CROSS-IDEOLOGICAL SOLAR POWER COALITIONS IN THE AMERICAN SOUTH: AN ADVOCACY COALITION APPROACH

Brian T. Toibin
Virginia Commonwealth University

Follow this and additional works at: https://scholarscompass.vcu.edu/etd
Part of the Public Affairs, Public Policy and Public Administration Commons

© The Author

Downloaded from
https://scholarscompass.vcu.edu/etd/5682

This Dissertation is brought to you for free and open access by the Graduate School at VCU Scholars Compass. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.
CROSS-IDEOLOGICAL SOLAR POWER COALITIONS
IN THE AMERICAN SOUTH: AN ADVOCACY COALITION APPROACH

A Dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University

by

BRIAN THOMAS TOIBIN

Master of Library and Information Science, University of South Carolina, 2006
Bachelor of Science, James Madison University, 1989

Director: Dr. Damian Pitt
Associate Professor of Urban and Regional Studies and Planning
L. Douglas Wilder School of Government and Public Affairs
Virginia Commonwealth University

Virginia Commonwealth University
Richmond, Virginia
December 2018
Acknowledgements

I would like to take this opportunity to acknowledge and thank my family and friends whose love and support made the completion of this project possible and who light my life every day.

Lisa, you are the love of my life and you have been instrumental in guiding and supporting me through the highlights and lowlights of both life and this accomplishment. Your love, faith, support, and understanding are my foundation. For that I will be forever grateful. I look forward to the roads that wait to be travelled. I love you.

Una, you are the greatest sister anybody could have. Your encouragement and dedication to all of us makes you as unique as your inspirational work. Thank you for the encouragement, sisterly friendship, and love that is one of the great blessings of my life. I love you.

To my brother-in-law Brad and sister-in-law Bonnie. Thank you for the love, friendship, and support you provide to all of us in so many ways. It is an honor to know you both.

To the younger generation of our clan: Andrew, Katie, Aidan, Liam, Mariah, and Catherine. Thank you all for your love, acceptance, and support over the years. I am proud of each one of you. Follow your dreams and make those dreams work for a cause greater than yourself. There is work to be done to secure your future, and this work belongs to us all – including you.

I would like to thank my academic support system at Virginia Commonwealth University – you know who you are, and you are many. Thank you
for helping me through this endeavor, I could not have made it without you. Thank you to my Dissertation Committee: Dr. Damian Pitt, Dr. John Mahoney, Dr. Robyn Diehl McDougle, and Dr. John Aughenbaugh. It was a pleasure working with you all. Dr. Pitt, thank you for your guidance. Dr. Mahoney, thank you for being the first line of editing work, your efforts will be forever appreciated. Also, thank you to Prof. Chris Saladino, who helped make my first few years at VCU memorable, amusing, and filled with interesting conversations.

Thank you to all those involved in the solar coalition efforts in both Georgia and Florida who took the time to speak with me while I was conducting the research for this project. Your assistance was very important to the accuracy and value of this study. Thank you for helping me convey this important public policy effort to a wider academic audience.

Finally, and most importantly, this work is dedicated to my parents, Mary and Colum Toibin. Your love, support, and guidance are beyond measure. Thank you for standing by me and “walking” with me. I love you Mom – I love you Dad. I appreciate you both more with each passing day. I also want to thank my departed brothers, Kevin and Brendan, for being great brothers and better friends. I love you guys.

“Energy is the most critical challenge facing humanity.”

– Richard Smalley (Rice University), Nobel Laureate

If we can solve this, we can solve many other issues. So Onward...

P.S: Thanks to the 3 pups: Finn, Sally, and Schatzi, who kept me company during late nights of researching and writing.
Table of Contents

Acknowledgements .................................................................................................................................................. i

Table of Contents .................................................................................................................................................. iii

Abstract .................................................................................................................................................................. xii

CHAPTER I: INTRODUCTION TO STUDY .......................................................................................................... 1

Introduction ........................................................................................................................................................... 1

Definition of Terms .............................................................................................................................................. 6

Organization of this Study .................................................................................................................................... 8

Historical Background of the Issue ................................................................................................................... 9

History of Electrical Generation ....................................................................................................................... 9


Deregulation ......................................................................................................................................................... 14

Factors in the Adoption of Solar PV ................................................................................................................ 18

Grid Parity ............................................................................................................................................................. 21

State Policies Supporting Solar .......................................................................................................................... 22

History of Power Purchase Agreements (PPA) ................................................................................................. 25

PPA Origins in California ................................................................................................................................... 25

PPA Growth and Success in Other States ......................................................................................................... 26

Examples of PPA Effectiveness ........................................................................................................................ 27
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitizing Concepts</td>
<td>70</td>
</tr>
<tr>
<td>Sampling</td>
<td>71</td>
</tr>
<tr>
<td>Data Collection</td>
<td>74</td>
</tr>
<tr>
<td>Data Management and Analysis</td>
<td>76</td>
</tr>
<tr>
<td>Ethics</td>
<td>78</td>
</tr>
<tr>
<td>Validity</td>
<td>79</td>
</tr>
<tr>
<td>CHAPTER IV – NARRATIVE OF EVENTS</td>
<td>82</td>
</tr>
<tr>
<td>Georgia Narrative</td>
<td>82</td>
</tr>
<tr>
<td>Georgia Background – Nuclear Issue</td>
<td>82</td>
</tr>
<tr>
<td>Advent of Tea Party</td>
<td>83</td>
</tr>
<tr>
<td>Georgia Public Service Commission (GPSC)</td>
<td>84</td>
</tr>
<tr>
<td>Early Coalition Efforts</td>
<td>87</td>
</tr>
<tr>
<td>Green Tea Coalition challenges the GPSC</td>
<td>89</td>
</tr>
<tr>
<td>Commissioner McDonald’s Solar Proposal</td>
<td>91</td>
</tr>
<tr>
<td>Public Debate of Commissioner McDonald’s Solar Proposal</td>
<td>93</td>
</tr>
<tr>
<td>Georgia Steps into the Sun</td>
<td>94</td>
</tr>
<tr>
<td>Florida Narrative</td>
<td>98</td>
</tr>
<tr>
<td>Utility Control in Florida</td>
<td>98</td>
</tr>
<tr>
<td>Founding of Floridians for Solar Choice (FSC)</td>
<td>100</td>
</tr>
<tr>
<td>Floridians for Solar Choice – Referendum Proposal</td>
<td>101</td>
</tr>
<tr>
<td>Floridians for Solar Choice - Referendum Language</td>
<td>102</td>
</tr>
<tr>
<td>Floridians for Solar Choice - Signature Effort</td>
<td>103</td>
</tr>
<tr>
<td>The Utilities Begin to React</td>
<td>105</td>
</tr>
<tr>
<td>Consumers for Smart Solar (CSS)</td>
<td>106</td>
</tr>
<tr>
<td>Dueling Proposals Create Confusion</td>
<td>108</td>
</tr>
<tr>
<td>The Collapse of FSC Ballot Amendment Effort</td>
<td>111</td>
</tr>
</tbody>
</table>
Solar Amendments Face The Vote................................................................. 112
Amendment 1 and Amendment 4................................................................. 112
Amendment 4.............................................................................................. 113
Amendment 1 Takes Center Stage............................................................... 114
The Public Thinks Two Opposites are True............................................... 115
FSC and CSS Campaign for Their Cause.................................................. 116
Floridians for Solar Choice Fights Back.................................................... 120
The Audio Tape.......................................................................................... 121
The Numbers Turn...................................................................................... 123
FSC Snatch Victory from the Jaws of Defeat.............................................. 124

CHAPTER V: ADDRESSING THE RESEARCH QUESTIONS ............... 127
Introduction to the Research Questions...................................................... 127
Georgia and Florida: Southern Epicenters................................................. 129
The Research Questions............................................................................ 129
The Research Questions Addressed........................................................... 130
Research Question #1.............................................................................. 130
Georgia: Sierra Club Perspective............................................................... 131
Sierra Club Strategic Plan – Goals............................................................... 132
Case in point: Sierra Club Goal 1 and Goal 2............................................. 134
Sierra Club Goal 3...................................................................................... 135
Important Interlude: Tea Party Divide......................................................... 138
Georgia: The Tea Party Perspective............................................................ 141
Florida: Floridians for Solar Choice......................................................... 143
Foundational Mission Statements of Florida Coalition Leaders............... 143
Specific Reasons for Why FSC Coalition Formed...................................... 146
Research Question #2

Georgia: How the Green-Tea Coalition stayed together

Florida: How Floridians for Solar Choice Coalition stayed together

Rule 1: Do No Harm

Rule 2: Understand the Issue, the fight, and be professional

Rule 3: Understand the people you are talking to

Rule 4: Reputation – Importance of protecting yours, and your partners

Research Question #3

Effectiveness Observations for Georgia and Florida

Effectiveness in Georgia

Effectiveness in Florida

Research Question #4: The Advocacy Coalition Framework

Advocacy Coalition Framework (ACF) – Foundational Premises

Premise 1: A time perspective of 10 years or more is required

Premise 2: Science and Technology have a Central Role

Premise 3: The set of policy subsystem actors is expanded

Premise 4: Policies can be viewed as translations of beliefs

Premise 5: The policy subsystem is the primary unit of analysis

Advocacy Coalition Framework Discussion

Relatively Stable Parameters

Basic Attributes of the problem area

Georgia: Basic Attributes of the problem area

Florida: Basic Attributes of the problem area

Basic distributions of natural resources
<table>
<thead>
<tr>
<th>Topic</th>
<th>Georgia</th>
<th>Florida</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic distributions of natural resources</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Fundamental sociocultural values and social structure</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Basic Constitutional Structures – Rules</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>External System Events</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Changes in Socio-Economic Conditions</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Changes in Public Opinion</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Changes in systemic governing coalitions</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Policy decisions and impacts from other sub-systems</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Long Term Coalition Opportunity Structures</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Degree of Consensus needed for major policy change</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Openness of Political System</td>
<td>........................................................................................................</td>
<td>........................................................................................................</td>
</tr>
<tr>
<td>Georgia: Openness of Political System</td>
<td>219</td>
<td></td>
</tr>
<tr>
<td>Florida: Openness of Political System</td>
<td>219</td>
<td></td>
</tr>
<tr>
<td>Advocacy Coalition Framework Fit</td>
<td>220</td>
<td></td>
</tr>
</tbody>
</table>

**CHAPTER VI: DISCUSSION AND REFLECTION**

| Introduction to Discussion and Reflections | 221 |
| Nationwide Solar Deployment: Perception and Reality | 223 |
| Solar Statistics | 223 |
| Solar Employment Statistics | 225 |
| Solar Power Public Opinion Statistics | 227 |
| Public Perceptions vs. Reality | 228 |
| Beliefs and the ACF | 231 |
| Beliefs and Sensitizing Concepts | 232 |
| Sensitizing Concepts and worldview quotations | 234 |
| Sensitizing Concepts (worldviews/beliefs) revealed by research | 237 |
| Climate Change | 237 |
| Environmental Protection | 238 |
| Energy Freedom and Energy Choice | 239 |
| Sustainability | 240 |
| Anti-Monopoly | 241 |
| Business Beliefs | 242 |
| Evangelical Stewardship of God’s Creation | 243 |
| Disagreement on the Environment among Evangelicals | 244 |
| Sensitizing Concepts summary | 246 |
| Policy Messaging | 246 |
| “Meet Them Where They Are” | 246 |
| Policy Learning | 251 |
CROSS-IDEOLOGICAL SOLAR POWER COALITIONS IN THE AMERICAN SOUTH: AN ADVOCACY COALITION APPROACH

By Brian T. Toibin, Ph.D.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Public Policy and Administration at Virginia Commonwealth University.

Virginia Commonwealth University, 2018.

Major Director: Dr. Damian Pitt
Associate Professor of Urban and Regional Studies and Planning
L. Douglas Wilder School of Government and Public Affairs

The purpose of this study was to explore two particular cross-ideological coalitions that have formed in order to promote pro-solar power policies in Georgia and Florida through the lens of the Advocacy Coalition Framework. The membership of the coalitions include individuals and organizations from opposite sides of the current prevailing ideological spectrum which united to support pro-solar policies for reasons that are consistent with their ideological worldview. The coalition in Georgia is known as the Green Tea Coalition and the coalition in Florida is known as Floridians for Solar Choice.

This qualitative study was guided by the following questions: 1) Why did supporters of solar power organize themselves into the particular coalition
structures represented by Georgia’s Green Tea Coalition and the Floridians for Solar Choice Coalition? 2) How have Georgia’s Green Tea Coalition and the Floridians for Solar Choice Coalition successfully managed their policy coalitions? 3) How effective are these coalitions perceived to be by public policy players outside the coalitions? 4) Do the Green Tea Coalition and the Floridians for Solar Choice Coalition represent an Advocacy Coalition approach?

Engaging these questions through the effective theoretical lens of the Advocacy Coalition Framework revealed a compelling example of cross-ideological cooperation within an increasingly divided political culture. Significant lessons concerning the formation and successful operation of coalitions were learned. The importance of strategic alliances, public belief systems, policy messaging, electorate education, policy learning, and careful political positioning are a few of the factors that enabled these coalitions to find success. The political success of these coalitions significantly advanced the role that solar power will be allowed to play in the future energy portfolio of these two influential states in the American South and across the country.

While the positive results for the future of solar power engineered by the coalitions are impressive, perhaps the most important lessons revealed by the study concern the potential for progress and cooperation on other complex issues. A portfolio of difficult issues awaits action by persons of good faith willing to find a cooperative path on which to move forward. Coalitions will be required to address many of these difficult problems. The lessons and example provided by these two cross-ideological coalitions may help others produce a their own blueprint to
encourage cross-ideological cooperation. This cooperation will be required if progress is to be made for the well being of current and future generations.
CHAPTER I

INTRODUCTION TO THE STUDY

A cornerstone of America’s experiment in democracy is the right for citizens to request action by the government at either the federal, state, or local level through the right of petition. The right to petition one’s government is a fundamental right contained within the First Amendment of the Bill of Rights: “Congress shall make no law...abridging...the right of the people...to petition the Government for a redress of grievances” (Bill of Rights Institute, 2015).

Because Americans are guaranteed this right, an ongoing conversation about what is right and wrong; what is working or broken; or what is fair or unfair is constantly taking place throughout the country between the citizenry and all levels of government. Sometimes, citizens petition their government by contacting their elected officials with a phone call or a letter. Other times, groups of citizens on one side or another of an issue band together in coalitions to take collective action in hopes of amplifying their voices and breaking through the ongoing din of democratic debate.

U.S. Supreme Court Justice Louis Brandeis, in a dissenting opinion in New State Ice Co. v. Liebmann in 1932, referred to the individual states that comprise the United States in a manner which helped coin the phrase “Laboratories of Democracy.” Brandeis (1932) wrote, “It is one of the happy incidents of the federal system, that a single courageous state may, if its citizens choose, serve as a
laboratory; and try novel social and economic experiments without risk to the rest of the country” (New State Ice Co. v. Liebmann, 1932).

Having 50 different states allows for various policies to be debated, adopted, and implemented in different venues. This arrangement gives the public and policy makers in the sister states the ability to observe the results of different legislative proposals undertaken in other states and choose to emulate or resist similar efforts. This process plays out in every sphere of public policy making such as education, health care, and law enforcement.

One of the more important areas under the purview of state government is the manner in which electric utilities are regulated and under what organizational structures and rules they are allowed to operate. How the states literally go about “keeping the lights on” has become a critical function of infrastructure management for government officials. The involvement of government in the regulation of the power industry has largely been a patchwork affair with regulatory developments taking place in fits and starts depending on the prevailing political or economic situation. Despite these fits and starts, the electric industry has been able to help power the world’s strongest economy.

Traditionally, the main sources of fuel for the generation of electricity have been the fossil fuels of coal, natural gas, and to a lesser extent, oil. However, the situation is beginning to change within the electric power sector, in the United States and all over the world. Concerns about the role fossil fuels play in the question of climate change, along with very significant improvements in the price and availability of renewable energy technologies, have added real momentum to
the development of cleaner, more environmentally friendly sources of generation like solar, wind, geo-thermal, and hydropower. Solar and wind power are becoming particularly effective methods to generate electricity, and in many places have reached a level of “grid-parity.” This term simply means that these sources are equal in price to electricity generated by traditional fuels like coal and natural gas (Climate Reality Project, 2016). In recent years, while improvements in solar and wind technologies were pushing them towards the point of “grid-parity,” a series of policy debates have been taking place around the country which have centered on finding a place within the electricity generation industry for these new technologies.

The purpose of this study is to examine the political and societal coalitions that have formed in order to promote the movement towards greater solar power adoption in the American South. This region enjoys significant solar resources that provide it with great potential for renewable power generation. However, the economic, political, and cultural underpinnings of the American South have helped shape a contentious series of ongoing political debates that will likely have impact far beyond the region’s geographical footprint. While the ripple effects of these debates will reverberate beyond the region, two very important epicenters of this debate currently reside in Georgia and Florida.

At the heart of the pro-solar movements in these states are two different, but related incarnations of an unlikely political coalition that has achieved significant support from people and organizations on both the left and right sides of the political spectrum. These two “strange bedfellows” political coalitions and the circumstances surrounding and informing them are the focus of this case study. In
Georgia, this coalition is known as the Green-Tea Coalition and in Florida the coalition operates as Floridians for Solar Choice.

The Advocacy Coalition Framework (ACF) is the theoretical framework through which the aforementioned solar policy coalitions are viewed in this study. The ACF is solidly rooted in disciplines that pertain to the issues and questions that surround solar photovoltaic (PV) power policy. Historically, “the early [ACF] research dealt primarily with U.S. energy and environmental policy, the author’s fields of expertise” (Sabatier and Weible, 2007, p. 189). The quality or applicability of the ACF’s “fit” to the coalitions being examined is one of the principle aspects of the study.

The reasons for exploring the applicability of this theory in connection with the debate over solar policy and legislation are connected with many of the ACF’s foundational premises. These include: 1) that the framework makes room for multiple policy actors at many different levels of society and government, 2) that it takes into consideration the influence of scientific knowledge and technological innovation as policy influences, 3) that policy development has taken over ten years to develop and be acted upon, 4) that policies advocated by members of each coalition can be seen as a reflection of their beliefs, and 5) the policy subsystem serves as the primary unit of analysis. Examples of these subsystems can be policy topic, geographic scope, and influencing actors (Advocacy Coalition Framework Overview, 2018).

An extensive review of the literature concerning the public policy theories under consideration to frame this study, including the ACF, is covered in Chapter
Two. Their relative advantages and disadvantages are examined concerning their applicability to the study.

A qualitative research approach is used in order to examine the following questions that relate to the role political coalitions play in the specific cases of the Green Tea Coalition and the Floridians for Solar Choice Coalition in Georgia and Florida respectively. The research questions being explored are: 1) Why did supporters of solar power organize themselves into the particular coalition structures represented by Georgia’s Green Tea Coalition and the Floridians for Solar Choice Coalition?; 2) How have Georgia’s Green Tea Coalition and the Floridians for Solar Choice Coalition successfully managed their policy coalitions?; 3) How effective are these coalitions perceived to be by public policy players outside the coalitions?; 4) Do the Green Tea Coalition and the Floridians for Solar Choice Coalition represent an Advocacy Coalition approach?

In order to better understand the role and effectiveness of political coalitions, this study examines the advent and development of the Green–Tea and Floridians for Solar Choice Coalitions in the states of Georgia and Florida. It uses qualitative research methods to evaluate these coalitions, through the lens of the chosen theoretical framework, the Advocacy Coalition Framework.

The data collection portion of the study is based on interviews, which contained both specific and open-ended questions, with important coalition members that represent different points of view. These questions are designed to inform the researcher of how the coalition members view the different research
questions and provide a forum for extended comments that may help illuminate the research questions.

An equally important source of research information is the collection and examination of publicly available print, audio, and video resources concerning the actions of the coalitions. These include resources such as books, articles, editorials, press conferences, conference speeches, and other sources. Because much of the public debate over this issue between the coalitions has taken place through media outlets, it is important to examine these types of documents produced by the coalitions and the media. Tracking how the media has covered the actions or opinions of the coalitions as the debates took place helps to provide context and supports the information gathered through the interview process. An accepted research coding procedure has been employed in order to help expose or highlight possible findings or shortcomings of the research.

**Definition of Terms: Important Solar Policies**

These definitions are from the National Renewable Energy Laboratory (NREL) and the Solar Energies Industry Association (SEIA):

**Feed in Tariffs** – “A feed-in tariff (FIT) is an energy supply policy that promotes the rapid deployment of renewable energy resources. A FIT offers a guarantee of payments to renewable energy developers for the electricity they produce. Payments can be composed of electricity alone or of electricity bundled with renewable energy certificates. These payments are generally awarded as long-term
contracts set over a period of 15-20 years” (NREL, 2015). Note: Feed in Tariffs are much more popular outside the United States.

Interconnection standards – “States have jurisdiction over the interconnection of customer-owned solar generation to the distribution grid, including projects that are net-metered. While standards and their implementation vary from state to state, some states are fostering the growth of solar energy by streamlining the interconnection process. Key principles include clearly identifying fees associated with the process, specifying timelines, and standardizing and simplifying forms” (SEIA, 2017).

Net-energy metering (NEM) – “Net-metering allows residential and commercial customers who generate their own electricity from a solar PV installation to feed electricity they do not use back into the grid. Many states have passed net metering laws. In other states, utilities may offer net-metering programs voluntarily or as a result of regulatory decisions. Differences between states’ legislation and implementation mean that the benefits of net metering can vary widely for solar customers in different areas of the country” (SEIA, 2015).

Power Purchase Agreements (PPA) – “A solar power purchase agreement (PPA) is a financial agreement where a developer arranges for the design, permitting, financing, and installation of a solar energy system on a customer’s property at little to no cost. The developer sells the power generated to the host customer at a fixed rate that is typically lower than the local utility’s retail rate” (SEIA, 2015). PPAs are a form of third-party ownership (TPO) of electrical production installations.
Renewable Portfolio Standard (RPS) - “A renewable portfolio standard (RPS) is a regulatory mandate to increase production of energy from renewable sources such as wind, solar, biomass and other alternatives to fossil and nuclear electric generation. It’s also a type of third-party ownership (TPO) and known as a renewable electricity standard” (NREL, 2015).

Shared Renewables/Community Solar – Shared renewable energy arrangements allow several energy customers to share the benefits of one local renewable energy power plant. When the power is supplied strictly by solar energy, it is sometimes called “community solar.” The shared renewables project pools investments from multiple members of a community and provides power and/or financial benefits in return (SEIA, 2016).

Solar Investment Tax Credit (ITC) – “The Solar Investment Tax Credit (ITC) is one of the most important federal policy mechanisms to support the deployment of solar in the United States. The ITC is a 30 percent tax credit for solar systems on residential (under Section 25D) and commercial (under Section 48) properties.” The ITC was implemented in 2006 and is slated to remain in effect until 2021 (SEIA, 2017).

Organization of this Study

The remainder of Chapter I reviews historical aspects of the electricity industry and provides an overview of some of the critical areas that pertain to this work which include the Public Utilities Regulatory Policies Act (PURPA), solar prices, grid parity, and a history of power purchase agreements in the U.S. It also reviews the solar power political coalitions that are researched throughout the
study. The chapter also briefly describes the purpose of the study, the theoretical framework, the research questions, design and methods, and definition of terms.

The remainder of the study is divided into four sections. Chapter II reviews the literature connected with the theories being considered to examine the subject. Chapter III focuses on the research methodology. Chapter IV consists of a narrative of events surrounding the actions of the coalitions, which is important context for addressing the research questions. Chapter V is a presentation of the findings concerning the research questions. Chapter VI is a discussion and reflection on this study, and proposes potential areas of further study.

**Historical Background of the Issue**

**History of Electrical Generation**

In order to better understand where this debate currently stands, a brief history of electrical development is important to provide context. As the 20th century approached, and electricity was being first introduced as a new way to light the houses of America’s cities, the early electrical grids that provided these services were small and unregulated. An early example of this was New York City’s Pearl Street power station, which was designed by Thomas Edison. Pearl Street was one of the first centralized, coal-fired power stations that distributed electricity on a closed or limited grid to a few hundred homes (Sulzberger, 2016).

In the late 1800s, this largely unregulated model expanded to the point where there were multiple companies stringing crisscrossing power lines across cities all over the country. This situation was due to the technological limitations of
direct current or DC electricity. “Produced and distributed at low voltages – around 110 volts – direct current electricity weakened substantially as it traversed copper distribution lines. In practice, customers needed to be within one mile of a generation plant to receive power” (Hirsh, 2002). Each of these independent companies owned their own generating stations and transmission lines and provided electricity to isolated grids of customers around the urban areas of the country.

This situation changed with the advent of the steam turbine and the introduction of alternating current (AC) power, which could travel much longer distances from the point of generation. Nikola Tesla, along with other inventors, contributed to the development of AC electricity. Industrialists such as George Westinghouse promoted AC as a better alternative to DC, and funded the deployment of the technology. This development cut down on the need for so many individual power plants and started the process of industry consolidation (Sulzberger, 2016).

The “laissez-faire” development of the late 19th and early 20th centuries resulted in an unregulated electric industry that was beginning to produce local monopolies. A prominent example of this process occurred when Samuel Insull, president of Chicago Edison, “acquired 20 other utility companies by 1907 and renamed the firm Commonwealth Edison” (Hirsh, 2002). This consolidation process resulted in the formation of a regional unregulated monopoly and was indicative of the types of consolidations that were occurring across the country.
The development of these localized monopolies invited government intervention. Local and state governments either purchased these utilities and established municipal ownership or they established oversight of the privately owned entities through state regulation. In 1907, the states of Wisconsin and New York established state regulation of their electric utilities and by 1914, 43 states had established some governmental oversight (Hirsh, 2002). This era of governmental regulation coincided with a significant expansion of the availability of electricity across the country. “The electrical output from the utility companies exploded from 5.9 million kWh in 1907 to 75.4 million kWh in 1927. In that same period, the price of electricity declined 55%” (Hirsh, 2002).

While the electrical output was growing, problems were created by the increased concentration of electric power production into fewer hands. The situation came to the front of the public agenda with the Stock Market Crash in 1929 and the ensuing Great Depression. Many electric utilities collapsed, including Commonwealth Edison. After the Crash, a continued concentration of power generation took place where those who survived acquired the assets of those that had failed. “By 1932, 73% of the investor-owned electric industry was owned by eight of the largest utility holding companies in the United States. This created a huge imbalance within the energy market” (Electric Choice, 2017). This situation became increasingly difficult to regulate and required government action at the federal level.

In 1935, Congress passed the Public Utilities Holding Company Act (PUHCA), which addressed the over-concentration of power generation with “many
new rules regarding the way in which energy could be sold” (Electric Choice, 2017). The Securities and Exchange Commission (SEC) became the primary regulator of these “holding companies” which controlled multiple electricity generation and distribution entities. Under PUHCA, the SEC became responsible for breaking these larger holding companies into smaller, more manageable organizations. By 1948, the holding companies had divested $12 billion in assets and reduced the number of subsidiaries they controlled from 1,983 to 303 (Electric Choice, 2017).

Despite the PUHCAs eventual success, the rural parts of the country were left behind. The executives of the investor-owned utilities (IOUs) insisted that expanding the reach of electricity to rural areas was too expensive. During the early years of the Great Depression, President Roosevelt’s New Deal sought to change this situation with the establishment of the Tennessee Valley Authority in 1933 and the Rural Electrification Administration in 1935 (Tuttle, Gullen, Hebner, et. al., 2016, p. 9). The Rural Electrification Act of 1936 continued the effort to wire the rural parts of the country. These efforts proved successful. “In 1930, only 10% of American farms had electrical service; by 1945, almost 45% of them were wired up” (Hirsh, 2002). The establishment of these government-owned utilities and rural cooperatives was responsible for the electrification of rural America. Many still serve these rural areas today.

These historical developments brought about an increased measure of organization to a very complex industry. The later years of the Great Depression through the post-World War II period are referred to as “the Golden Years” for electricity and saw extraordinarily growth for the industry. Yearly increases
between 1947 and 1973 were about 8%, which resulted in utilities almost doubling their output and sales every decade (Hirsh, 2002). However, the events of the early 1970s were set to change the energy landscape in profound ways.

**Public Utility Regulatory Policy Act of 1978**

While it is true that the states play major roles in the development of renewable energy policy, it is important to note that historically, the federal government is responsible for putting into place some very important foundational policies. The most important of these was The National Energy Act, which was a series of bills passed together in 1978 during the Carter Administration. This law was a legislative response to the Middle East Oil Embargo of 1973-74, and a subsequent oil supply shock in 1977. These events exposed the extreme vulnerability of United States and other industrialized countries to oil imported from the Middle East. The overall aim of the National Energy Act was to lessen the country’s dependence on foreign oil by seeking to statutorily diversify energy supplies and encourage conservation (Hornstein and Stoermer, 2006).

One particularly important and groundbreaking piece of the National Energy Act was the Public Utility Regulatory Policy Act of 1978 or PURPA. The provisions contained within PURPA resulted in the law becoming the cornerstone around which much of the renewable energy market in the United States has developed and signified an important step towards the deregulation of the electricity industry. “Congress intended PURPA to foster energy efficiency in an environmentally friendly manner by establishing incentives for the development of cogeneration facilities and small scale renewable power projects” (Hornstein and Stoermer, 2006).
These facilities, established under PURPA regulations, became known as “qualifying facilities” or QFs. The small renewable power projects could be solar, wind, biofuel, or hydroelectric installations. Cogeneration facilities are generally larger energy producers designed to utilize both the electrical and thermal outputs of a plant, increasing efficiency (Hornstein and Stoermer, 2006).

In addition to allowing for the development of QF’s, PURPA legislated that the power they produced could find a market. Hornstein and Stoermer (2006) noted, “PURPA’s incentives included the creation of markets for the power produced by these facilities and the exemption of the facilities from most state and federal regulation.” The creation of these markets provided the conditions for renewable energy to slowly begin competing with electric monopolies, which helped to “encourage the development of these new resources and to diversify the domestic electric power base” (Tuttle, Gullen, Hebner, et. al., 2016, p. 10).

Deregulation

The importance of PURPA to the development of renewables in the United States is foundational. As the effects of the law have matured, it has helped renewables gain a foothold and actually helped call into question the “natural monopoly” role that utilities have enjoyed for decades. PURPA helped turn the electricity equation upside down. “Thanks to incentives provided by PURPA and innovation in small-scale technologies...non-utility companies could produce power as cheaply or more so than regulated firms” (Hirsh, 2002). Because of this, the rationale for utilities as natural monopolies was called into question. William Berry, president of Virginia Electric and Power Company (the precursor to Dominion...
Energy) addressed this issue in 1983, before many people realized the coming shift in the electricity landscape. Berry said, “as in so many other regulated monopolies, technological developments have overtaken and destroyed the rationale for regulation. Electricity generation is no longer a natural monopoly” (Hirsh, 2002). Concerning this, Hirsh (2002) wrote, “In short, the existence and success of PURPA QFs appeared to destroy one important justification for regulation of utilities.”

The deregulation of electricity is an issue that has been the subject of multiple ongoing and contentious policy debates. Through 2017, there are 17 states plus the District of Columbia that have gone forward with deregulation (Zummo, 2017). Many of these states are in the Northeast and include very large markets such as New York, Pennsylvania, New Jersey, and Massachusetts. Texas and Oregon have also deregulated their electricity industry. Seven other states, including Virginia and California, had started the process of deregulation but have suspended the efforts, or opted for partial deregulation (Electricity Local, 2017).

The process of deregulation does not always reach completion. For example, California’s rapid deregulation of the electricity market included forcing the utilities to sell their generation facilities (Taylor, 2001). Deregulated energy traders from ENRON and other electricity wholesalers were able to manipulate the new rules to engineer rolling blackouts and other schemes to drive up the price of electricity in California. Massive price increases for electricity created a major political and economic scandal and the eventual dissolution of total deregulation into a condition of semi-regulation (Macaray, 2017).
The Virginia General Assembly took a slower approach to opening up the market to other power producers. Casey (2018) wrote,

The 1999 deregulation law took effect in 2002. At that time, Virginia froze electric rates until other power providers entered the market. None did. The benefits of competition never materialized...In 2007, at the urging of Dominion and Appalachian [Power], state lawmakers adopted re-regulation. That took effect in 2009. (2018)

Deregulation of the electric industry can mean a number of things and is often a complex situation. Traditional, vertically integrated, regulated systems are usually investor-owned utilities (IOU) that have a monopoly on the generation, transmission, and sale of electricity at all levels. Various Deregulated models include structures known as Single Buyer (limited competitive generation of electricity), Wholesale Competition of Generation (popular in other countries), and Retail and Wholesale Competition (Tuttle, Gullen, Hebner, et. al., 2016, p. 15). Other arrangements, which are not traditional IOU monopolies include municipally-owned utilities (city owns utility) and co-operatives, which come in a variety of forms, many of which were developed during rural electrification efforts such as the Tennessee Valley Authority (Tuttle, Gullen, Hebner, et. al., 2016, p. 15).

For the most part, Georgia and Florida have traditional IOUs and smaller combinations of municipal and co-operative electricity providers. As such, any adoption of policies that increase the amount of solar power deployed must be done through the legislature, public service commissions (PSC), or by public ballot initiative. All of these avenues are explored in the course of this study.
In general, deregulation would seem to be a good idea to help solar thrive, but, as with most complex situations, the details are critical. Choose Energy, an organization that helps customers pick the most appropriate energy supplier in deregulated or semi-regulated markets, addressed the question of how solar fares in regulated or deregulated situations by comparing the success of solar in Texas and California.

California, the most populous state, is a partially regulated energy state and has the most solar deployed in the country. Texas, the second most populous state in the country, is a highly deregulated energy state which ranks 13th in solar power deployment. Choose Energy (2016) noted, “The problem is that these two trends can sometimes be at odds with each other.” Deregulation alone does not seem to be the most effective way to bring about the most solar deployment; it also requires supportive public policy. Choose Energy (2016) explained:

The lesson that we can take from this comparison of the two biggest states in the U.S. is that energy deregulation and solar power can coexist: if it is supported by good laws. Electric utilities and the for-profit energy resellers need to be given incentives to use the electricity generated by solar installations. State PUCs must also be more active in passing legislation that ensures a steady supply of energy from both power plants and alternative sources. (2016)

The respective utility commissions in each state influenced the strategies and actions of both coalitions as the worked for pro-solar policies.
Factors in the Adoption of Solar PV

The complexity of the electricity system and the level of debate surrounding its future are increasing as new methods of generating electricity, such as wind and solar technologies, become more efficient, affordable, and widespread. These new methods of generating electricity are beginning to significantly impact the existing models of generation and distribution, and with this change, new players are trying to determine if they have a place in the existing electricity distribution model. These new players can be the individual homeowner, who has placed a small array of solar panels on top of his/her private home, a newly formed small cooperative, that has formed to construct a community solar installation, or a larger company that generates electricity using these new technologies.

Because the United States is a country with 50 different “laboratories of democracy,” the process and outcomes of determining how and where these new players and technologies fit into the existing model often vary. This variety of outcomes can be the result of a number of different factors, such as the current existing political culture of the state, the existing utility structures being challenged, or even the geologic or geographic makeup of a particular state such as an abundance of coal or sunshine (Branker, Pathak and Pearce, 2011).

Any attempted change to the status quo is likely to be met with resistance from established interests. This certainly has proven to be the case where newer energy technologies, such as solar, have sought to move from a niche technology to a more established member of the market. When solar energy was relatively expensive, entrenched utility interests largely treated it as a niche technology that
would be utilized by environmentalists who were seeking to lessen their own carbon footprint or survivalists who wanted the self-sufficiency to weather any societal eventuality. However, that view has been rapidly changing.

The last 10 years has seen a dramatic decrease in the price of deployed solar PV installations. These price decreases have impacted all types of solar PV installations from small residential systems to large utility-scale solar farms. The reasons for these price declines are multi-faceted and fairly complex. However, the core of the price declines are due to falling hardware costs. For example, SEIA/Greentech Media (2017) Solar Market Insight 2016 Year in Review report says that, “Due to both the global module demand and supply imbalance, and policy instability internationally, hardware markets were fiercely competitive in 2016, producing aggressive component price declines.” These falling prices for hardware have greatly contributed to dramatic price reductions for solar PV systems.

Bloomberg reports, “Since 2009, solar prices are down 62 percent, with every part of the supply chain trimming costs” (Shankleman and Martin, 2017). In 2017, the National Renewable Energy Laboratory published a chart that tracked the decline in solar photovoltaic (PV) system costs from 2010 to 2017. These numbers reflect the cost for the whole installation of a system, hardware costs, and soft (installation) costs. These numbers reflect the significant economic changes surrounding solar power and are reported as per Watt DC in 2017 dollars. The chart was entitled NREL PV system cost benchmark summary (inflation adjusted), 2010–2017. NREL (2017) reported:

- Residential solar PV declined from $7.24 in 2010 to $2.80 in 2017.
• Commercial solar PV declined from $5.36 in 2010 to $1.85 in 2017.
• Utility-scale solar PV declined from $4.57 in 2010 to $1.03 in 2017.

These prices reflect the significant economic shift that has happened in the industry over a time period of seven years. Some years saw price reductions that were particularly impressive. One of those years was 2016. The Greentech Media/SEIA (2017) Solar Market Insight 2016 Year in Review report put forward these examples of remarkable changes in solar PV prices:

• Delivered solar modules from Chinese producers dropped from $0.65/W in Q4 2015 to $0.39/W in Q4 2016.
• Overall “solar prices have dropped 29% from Q4 2015 to Q4 2016.”
• Utility-scale PPAs are now being signed for $0.03 - $0.05/kWh.

(SEIA/GTM Year In Review, 2017).

These significant price reductions are expected to continue as economies of scale continue to take hold due to improvements in production technologies and the expansion of production facilities across the globe. Bloomberg researchers Jess Shankleman and Chris Martin compiled these forecasts from industry experts concerning solar price declines over the next few years in their January 2017 article Solar Could Beat Coal to Become the Cheapest Power on Earth:

• “The average 1 megawatt-plus ground mounted solar system will cost 73 cents a watt by 2025 compared with $1.14 now, a 36 percent drop” - Jenny Chase, head of solar analysis for New Energy Finance.
• Some parts of the U.S. Southwest are approaching $1 a watt (for utility solar PV) today and may drop as low as 75 cents in 2021 – MJ Shiao, GTM Research analyst.

• “The U.S. Energy Department’s National Renewable Energy Laboratory expects costs of about $1.20 a watt now declining to $1.00 by 2020.” – Donald Chung, NREL senior project leader.

• “These are game changing numbers...Every time you double capacity you reduce the price by twenty percent.” - Adnan Amin, Director General of the International Renewable Energy Agency

Grid Parity

With these current and future reductions in price, solar PV generation technologies are becoming increasingly competitive with coal and natural gas, the traditional fossil fuels of electricity generation. Solar PV is reaching “grid parity” in many locations. Grid Parity is “the point when the cost of alternative energy becomes equal to or less than electricity from conventional energy forms like fossil fuels” (Climate Reality Project, 2017). Achievement of grid parity is based on a score known as the levelized cost of electricity (LCOE), which is a “benchmarking or ranking tool to assess the cost-effectiveness of different energy generation technologies” (Branker, Pathak and Pearce, 2011). The methodology behind the LCOE attempts to levelize the costs of different sources of electricity so they can be compared on as even a footing as possible. Calculating grid parity for solar PV requires a complex examination of factors including local prices of electricity, cost of
solar system installation, and incorporation of geographical attributes such as solar insulation (Branker, Pathak and Pearce, 2011).

Regardless of the complexities associated with comparing different forms of electricity production fairly, the trend towards “grid parity” for solar PV systems is clear. Cory Honeyman, a senior analyst for GTM Research, reported, “through 2020, incremental cost reductions to rooftop solar, alongside incremental retail hikes in most utility service territories, will serve as sufficient tailwinds to expand the number of states that reach grid parity from 20 to 42 states” (Meehan, 2016).

This newly developing competitiveness with coal and natural gas has recently engendered a more robust response to solar PV’s entry into the marketplace from established utilities. Over the last few years, some utilities seem to be making an attempt to adjust to the arrival of solar, while others are not. Most utilities no longer see solar PV as a niche technology and their reactions differ depending on the utility. Some still view solar as a threat to their business model and are resisting the expansion of solar PV wherever possible. However, others are choosing to embrace the potential for solar and are beginning to figure out how best to incorporate the technology into their future plans. The specific actions taken by the utilities in Georgia and Florida are instructive as to how this situation is developing and are explored in greater detail in coming chapters.

**State Policies Supporting Solar**

The adoption of solar energy is helped or hindered by different state policies concerning the implementation of solar PV systems. A number of different policies impact the adoption of these new technologies. Three of the most important are the
A renewable portfolio standard (RPS) is a regulatory mandate to increase production of energy from renewable sources such as wind, solar, biomass, and other alternatives in place of fossil fuels and nuclear electricity generation (NREL, 2017). The RPS is a target or required level of renewable energy that must be produced within a state or acquired as renewable energy credits purchased from another state. As of July 2018, 29 states, the District of Columbia, and three territories have a version of a RPS. One additional territory and eight states have voluntary renewable energy goals (NCSL, 2018).

A RPS varies from state to state and is often subject to many different caveats. Some RPS standards are mandatory and some are voluntary. “Under a mandatory RPS, electric utilities are required to meet annual targets for obtaining a portion of their electricity supply from renewable sources such as wind and solar (e.g. 10% by the year 2020)” (Pitt and Michaud, 2015). Some of the RPS standards go further in support of renewables by implementing a requirement know as a “carve-out” that mandates a certain amount of power come from a particular renewable resource (Michaud and Riley, 2018). For example, a solar “carve out” requires that a certain amount of the energy produced to meet an RPS come specifically from solar power.

Net-energy metering (NEM) is an important state-based solar PV policy. “Under this arrangement, a customer who owns a solar PV system can sell excess
electricity back to the utility at times when the system produces more electricity than the building requires (e.g. on sunny afternoons)” (Pitt and Michaud, 2015). Net-energy metering exists in one way or another in 41 states, Washington D.C, and the U.S. territories of American Samoa, the U.S. Virgin Islands, and Puerto Rico (DSIRE, 2018).

The International Renewable Energy Council and Vote Solar produce an annual report entitled *Freeing the Grid* which grades states on net-metering. “In 2015, six states improved their net-metering grades. In total more than two-thirds of U.S. states now qualify for good A or B grades...four states received lower grades including one-time rooftop solar leaders Hawaii and Nevada which both fell to F grades” (IREC and Vote Solar, 2016). The fact that states can improve or dramatically decline, like Hawaii and Nevada, shows how important and volatile state-based solar policies can be, and how important it is to track their progress.

Another important state based solar policy concerns the question of “third-party ownership” of solar power installations. A third-party ownership (TPO) arrangement that is of particular importance to the questions being researched within this study is a policy known as a power purchase agreement or a PPA. In a PPA, the solar service provider or company places a solar power installation onto a customer’s roof or land, making that customer the “host” of the system. The solar service provider or company retains ownership of the system and services the equipment. The customer or “host” is contract bound to purchase the power generated by the system at a pre-determined rate for a set period of time, usually 15 to 25 years (DSIRE, 2015). This arrangement allows individuals and businesses a
viable option to deploy solar power at an affordable rate. However, many of the centralized electric utilities that currently own and operate the existing electricity generating and distribution system see PPAs as an unwelcome challenge to their business model.

PPAs offer consumers an innovative energy service product that allows them to avoid the large up-front costs of purchasing solar power equipment (DSIRE, 2015). PPAs are also an intense area of political and policy debate concerning how solar power is going to be deployed in the future. PPAs raise a number of production, distribution, and bottom-line issues that directly challenge the status quo. This challenge is being addressed differently by various utilities. The stridency of the opposition to PPAs by many utilities has helped to shape the composition and strategy of the pro-solar political coalitions under study.

This research examines the coalitions that promote the expansion of PPAs and other pro-solar policies. Both coalitions’ structures, actions, and effectiveness are viewed through the academically accepted and often employed research lens of the Advocacy Coalition Framework. A brief history of PPAs will assist in lending understanding to the field of research.

**History of Power Purchase Agreements**

**PPA Origins in California**

The advent of the power purchase agreement as a solar policy began in California. “In 2006, the Legislature passed Assembly Bill (AB) 1969, ordering the
development of a Power Purchase Agreement (PPA) for renewable generation…” (PG&E Power Purchase Agreements, 2008). “Effective February 20, 2008, PG&E will purchase power from customers who install eligible renewable generation up to 1.5MW in size” (PG&E Power Purchase Agreements, 2008). With the adoption of this legislation, California began to pave the way for the adoption of PPAs within the state and across the country.

The legislation has been a clear success because in 2016, “California had the highest distributed solar capacity at 4.9 GW, with “one-third of it owned by third parties” (Walton, 2016). One of the major growth areas for PPAs is in the area of utility-scale solar PPAs, which are becoming more prevalent in the energy portfolios of utilities in California and beyond.

**PPA Growth and Success in Other States**

Historically, when PPAs began to penetrate the solar market, they put up impressive numbers. For example, “in Arizona...over 90% of new installations performed in the 4th quarter of 2012 were owned by a third-party” (Haddix, 2014). Additionally, third-party ownership accounted for 80% of new-residential installations in Colorado, 67% in California, and over 40% in Massachusetts (Haddix, 2014).

As of March 2018, the North Carolina Clean Energy Technology Center, based at N.C. State University, reported that PPAs are currently allowed in one form or another in 26 states, the District of Columbia, and Puerto Rico (DSIRE, 2018). According to the Energy Information Agency (EIA), “Distributed solar capacity in the United States, which includes all solar power capacity other than utility-scale
installations 1 MW or larger, totaled 12.3 gigawatts (GW) as of September [2015]...

*About 30% of that amount (3.7 GW) was owned by third-party owners*” (EIA, 2016).

The states with the highest overall rates of third-party ownership (PPAs) are California, Arizona, New Jersey, Maryland, Massachusetts, and New York (EIA, 2016). Georgia and Florida are at different stages of the PPA adoption debate and must make a significant amount of progress in order to catch up to the leading states.

**Examples of PPA Effectiveness**

Third-party ownership (TPO) arrangements, which are often PPAs, tend to be more common in the residential sector than in the commercial and industrial (C&I) sectors. As of 2016, TPO arrangements control 44% of distributed solar capacity in the residential sector, compared with 11% in the C&I sectors (EIA, 2016). PPAs are a useful financial mechanism to bring solar onto an individual rooftop and increasingly, a utility solar farm. According to Berkeley Lab’s Mark Bolinger, “Falling PPA prices have enabled the utility-scale market to expand beyond the traditional strongholds of California and the Southwest into up-and-coming regions like Texas, the Southeast, and even the Midwest” (Zipp, 2016). This is possible because according to Greentech Media’s 2016 Year in Review report, utility-scale PPAs are now being signed for $0.03 - $0.05/kWh. These prices represent grid parity in many parts of the country.
Coalition Composition in Georgia and Florida

Different states have different policies and they are often in a constant state of flux. Generally, but not universally, states that are more progressive have adopted policies to make room for the new technologies within the industry, while conservative states have stood by the traditional fuels of coal and natural gas. Many of the most conservative states are located in the South and have very strong and historic ties to the coal industry (Lavin, 2014).

In all of these states, there are both pro-solar and anti-solar coalitions. Generally, the anti-solar coalitions include investor-owned electric utilities, the coal and natural gas industries, the American Legislative Exchange Council (ALEC), Americans for Prosperity, and other generally conservative leaning groups and individuals interested in maintaining the status-quo (Penn, 2015).

A particularly interesting pro-solar coalition in Georgia is known as the “Green Tea Coalition.” This coalition combines organizations such as the Sierra Club, the Solar Energies Industries Association (SEIA), and other environmentally centered groups with an activist branch of the very conservative Tea Party (Lavin, 2014). This partnership has produced a powerful pro-solar coalition. This coalition has demonstrated considerable influence within some conservative political circles and has changed the balance of the debate in interesting ways. In Florida, a similar coalition known as Floridians for Solar Choice emerged as an offshoot of the Green Tea Coalition and has demonstrated potent cross-ideological support of PPAs (Lavin, 2014). These two pro-solar coalitions are the primary focus of this study.
The initial success of these coalitions that support PPAs prompted many utilities in states that do not allow PPAs to actively oppose their approval. While half of the country allows for this arrangement to take place, there are states, most significantly Florida, that specifically prohibit PPAs (DSIRE, 2015). Georgia has recently adopted policies that actively encourage or promote the arrangement (DSIRE, 2015). The fact that these two politically similar southern states are at different stages in the debate surrounding the adoption of PPAs makes them good candidates for a comparative research effort.

Over the last few years, the political battle concerning the future makeup of America’s electrical power generation has moved into the American South. Business as usual in these traditionally conservative states is being challenged by the availability of solar power that has reached “grid-parity”. The fact that solar can begin to compete with traditional fuels has changed the make-up of some of the traditional coalitions that have been debating these issues in the recent past.

This debate in the South has been marked by the emergence of these “politics makes strange bedfellows” coalitions that are shaking up the debate over solar power’s future. As was noted above, during the 2012 election cycle in Georgia, environmental groups like the Sierra Club found an unlikely ally in the promotion of solar power when they teamed up with a significant branch of the very conservative Tea Party. This unlikely coalition focuses on the same goal, promotion of pro-solar legislation, but for different reasons. Green groups like the Sierra Club primarily support it for the environmental benefits and the positive effect it can have in combating climate change (Bonanno and Cherson, 2014). At the same time, the Tea
Party support, led by an activist named Debbie Dooley, focuses on the business monopoly aspects of centralized utilities (Bonanno and Cherson, 2014). They claim that if the technology exists for individuals to produce their own power, they should be able to use it or sell it back into the marketplace. To them, it is an issue of personal freedom and pro-free market economics centered on an anti-monopoly stance (Bonanno and Cherson, 2014).

The Green-Tea Coalition significantly changed recent outcomes in the solar debate in Georgia. Because of their actions, in concert with others, Georgia Power committed in 2013 to purchase 525 megawatts of solar electricity by the year 2016, with one-fifth of that total coming from residential and commercial rooftops, not utility owned solar farms (Martin, 2013). In 2016, “Georgia Power asked regulators to approve its Renewable Energy Development Initiative, a program that will bring an additional 525 MW of renewable generation to the company’s portfolio” (Walton, 2016). Actions like this have made Georgia one of the most solar-friendly states in the country according to the Solar Energy Industry Association with a 2016 ranking of 8th (SEIA, 2017).

The Green-Tea Coalition is now operating as a member of an umbrella organization under which a number of groups have come together to change the terrain of the solar power debate in Florida. This coalition is named Floridians for Solar Choice, and much like the Green-Tea coalition, this coalition is made up of groups from all sides of the political spectrum, from the right-leaning Conservatives for Energy Freedom to the left-leaning Southern Alliance for Clean Energy (Floridians for Solar Choice, 2015).
According to the N.C State Solar Center, only four states *expressly prohibit* the PPA arrangement (DSIRE, 2015). Florida is one of those four states that prohibit the arrangement, a fact that turned the state into a major solar policy battleground. The Floridians for Solar Choice (FSC) coalition actively pursued a course of action to place a statewide referendum on the ballot in November 2016, which would allow for power purchase agreements or PPAs to become legal in Florida (Floridians for Solar Choice, 2015). The coalition elected for this course of action because the Florida state legislature and Governor have been steadfast in their opposition to many pro-solar policies, especially power purchase agreements (PPAs).

On the opposite side of this FSC pro-solar effort was a utility-backed coalition named Consumers for Smart Solar (CSS). What followed was a very contentious public debate between these competing coalitions that included deceptive public relation campaigns, large amounts of outside money, competing editorials, Florida Supreme Court decisions, and ultimately a nail-biting contest on Election Day 2016. These events are covered in detail in later chapters. The actions and organization of the coalitions also serve as an important focus of the interview questions posed to important coalition members. Their responses illuminate the events surrounding this important debate.

In summary, the primary focus of this study concerns the advent and effectiveness of the Green-Tea Coalition in Georgia and the related Floridians for Solar Choice Coalition in Florida. These organizations and their issues are researched through the lens of the Advocacy Coalition Framework, to see how well that theory fits these situations. It is also possible that this research may fill in
“gaps” of knowledge concerning these coalitions through an examination of the ongoing policy debate.
CHAPTER II

LITERATURE REVIEW

Public Policy Theories Applicable to Energy

There are different public policy theories that have played significant roles in the study of the issues involved in energy policy. These theories and frameworks have been applied to policy debates and problems concerning traditional forms of energy, like fossil fuels, as well as the newer renewable energy technologies. They have been used to study traditional and renewable forms of energy production and deployment within the United States and in other countries around the world, particularly Europe. The main public policy theories that have been used in the study of these issues are: Incrementalism, Multiple Streams Theory, Punctuated Equilibrium, and the Advocacy Coalition Framework.

In order to provide the reader with a better understanding of the issues being addressed in this study, each of these public policy theories is briefly explained. Additionally, a case is made defending the choice of the particular theory that is used in the remainder of this study. But in order to understand the choice, it is important to know more about the history and structure of the theories.

Potential Public Policy Theories Applicable to This Study

This section discusses three public policy theories that are often used to explain how policy debates and decisions occur in different political settings. They are Incrementalism, Multiple Streams Theory, and Punctuated Equilibrium. While
each of these theories has proven their worth many times over in multiple settings, they were not the best fit for this particular study. A discussion of each theory explains why it was not the appropriate theoretical framework for this research.

**Incrementalism**

One of the more important theories in public policy is widely known as *Incrementalism*. Lindblom’s foundational 1959 article, “The Science of Muddling Through” is a very important examination of this significant and enduring process. The critical idea put forth by Lindblom in this groundbreaking article, was that the ‘rational-comprehensive model’ favored by policy theorists at the time was often talked about, but rarely practiced. Instead of the step-by-step, all-inclusive analysis envisioned by purists, Lindblom forcefully pointed out that it was actually a much smaller, more ad hoc process that was being practiced by policy analysts and legislators, and that this reality should be identified and accepted. Lindblom (1959) wrote:

> Accordingly, I propose in this paper to clarify and formalize the second method much neglected in the literature. This might be described as the method of ‘successive limited comparisons.’ I will contrast it with the first approach, which might be called the rational-comprehensive method (p. 80-81).

This process of ‘successive limited comparisons’ championed by Lindblom, came to be known in public policy circles as *Incrementalism*. *Incrementalism* has proven to be a critical and very successful process of public policy proposal,
adoption, and implementation over the years, winning the favor of politicians and policy analysts alike. The view of the incrementalist can be summed up in the phrase “evolution not revolution.” By proceeding this way, progress can actually be made in manageable steps, while policymakers can avoid large mistakes. Lindblom (1959) wrote:

A wise policy-maker consequently expects that his policies will achieve only part of what he hopes and at the same time will produce unintended consequences he would have preferred to avoid. If he proceeds through a succession of incremental changes, he avoids serious lasting mistakes. (p. 86)

Because the steps taken are small, the subjects on the agenda are typically smaller in scope. For example, if the policy under consideration concerned reducing the amount of carbon emitted into the atmosphere, there are interests who would want to take bold action through the implementation of an economy wide “cap and trade system” or “carbon tax.” On the other hand, incrementalists may see those issues as too large to be undertaken at once and prefer to attack the problem by increasing miles-per-gallon (MPG) standards for cars and increasing spending on energy efficiency. Additionally, they may increase the amount spent on research into alternative energy and consider a number of other smaller proposals. By proceeding this way, incrementalists feel their efforts can add up to real change. Lindblom addressed this idea in his 1979 follow up article, “Still Muddling, Not Yet Through.” Lindblom (1979) wrote:

Incrementalism in politics is not, in principle, slow moving. It is not necessarily, therefore a tactic of conservatism. A fast-moving sequence of
small changes can more speedily accomplish a drastic alteration of the status quo than can an only infrequent major policy change. (p. 520)

The process of incrementalism will remain in practice as long as there are agenda items to be debated and decisions to be made. Incremental changes are often made in the area of energy policy as demonstrated by the example of the miles-per-gallon (MPG) requirements that are “incrementally” increased over time. These standards positively impact oil consumption, pollution, and the budgets of consumers who need to fuel their cars.

Like all policy theories, incrementalism has its critics. In certain cases, incrementalism may not be seen as an adequate policy response to one of the crises or technological shifts that periodically occur in a particular policy realm, including the field of energy. When considering if incrementalism is the best theory to examine the actions of the Green Tea and Floridians for Solar Choice coalitions, a few things need consideration. These include the size of the coalition’s goals and who is proposing the changes.

As has been outlined earlier in this study, the changes the solar coalitions have proposed are not piecemeal. The implementation of these proposals would require regulatory action and result in fairly significant changes to the energy production landscape. While incrementalists argue that small steps in the correct direction will eventually prove more effective, all parties do not accept this view. The reality of incrementalism is that “the real-world of policy making [is] dominated by decisions that compared closely related and only marginally different alternatives, supplemented by a process of partisan mutual adjustment” (Pal, 2011,
p. 29). In other words, incrementalism takes place when compromise is reached by splitting the difference between fairly similar positions. Incrementalism works well that way. However, the proposals of the solar coalitions concerning PPAs call for bolder actions. These actions fall outside the traditional lines of incrementalism and its series of successive limited comparisons.

The second issue is not the size of the changes under consideration, but the identities of those participating in the debate. This is also a shortcoming of incrementalism in how it could apply to the situations in Georgia and Florida. Incrementalism often relies on existing legislators or well-connected interest groups to propose or negotiate the small changes that take place. Pal (2011, p. 30) wrote, “that Lindblom essentially repudiated any normative claims incrementalism might have had for engaging citizens and a wide variety of policy actors in the policy process.” Incremental deals are often struck in the halls of power, by power elites and often do not seek to include substantial input from public advocacy groups.

The significant proposals for change in Georgia and Florida are not coming from politicians and power-elites, but from individuals and groups outside traditional legislative avenues. These coalitions that are proposing significant changes in the area of solar power production contain members from many different parts of society, not just the traditional iron triangle of policy makers. In summary, because the genesis of these pro-solar ideas come from a coalition of outside groups and represent significant, rather than step-by-step change, incrementalism does not offer the best lens through which to study the situation.
Multiple Streams Theory or Multiple Streams Approach (MSA)

The world of public policy has a number of theoretical approaches with legitimate claims of validity. The Multiple Streams Theory has proven very useful in helping to examine many policy situations, including those that resist incrementalism, and provides a policy vehicle to undertake fairly swift policy action. As such, it deserves examination.

In the March 1, 1972 issue of Administrative Science Quarterly, an important article in the study of political agendas and how solutions to various policy problems emerged was published. The article, “A Garbage Can Model of Organizational Choice,” was co-authored by Michael D. Cohen, James G. March, and Johan P. Olsen. This article was concerned with the often-chaotic organizational aspects of large organizations, particularly large public universities, but it eventually became an important cornerstone in the development of an important theory in public policy, the Multiple Streams Theory or Multiple Streams Approach (MSA).

In their article, the authors put forward an unconventional theory of decision-making that challenged traditional or “rational” models. In traditional models of decision-making, a problem was identified, potential solutions to the problem were proposed, and the best solution was chosen and implemented. Instead of this “rational” model, they proposed a “garbage can model” that cut the string that directly tied together problem and solution.

The authors identified four independent entities involved in the process: problems, solutions, choice opportunities, and participants that could be mixed together in a metaphorical garbage can. Within the confines of the garbage can “is a
collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work” (Cohen, March, & Olsen, 1972, p. 1).

This model made its way from organizational studies to become a very important theory in the field of public policy and administration when John Kingdon of the University of Michigan, saw parallels between the research of Cohen, March and Olsen and his own. Kingdon (1984) wrote:

Our point of departure is a model developed by Michael Cohen, James March, and Johan Olsen, which in a masterpiece of indelicate language they called ‘a garbage can of organizational choice.’ What I have observed in my research seems similar in many of its contours to the essential logic of their model. (p. 84)

Kingdon’s book, *Agendas, Alternatives and Public Policies* has become one of the most influential and important works in the public policy field concerning the subject of agenda formation and solutions acquisition. Kingdon took much from the classic works of public policy that had come before him, and combined it with the groundbreaking theory of organizational structure known as the garbage can model discussed above. This allowed him to devise a new and valuable model of agenda formulation and solution acquisition that is widely accepted and used today. What Kingdon produced was the Multiple Streams Theory, which is also referred to as the Multiple Streams Approach (MSA) in the literature. Multiple Streams has become a cornerstone theory of the public policy field.
The following is a brief, but concise narrative outlining the workings of Multiple Streams Theory:

Any societal predisposition to get something done will enter one of three ever-flowing, somewhat independent, circular streams. The problem stream (problems waiting to be solved), the policy stream (proposed solutions to various problems), and the political stream (frameworks of prevalent ideologies, public opinion, and the political realities in which policy making takes place) are always moving, with issues or factors coming in and out of the streams.

While these streams are flowing around the decision-making buildings (the Capitol Building in Washington D.C. or the various statehouses), events are happening in the world that might elevate one issue to the forefront of attention. This generally happens because a ‘focusing event’ may have taken place that gets the public’s attention and requires policy makers to take action.

At this point, decision-makers may fish through the “garbage can” of policy ideas in hopes of coming up with one that will address the problem, while ‘policy entrepreneurs’ and special-interest groups stand beside the garbage can trying to sell the decision-makers on their ideas. When the decision makers find a possible solution to the problem in the form of a policy idea, the issue and its possible solution will “couple” together and make its way through a temporarily open “policy window” and onto the political agenda for possible consideration.

A clear example of this dynamic is what sometimes happens after one of the periodic mass shootings in the United States. The event “shocks” the system and focuses everyone’s attention. A potential policy window opens through which one
could expect legislation in response to the event to pass (background checks or ammunition magazine limits). Some action may or may not be taken before the shock wears off or effective lobbying helps close the window to further action.

The Multiple Streams process is carried out on a continuous basis with one window opening while other windows close. One can never predict with certainty how or when the time will come that allows a particular issue to find the open policy window. One has to look no further than today’s headlines to see which issues may be catching onto one of the streams and heading for an open policy window on a timetable some decision-makers may not like, while others welcome.

Multiple Streams is a public policy model that “is much admired and cited (over 12,000) times” (Cairney and Jones, 2015). The question at hand concerns if MSA is the right model for this study of solar coalitions in the American South. Policy entrepreneurs are key players in the MSA model who stand ready to offer their solutions when a window of opportunity opens. “Entrepreneurs within Kingdon’s Darwinian metaphor are best understood as the well-connected insiders who provide knowledge and tenacity to help couple the “streams”; yet they cannot do more than the environments allow. They are ‘surfers waiting for the big wave’...” (Cairney and Jones, 2015).

This quote highlights two issues that may preclude Multiple Streams from being the proper choice for this solar policy case study. The first is the critical role played by “well-connected insiders” in the MSA model. This is problematic just as it was with the importance of insiders in the incrementalism model. The backbone of the Green-Tea and Floridians for Solar Choice coalitions are policy actors who come
from outside the policy mainstream. These policy actors are not well-connected insiders, but citizens and civic organizations who are organized to affect change in solar energy policy.

Another disconnect comes from the “surfers waiting for the big wave” metaphor. This wave often comes from a shock or focusing event that opens the window of opportunity. One of the elements of MSA is that “actors have limited time (which forces people to make choices before their preferences are clear)” (Cairney and Jones, 2015). The recent energy situations in both Georgia and Florida have been relatively stable and are not suffering from any “crisis” in energy supply that would demand immediate action. This lack of a focusing event that limits the time in which decisions are made is another element that puts the applicability of the MSA to this study in doubt. While different members of the coalitions cite various reasons for getting involved, there does not seem to be a reaction to one overarching event. The importance of insiders and the MSA’s reliance on a focusing event prevents the MSA from being the right lens for this study.

**Punctuated Equilibrium**

Kingdon’s Multiple Streams Theory was based on the work of classic public policy authors, his own academic explorations, and the application of the garbage can model in collaboration with its authors. Just as Kingdon was handed the torch by a mention in the Charles Jones work *An Introduction to the Study of Public Policy*, he in turn, seemed to hand the torch to a new generation of academics by
mentioning the new work they were undertaking in the field and commenting on the importance of their ideas.

In the revised final chapter of *Agendas, Alternatives, and Public Policies*, Kingdon (2003) wrote, “the agenda-setting process might be much less gradualistic, for reasons we have discussed in this book...As Frank Baumgartner and Bryan Jones point out in their excellent discussion of the issue, agenda setting looks like ‘punctuated equilibrium’...as we have noticed in this book, subjects hit suddenly” (p. 226).

These paragraphs, written by the one of the most influential policy academics in the closing pages of his revised masterwork, were high praise for the newer and increasingly influential work of Frank Baumgartner and Bryan Jones. The idea of “punctuated equilibrium” is one that has been gaining credibility as a reproducible model of agenda formulation, implementation, and policy change. It is also one that has a role to play in the area of energy policy.

Frank Baumgartner and Bryan Jones have been long time academic collaborators, with works both individual and collaborative gaining attention beginning in the late 1980s. The breath of their influence on the public policy academic world began to be seriously felt with the publication of their 1993 work, *Agendas and Instability in American Politics*. Just as Kingdon produced an understandable and applicable model that allowed students to actually see how an issue moves from a societal predisposition to a place on the decision agenda, Baumgartner and Jones have produced a model that explains both how agenda items sometimes unexpectedly burst onto the stage, while also explaining the
longer, calmer time periods of "stasis" that usually prevail in the governmental policy arena.

This theory is known as “Punctuated Equilibrium” (PET) and is primarily a process studied in the field of evolutionary biology. Reminiscent of the way Kingdon borrowed and applied a theory from another field of study to public policy, so have Baumgartner and Jones. Whereas Kingdon’s inspiration came from the closely related field of organizational sciences, the reach of Baumgartner and Jones for their inspiration was many more disciplines removed, namely, evolutionary biology. However, both reaches proved very worthwhile.

In his de facto introduction of these authors and their ideas, Kingdon also explained the biological basis upon which their theory is built. Kingdon (2003) wrote, “According to this concept, biological evolution has actually proceeded in fits and starts, and not as gradually as Darwin originally thought. Systems seem to settle into an equilibrium for a time, then suddenly change, then settle into a new equilibrium” (p. 226).

This idea of punctuated equilibrium and the role it plays in explaining both the calm and active periods of policy implementation, and the different literatures they spring from, is discussed in a chapter entitled “Punctuated Equilibrium Theory and Environmental Policy.” Baumgartner wrote this chapter for the book *Punctuated Equilibrium and the Dynamics of U. S. Environmental Policy*, edited by Robert C. Repetto. Baumgartner (2006) wrote:

In our original formulation of these ideas, our goal was simply to integrate what had been two disjointed literatures: Most of the literature on public
policy focused on incrementalism and institutional analyses; these literatures shared a common focus on the difficulties of creating dramatic policy changes. However, an entirely separate and quite vibrant literature focused on agenda-setting and dramatic policy initiatives. Could we build a single understanding that would incorporate explanations both of stability and dramatic change? (p. 27)

It would seem from the reviews their work has received that they have succeeded in bringing these two literatures together. Considerer this quote from a September 1994 review of Agendas and Instability in American Politics, published in the American Political Science Review. Bosso (1994) wrote:

Baumgartner and Jones have produced the book that students of public policy have been awaiting and that more than a few will wish they had written. In this rich work, the authors show how long periods of policy incrementalism and spasms of change are part of the same equation of issue definition and institutional bias. (p. 752)

In addition to commending and recommending this work on its academic level, Bosso went on to call it a classic. Bosso (1994) related, “It is at once a grand synthesis of the past and a path-breaking work against which future studies will be measured. In these ways it is a worthy heir to a long tradition” (p. 753).

Like Multiple Streams Theory, Punctuated Equilibrium also reacts to system shocks, crises, or developments. In order for a Punctuated Equilibrium policy change to take place, the development or shock that precipitates the change must be
timely enough or severe enough to help it “catch fire” and spread. This potentially significant policy change is contingent on the situation being close enough to a “tipping point” that it can be set off by an external event (Brock, 2006).

“As with MSA, PET posits the potential for policy change when a shock (a punctuation) reorders the stable agenda. With increased attention and public concern now paid to the problem the shock has highlighted, there may consequently be a change in that “policy image” (Grossman, 2015, p. 62).

The shock or focusing event does not necessarily have to be a local event. A recent example of this was seen in the effect the Fukushima earthquake and subsequent nuclear accident had on nuclear policy in Germany and its process of energy transition to renewables known as the Energiewende. In the year 2000, a German coalition government of Social Democrats led by Gerhard Schroder and the Green Party decided to phase out nuclear power. A subsequent government led by current Prime Minister Angela Merkel decided to halt this total phase out of nuclear power. However, the “shock” of the Fukushima accident changed her calculus. The “Fukushima disaster triggered a spectacular policy U-turn where Merkel, a physicist by training, ordered the immediate shutdown of the country’s oldest nuclear reactors and resurrected plans for a complete nuclear phase out by 2022” (How Fukushima catalyzed Germany’s energy revolution, 2016). This decision turbocharged Germany’s commitment to their energy transition towards renewable sources and is an excellent example of how Punctuated Equilibrium works.

However, as noted in the earlier discussion about Multiple Streams, the energy situation in Georgia and Florida has been fairly stable and has not been
subject to the kind of shock described above. Instead, the discussion surrounding
the energy situation in these states has more to do with local politics and
entrenched interests. Reactions to these entrenched interests have helped create
the debate underway. The motivations of the coalitions under study are
multifaceted. Some are motivated by ideas of personal freedom and anti-monopoly
economic outlooks. Others are driven by environmental concerns. Because these
various motivations are driving the coalition members rather than a singular shock
to the system, Punctuated Equilibrium Theory is not the best lens for this study.

A Better Theoretical Fit

This section has touched upon three public policy theories that have been
used to examine different aspects of the issues surrounding energy. They are
Incrementalism, Multiple Streams Theory, and Punctuated Equilibrium. While all
three of these are valuable theories through which to examine energy issues, they
each have issues that keep them from being a good “fit” for this study.

Each of these theories at some point requires that the institutions of
government, such as the legislative and/or the executive branch, actually consider
the policy under consideration. In Florida, the legislative and executive branches
have already spoken and delivered solid rejections of the legislation that would
allow solar power purchase agreements to be made legal in the state. Because of
this rejection, advocates turned to a referendum process to proceed. This
referendum process was not designed to go through the legislature. The situation
now requires a theory or lens that can work inside or outside the legislative process

47
and provide a structure that allows for the study of the different grassroots organizations involved in the process. Coalitions working outside the legislative process are the policy subsystems or ‘units of analysis’ that must be examined. Thankfully, the fourth theory under consideration, the Advocacy Coalition Framework (ACF), seems to be a good fit for the situation. This important public policy theory focuses on the actions and structures of coalitions within policy-making efforts. In this case, these coalitions are operating outside the normal legislative process, and the design of the ACF can handle that process. Therefore, the Advocacy Coalition Framework is used as the primary public policy theory throughout this study’s examination of solar power coalitions in the Southeastern United States.

The Advocacy Coalition Framework

Because of the significant political power of the electric utilities and fossil fuel industries, getting legislation enacted that encourages the development of alternative sources of energy is a major, but not impossible, challenge. The Advocacy Coalition Framework (ACF) presents itself as a public policy theory that could potentially help explain the process by which solar power legislation can be enacted. The reasons for exploring the applicability of this theory in connection with the debate over solar legislation are connected with many of the ACF’s foundational premises. These include: 1) that the framework makes room for multiple policy actors at many different levels of society and government, 2) that it takes into consideration the influence of scientific knowledge and technological innovation as policy influences, 3) that policy development has taken over ten years to develop
and be acted upon, and 4) that policies advocated by members of each coalition can be seen as a reflection of their beliefs, and 5) that the unit of analysis for understanding policy change is the policy subsystem (e.g. topic, geography, influencing actors) (Sabatier and Jenkins-Smith, 1999).

The Advocacy Coalition Framework first came into academic consideration with the arrival of a 1988 paper by Paul Sabatier, of the University of California at Davis, entitled: An advocacy coalition framework of policy change and the role of policy-oriented learning therein. This single paper began the process of offering the ACF as an alternative to the more familiar stages heuristic theory of public policy development. The journey of the ACF picked up steam a few years later with the 1993 publication of the book, Policy Change and Learning: An Advocacy Coalition Approach, which was co-edited by Sabatier and Jenkins Smith. The publication of this book set the ACF up as a theoretical force to be reckoned with in the field of public policy studies.

An important aspect to understanding policy change through the lens of the Advocacy Coalition Framework depends on having knowledge of its unit of analysis. “In the ACF, the unit of analysis for understanding policy change is the policy subsystem -- the collection of stakeholders (both governmental and non-governmental) actively concerned with a substantive issue in a clearly defined geographic scope and regularly seeking to influence the decision making and implementation process with their preferences” (Sabatier & Jenkins-Smith, 1999). A few examples of published studies concerning these policy subsystems covering “substantive issues in a clearly defined geographic scope” that have been examined
using the ACF are: water issues in California, forest policy in Chile, and education policy in Mozambique (Sabatier & Weible, 2007, p. 217-219).

Two examples of the ACF’s growing influence over the first two decades of its existence are worth noting. First, an examination of the theory’s use within public policy studies was highlighted in the book chapter The Advocacy Coalition Framework: Innovations and Clarifications from the 2nd edition of Theories of the Policy Process. This examination revealed that much of “the early research dealt primarily with U.S. energy and environmental policy, the authors’ field of expertise” and that from its inception through 2007, at least eighty-eight case studies have been published using the ACF as their empirical base (Sabatier & Weible, 2007, p. 189).

The ACF’s global influence can be seen in the fact that between the years of 1998 to 2007, fifty-four case studies were carried to publication, with nineteen applications taking place in Europe and fourteen in the United States. The balance are provided by researchers who have applied the ACF to issues in Asia, Africa, Canada, South America, Australia, and other venues (Sabatier & Weible, 2007, p. 190). Of these fifty-four case studies from 1998 to 2007, “twenty-six have dealt with environmental or energy policy, while twenty-eight have dealt with economic or social issues such as taxation, public health, drugs, culture, education, sport, and domestic violence” (Sabatier & Weible, 2007, p. 190).

The second example of the ACF’s ever growing influence is the fact that Policy Studies Journal, a leading voice in the field, published an entire issue dedicated to the ACF twenty-five years after the ACF was first developed. The 2011
issue, Vol. 39, No. 3, opened with an article entitled *A Quarter Century of the Advocacy Coalition Framework: An Introduction to the Special Issue*. This represents only the second time that Policy Studies Journal has published a special issue entirely devoted to a particular public policy research framework (Weible, Sabatier, Jenkins-Smith, Nohrstedt, Henry, & deLeon, 2011).

The issue contains a compilation of eight peer-reviewed articles from authors in four countries: Canada, Sweden, Switzerland, and the United States. The authors hail from ten different universities and the issues examined “range from Albright’s article on policy change in Hungary’s flood management to Pierce’s historical analysis of coalitions involved in the United States policy on the creation of Israel” (Weible, Sabatier, Jenkins-Smith, Nohrstedt, Henry, & deLeon, 2011). One potentially interesting development contained in the special issue is an “application by Shanahan, Jones and McBeth (2011) that posits several hypothesis that explore the intersections of the role of policy narratives in the ACF. The idea that policy narrative or “storytelling” has provable value in the process of examining advocacy coalitions and their efforts has significant potential to be a powerful application.

**The Advocacy Coalition Framework Model**

To initially begin understanding the ACF model, it is helpful to think of it in terms of a sporting contest such as baseball, football, and, because of the ACF’s worldwide appeal, soccer (futbol). The ACF is designed to provide the researcher or reader an outline of the political or policy playing field (diamond, gridiron or pitch) and explain some of the major rules or tendencies of the game. The ACF also
provides a vehicle to research which political players or organizations choose to be on which team (coalition) and why they choose to join. Because the ACF is designed to examine policy conflicts over long periods of time, usually ten years or more, it becomes possible to see what coalitions or teams are historically stronger than the opposition (New York Yankees vs. San Diego Padres, Dallas Cowboys vs. Detroit Lions, or Manchester United vs. Cambridge United). Once the teams or coalitions are developed, and their relative talents or strengths are understood (i.e. unlimited money, winning culture, ruthless pursuit of victory vs. limited resources, little success, unorganized political efforts), the ACF model also provides a mechanism to track how the two opposing coalitions employ different strategies to counter the others arguments and gain (or maintain) the upper hand in the policy arena or “game.”

To gain a more concrete understanding of the ACF, it is valuable to move away from an introductory sports analogy towards a more detailed examination of its features. It is worth noting that the examples are drawn from an actual policy debate that contains significant parallels to the larger subject of this dissertation, Cross-ideological Solar Power Coalitions in the American South.

The actual policy debate that can shed some light on the workings of the ACF is the proposal to build a twenty-four square mile wind farm off of Cape Cod in Massachusetts known as Cape Wind. Since its initial proposal in November 2001, this “policy proposal has been, and continues to be highly controversial, with interest groups, developers and residents of the Cape forming two advocacy coalitions, one for and one against this wind farm” (Shanahan, Jones & McBeth,
2011, p. 536). In its classic schematic model below, Sabatier presents a flow chart that outlines existing factors and potential avenues of action important to the framework. Inserting some concrete examples from the “Cape Wind” wind farm debate into an explanation of the ACFs model where appropriate, is valuable by providing readers with a clearer understanding of the workings of the ACF in a real world policy debate.

The ACF model contains stable and dynamic external parameters that will influence any debate undertaken by different opposing coalitions through the lens of the ACF. The two flow chart boxes positioned on the left side of the diagram represent these external parameters. The top box contains the three relatively stable parameters that are unlikely to change over the course of a policy debate, while the bottom box contains the four external subsystem events that represent potential change with a dynamic impact on the policy debate. For each, a quote from Sabatier’s 1988 proposal is included along with a real world example of these parameters in the context of the Cape Wind project. A larger version of this model is available in Appendix D.
Advocacy Coalition Framework Model

Relatively Stable Parameters

Basic Attributes of the problem area (or “good”)

Society’s demand for power or electricity must be fulfilled. This requires the burning of fossil fuels, such as coal or natural gas, the use of nuclear power, and the deployment of renewable technologies like solar and wind power. The demand for power is a stable situation; it is not going to cease. The question becomes in what combinations or ratios will these power sources be deployed, and what future direction will the provision of energy take?

One important area that is fundamental to the ACF, which needs to be mentioned, is the potential for “policy learning.” This idea of policy learning informs...
how the players involved in the policy debate may, or may not, shift their positions or opinions on the subject under discussion depending on the situation or information that is present. Sabatier (1988) wrote that different “aspects of the good or problem/issue area affect the degree of policy-oriented learning likely to take place...One would thus expect more learning on air pollution than mental health” (Sabatier, 1988, p 135). Simply put, this highlights that air pollution (or electricity generation) are issues that are more easily understood by the body politic and therefore more likely to be candidates for “policy learning” than more highly complex issues such as mental health.

**Basic distributions of natural resources**

The natural resources of an area significantly impact many policy debates and are relatively stable and unlikely to change during the time an issue is under consideration. For example, in order to generate electricity during the oil crunch of the 1970s, “the U.S. could encourage utilities to switch from oil to coal – with its potentially significant levels of sulfur emissions – while the French, lacking in abundant coal reserves, turned to nuclear power as an alternative means of generating electricity” (Sabatier, 1988, p. 135). When applied to our “Cape Wind” example, the natural resource of significant potential wind energy off the coast of Cape Cod, Massachusetts is not going to change. It is a stable natural resource parameter because the wind will blow off Cape Cod regardless of any decision made/taken concerning the wind farm.
Fundamental cultural values and social structure

Different areas or countries of the world hold historical cultural values and social structures that are unlikely to change quickly. For example, given the cultural adherence to free-market values in the United States vs. Europe, "Large-scale nationalization of the means of production is a viable policy option in many European countries, but not in the U.S. While such norms are not immutable, change usually requires decades" (Sabatier, 1988 p. 135). Since Sabatier made this observation in 1988, many European countries, most notably the United Kingdom have moved many aspects of the means of production toward the free-market, but it took a long time, and the political memory of the culture is always debating a potential reversal.

Another important worldwide cultural or social norm is that “political power in most countries tends to be rather highly correlated with income, social class and large organizations” (Sabatier, 1988, p. 135). This social/political fact is very resistant to change and can safely be considered a stable parameter. This is especially true in societies that do not have well developed democratic institutions that provide some recourse to those opposing the wishes of the wealthy.

While it is true that the wealthy are, and will remain, well connected throughout political circles and that these connections very often pay off in political victories, it is not a certainty. In the context of the “Cape Wind” example, many powerful, wealthy interests formed a coalition against the building of the wind farm. This anti-wind farm coalition included elites who lived and vacationed on Cape Cod such as the Kennedy and Romney families, who thought the wind farm would spoil
their views, along with two Native American tribes who had issues with the wind farm encroaching on sacred land. One relentless opponent was William Koch, a billionaire fossil-fuel magnate, whose strategy was to delay the project in court (Eckhouse and Ryan, 2017). William Koch is the brother of Charles and David Koch. Charles and David Koch are primary funders of advocacy organizations like Americans for Prosperity, which played a significant role in opposing the development of solar power in Georgia and Florida.

While political power often resides with the wealthy and social elites, it is not always determinative, however, it was in this case. The pro-wind advocacy coalition anchored by the “Cape Wind” organization and Greenpeace won seventeen legal challenges brought against the plan over the years by the opposing coalition and was fully permitted by the state and federal governments in 2015. However, the lawsuits continued to mount and “Cape Wind missed a series of contractual milestones, prompting National Grid Plc and Northeast Utilities’ NSTAR unit to cancel power-purchase agreements in early 2015, which ended the project (Eckhouse and Ryan, 2017).

Other wind power projects are continuing in the region. “Several of the developers have said they learned a key lesson from Cape Wind: don’t try to build within sight of shore” (Eckhouse and Ryan, 2017).

**Basic legal structure**

In most North American and Western European societies, where the bulk of the ACFs applications to policy issues have taken place, the basic legal norms are quite stable. While the laws within particular states of the United States, like
Massachusetts, will change over time, the *institutions* of the executive, legislative, and judicial branches will remain stable.

In the case of the “Cape Wind” scenario, this stability of basic legal structures offered the opposing coalitions stable legal and institutional battlefields on which to pursue their aims. Each coalition had sympathetic lawmakers within local and state government and there were legal motions to be filed in court by parties on both sides of the debate. The stability of these institutions allowed each coalition to develop and employ their respective strategies.

**External Subsystem Events**

This section examines the lower box on the left hand side of the ACF model flowchart. While the previous section focused on the stable external parameters of the policy landscape, this section examines three types of external developments that are not stable, but instead, dynamic. The tendency for relatively quick change within these categories can be external events that can significantly change a policy debate. Dealing with these unexpected external events can be challenging and frustrating, “as (policy) actors who have worked for years to gain advantage over their competitors within a subsystem suddenly find their plans knocked awry by (external) events – such as the Arab oil boycott – over which they have little control” (Sabatier, 1988, p. 136).

**Changes in socio-economic conditions and technology**

These types of changes can happen very rapidly like a stock market crash or sudden oil embargo that dramatically changes the economic calculus of a policy
debate. Or, they can be the result of a developing trend that reaches a “tipping point” and allows a technology to reach a point where it has the potential to change the market. Either way, “these can substantially affect a subsystem, either by undermining the causal assumptions of present policies or by significantly altering the political support of various advocacy coalitions” (Sabatier, 1988, p. 136).

In keeping with the “Cape Wind” example, the growing concern about climate change coupled with the improving economies of scale connected to wind power, allowed for the project to be relatively competitive in the electricity market. These changes in socio-economic conditions and technology made the wind farm a viable alternative to fossil fuels, which led to the bitter and lengthy debate over its completion.

**Changes in systemic governing coalitions**

Air pollution was a significant issue in the late 1960s. Conditions had become bad enough in many of America’s larger cities that the government eventually acted in 1970 with the Clean Air Act. This law, which was passed under the Republican administration of Richard Nixon, helped make substantial progress in improving air quality. The ensuing administrations of Gerald Ford and Jimmy Carter and sympathetic coalitions protected the Clean Air Act from forces that sought to weaken its provisions. However, the 1980 election of Ronald Reagan brought into power a president who viewed the law as overregulation of the business community. “Reagan’s election led to the appointment of administrators at the Environmental Protection Agency (EPA) who were committed to a drastic reduction in federal enforcement of environmental regulation” (Sabatier, 1988, p.
Reagan’s election changed the governing coalitions that implemented the Clean Air Act within the EPA, and therefore enforcement was curtailed.

**Policy decisions and impacts from other subsystems**

In the policy world, it seems that very few policies live in a vacuum. Policy change in one area or subsystem has ripple effects into other subsystems. These ripple effects are a major ‘principal dynamic element’ affecting other subsystems. A good example of this is, “Britain’s entry into the Common Market (largely on foreign policy and economic grounds has had repercussions on subsystems from taxation to pollution control because of the need to comply with EEC mandates” (Sabatier, 1988, p. 137). In other words, because Britain wanted to join the European Union for its economic and foreign policy benefits, it had to put up with the European Union making certain rules concerning taxation and pollution, which, if left to its own devices, Britain may not have adopted. Some of these issues seem to have come home to roost with the Brexit vote, and Great Britain’s move towards cutting ties with the European Union.

This section has provided an overview of how the foundations of the ACF are structured. A more in depth explanation of how these structures actually work occurs in the ensuing chapters, where the relationship between the ACF and the solar coalitions is explored.

**The Advocacy Coalition Framework and Solar Power**

These first two sections of this literature review have covered some of the important public policy theories that have been used to examine energy issues.
These theories are Incrementalism, Multiple Streams Theory, Punctuated Equilibrium, and the Advocacy Coalition Framework. The first section examined the first three theories, while the second section covered the ACF in depth because it is the public policy theory that is utilized in the actual study of Cross-ideological Solar Power Coalitions in the American South.

This section concentrates on taking this study towards what appears to be a “gap” in the literature. A search of the literature has turned up peer-reviewed articles and studies that have dealt with the structure of each theory, as well as articles that explore how they apply to different subject areas. Another search turned up results where the different theories have been used to address questions concerning the environment or energy. A more concise search combined the terms “Advocacy Coalition Framework” with “energy and environment.” This search successfully delivered a number of valuable articles. These articles were either academically peer-reviewed or journalistic in nature.

One important result of this search was the 2009 article, *Themes and Variations: Taking Stock of the Advocacy Coalition Framework*. Weible, Sabatier, and McQueen reviewed the 20-year history of the Advocacy Coalition Framework (ACF) and reviewed some of its changes and applications. After taking stock of the 80-plus peer-reviewed applications the ACF has been used in over the 20 years since its proposal, it was noted “the majority of applications, however, remain in the environmental and energy policy areas, which is most likely a legacy of the original focus by Sabatier and Jenkins-Smith” (Weible, Sabatier & McQueen, 2009, p. 125).
This finding offered this researcher a measure of comfort in the fact that the ACF was born out of and continues to be applied to the areas of environmental and energy studies. Because the historical use of the ACF is similar to the subject matter of this study, the choice to use the ACF as the primary theory for this study seems reasonable.

A further narrowing, combined the search terms “Advocacy Coalition Framework” with variations of “solar energy policy.” This search resulted in very few results. The results that did appear primarily dealt with the European coalitions that have been active in the promotion of solar power on the continent, particularly Germany. While the information contained in these articles is valuable to this study, a gap in the literature remained. An additional search for applications of the ACF to solar policy in the Southeastern United States returned zero results. The lack of results from this search confirmed the apparent existence of a “gap” in the literature that this study hopes to fill.

The ACF seems to be very applicable to this study. One of the areas that the ACF helps to address is the fact that many coalition members have different core beliefs. The founding members of the Green Tea Coalition and the Floridians for Solar Choice Coalition hail from various conservative and environmental groups, including the Tea Party and the Sierra Club. These groups are from opposite sides of the political spectrum and have different core beliefs as defined by the Advocacy Coalition Framework. It is informative how the ACF deals with these divergent beliefs.
Other groups who also reside on different ends of the left-right political divide have joined them in the coalitions. The Floridians for Solar Choice website lists the additional founding members of the coalition. Some examples of these groups listed on the website are from the right the Christian Coalition of America, Conservatives for Energy Freedom, and the Republican Liberty Caucus of Florida. From the left, members include the Florida Alliance for Renewable Energy, the Florida Solar Energy Industries Association, and the Southern Alliance for Clean Energy. A full list of member organizations is available as Appendix C.

How the ACF digested these political differences went a long way to answering the research question about the ACF’s applicability to this particular coalition. The research process revealed how the ACF dealt with these divergent core beliefs.

Another interesting article, *Industrial fields and countervailing power: the transformation of solar energy in the United States* may foreshadow what might develop in Florida, Georgia, and across the country. Hess (2013) wrote,

> Dominant models of distributed solar energy are aligned with countervailing industrial power (e.g. Google or Morgan Stanley) that favors third-party financing. As the third-party financing industry grows, it will likely have increasing political influence in state legislatures and public utility commissions. This financial clout could provide a countervailing power center to investor owned utilities (IOUs). (p. 854)

Essentially what Hess is arguing is that if the coalition succeeds in getting PPAs legalized in Florida, it will create a powerful industry that will be able to lobby
for even more solar-friendly legislation, even if traditional industry objects.

Essentially, success begets success.

**Summary of the Literature Review**

Creswell (2009) wrote, “Qualitative researchers often use [theoretical] lenses to view their studies... Sometimes the study may be organized around identifying the social, political, or historical context of the problem under study” (p. 176). There are different public policy theories that have played significant roles in the study of the issues involved in energy policy. These theories and frameworks have been applied to policy debates and problems concerning traditional forms of energy, like fossil fuels, as well as the newer renewable energy technologies in many parts of the world. The main public policy theories that have been used in the study of these energy issues are: Incrementalism, Multiple Streams Theory, Punctuated Equilibrium, and the Advocacy Coalition Framework. Each of these theories has been closely examined in this literature review.

The Advocacy Coalition Framework (ACF) is the public policy theory that has the best potential to help explain the process that surrounds the solar policy debate in the American South. The framework helps explain how solar power policy develops within the particular political environment of the South and how that influences the particular coalitions being examined. The reasons for exploring the applicability of this theory in connection with the debate over solar power policy are connected with the ACF’s foundational premises. These include:

1) that the framework makes room for multiple policy actors at many different levels of society and government,
2) that it takes into consideration the influence of scientific knowledge and technological innovation as policy influencers,

3) that policy development has taken over ten years to develop and be acted upon,

4) that policies advocated by members of each coalition can be seen as a reflection of their beliefs, and

5) that the unit of analysis for understanding policy change is the policy subsystem -- (e.g. topic, geography, influencing actors) (Advocacy Coalition Framework Overview, 2018).

While each of these foundational premises are important to examine, two that are of particular interest given the types of coalitions being studied are 1) that the policies being advocated by the coalition can be seen as a reflection of their beliefs and 2) that the framework makes room for multiple policy actors at many different areas of society and government.

Typically, coalitions are made up of participants who have similar beliefs on the specific topic being promoted as well as their general outlook on related matters. For example, most coalitions are made up of groups and individuals that generally reside on one side of the right / left political divide. What is particularly interesting about this coalition is the fact that the two wings of the coalition are made up of members who are generally on opposite sides of the political spectrum, that have come together for one specific cause, solar power advocacy. This dynamic makes it an interesting case study to test against the tenants of the ACF.
CHAPTER III

METHODOLOGY

It is the purpose of this study to examine the coalitions that have formed to participate in the debate over solar power policy in two different states in the American South. This chapter highlights the methodological approach this study employed in addressing this subject. Each section of the chapter addresses a particular aspect of the methodological approach.

The sections included address: 1) The Research Questions which state what questions are being asked in the study, 2) The Qualitative Research Design being applied which helps anchor the approach to the research, 3) Sampling highlights the methods used to choose interview subjects, 4) Data Collection outlines how the needed information was gathered, and 5) Data Analysis provides insight into how that information was examined in order to answer the research questions. Two additional sections address 6) Reflexivity and Ethical considerations that are critical to have in place and 7) Validity strategies that highlight how to proactively protect the reputation of the study.

The Advocacy Coalition Framework (ACF) is employed as the public policy theory through which to examine the active coalitions and political developments that have taken place in Georgia and the larger constitutional amendment referendum process that has been unfolding in Florida.
Research Questions

This study examines how and why certain solar power coalitions have developed in the American South, if they are perceived as effective, and how well their development applies to the tenants of ACF. The research questions are as follows:

1) Why did supporters of solar power organize themselves into the particular coalition structures represented by Georgia’s Green Tea Coalition and the Floridians for Solar Choice Coalition?

2) How have Georgia’s Green Tea Coalition and the Floridians for Solar Choice Coalition successfully managed their policy coalitions?

3) How effective are these coalitions perceived to be by public policy players outside the coalition?

4) How does the Green Tea Coalition and the Floridians for Solar Choice Coalition represent an Advocacy Coalition Approach?

Qualitative Research Design

This study employs a qualitative research design to address the above research questions. Qualitative research has been used in a number of different disciplines such as anthropology, philosophy, humanistic psychology, ecology, and sociology among others. Within these disciplines there are important theoretical traditions and aspects to qualitative research, which concern the epistemological or methodological approaches through which researchers discover knowledge.
While these academic disciplines, theoretical traditions, and the situations and questions they address can be quite complex, it turns out the methods used to study them do not have to match that complexity. Patton (1990), wrote:

There is a very practical side to qualitative methods that simply involves asking open-ended questions of people and observing matters of interest in real world settings in order to solve problems, improve programs, or develop policies. In short, in real-world practice, methods can be separated from the epistemology out of which they have emerged (italics retained from source). (p. 89-90)

The fact that the practical aspects of qualitative research can contain such straightforward methods is a welcome development. These important practical aspects include the methods used to design the study, select a sample, and to collect and analyze the data.

Within the world of qualitative research, the idea of “grounded theory” plays an important role and, as such, helps inform, but not dictate, the design of this study. Glasner and Strauss (1967) put forward this cornerstone of qualitative research with their contention that a theory offering an explanation about your area of research inductively develops over the course of the research, if you constantly interact with the data. Patton addresses this process of data interaction leading to theory induction. “Qualitative methods are particularly oriented towards exploration, discovery and inductive logic...Inductive analysis begins with specific observations and builds towards general patterns” (Patton, 1990, p. 44).
While this study already has an underpinning theory framing the research, the Advocacy Coalition Framework (ACF), many of the procedures and methods connected with the process of grounded theory research still hold value. While the goal of this research is not to develop a stand alone theory of what is happening with the solar coalitions in the American South, it is concerned with finding out as accurately as possible what is occurring within and around these coalitions, and to see if that fits into the Advocacy Coalition Framework. Towards that end, the tools offered in the grounded theory method are procedures worth emulating in order to see if the facts on the ground fit within the ACF.

The qualitative paradigm that helps govern this study is anchored in the “bricolage” approach that Maxwell promoted. Maxwell (2013) wrote, “the key idea is that rather than developing a consistent plan in advance...the bricoleur spontaneously adapts to the situation, creatively employing the available tools and materials to come up with a unique solution to the problem” (p. 42). This approach allowed this study to be flexible in reacting to new information that revealed itself as the research moved forward.

Maxwell’s preferred approach to qualitative research is known as critical realism (2013, p. 43). This approach has been gaining acceptance among qualitative researchers, and, as such, was employed to help govern the approach to exploring the research questions. Maxwell notes that critical realism is a form of “bricolage” that combines ontological realism and epistemological constructivism (Maxwell, 2013, p. 43). This combination informed this inquiry into the motivations and perspectives of the different wings that make up the unlikely coalition working to
promote solar power in the American South. Ontological realism is centered on "the belief that there is a real world that exists independently of our perceptions and theories" and epistemological constructivism puts forward that "our understanding of the world is inevitably our construction, rather than a purely objective perception of reality, and no such construction can claim absolute truth" (Maxwell, 2013, p. 43).

Because this study examined two coalitions made up of members from different sides of the political spectrum that agree on a central goal of solar power promotion, the approach provided by critical realism should prove itself useful as a paradigm. Both groups have perceptions and theories about the situation that do not exactly adhere to what exists in the "real world." This can be seen as an example of ontological realism. Also, both groups have understandings of the world (or this situation) that is of their own construction. Therefore, epistemological constructivism can help the study understand how each side of the coalition views the situation. Because much of this study is focused on examining "how" these groups see the policy issue, themselves, and their coalition partners, this approach of critical realism with its two parallel perspectives, proved useful to this effort.

**Sensitizing Concepts**

Patton (2015) wrote, “Qualitative inquiry using sensitizing concepts leaves terms purposefully undefined to find out what they mean to people in a setting. *Sensitizing concepts are windows into a group’s world view*” (p. 360). Because this study looked at solar power advocacy in coalitions that contain two different ends of the political spectrum, the idea of a group’s “worldview” proved applicable. Each
side of these coalitions has a worldview concerning solar power. Aspects of the
importance of solar power to these coalitions were explored within the parameters
of the ACF in order for the study to successfully answer the research questions.

How these groups perceive the world and how they perceive themselves can be explored through an examination of sensitizing concepts. Identifying these concepts as they arose in the research materials and during the interviews helped shed light on the worldviews that various members of the coalitions hold and how those views inform their motivations and actions. It was informative to see where these fell on either side of the ideological spectrum, and if any sensitizing concepts applied to both sides. These insights are important data points and provide valuable information for analysis.

Sampling

Best practices in qualitative research require direct engagement with the participants involved in the situation being researched. Therefore, this study employed two types of sampling to target quality subjects to interview. The first sampling method was *purposive sampling*, or *purposeful selection* and the second level was *snowball sampling* (Maxwell, 2013, p. 97).

Patton (1990) wrote, “The logic and power of purposive sampling lies in selecting information-rich cases [subjects]...from which one can learn a great deal about issues of central importance to the purpose of the research” (p. 169). To fulfill this requirement, high profile leaders from different coalition organizations or influential individuals involved with the situation were sought out for interviews.
These leaders included persons from both advocacy coalition efforts in Georgia and Florida.

These sampling efforts included reaching out to members of the Green-Tea Coalition whose cross-ideological efforts in Georgia proved instrumental in touching off the larger effort in Florida. Within the Floridians for Solar Choice coalition there are ten founding organizations from different sides of the political spectrum that have come together to support the pro-solar referendum. Examples of these organizations are Conservatives for Energy Freedom and the Christian Coalition of America on the Right and the Florida Alliance for Renewable Energy and the Southern Alliance for Clean Energy on the Left. Individuals from within these founding organizations proved to be valuable interview subjects.

A number of supporting organizations have joined the coalition, and some of their leaders were sought out for interviews as well. Before any contacts were made, a list of interview candidates from both founding and supporting organizations was compiled. Efforts to identify influential players were undertaken by researching coalition literature, press releases, and media stories to identify players who are mentioned or quoted within the public sphere. A concept map representing where some of the important founding and supporting organizations are situated within the coalition is available as Appendix A. This schematic representation of the coalition is a useful visual in understanding the makeup of the coalition and is helpful in providing a better understanding about where particular organizations or interview subjects reside within the coalition.
The second sampling method employed was *snowball sampling*. The number of organizations that have joined the Floridians for Solar Choice Coalition has become fairly large, and interviewing a principal or influential member from all involved organizations was impractical. Therefore, the researcher relied on the opinions or recommendations of important primary interview subjects to suggest other potential interviews. This method of snowball sampling resulted in contact being made with some of the more influential players within the coalitions supporting organizations and important observers of the coalitions' efforts.

The number of interviews conducted depended on the agreement of potential interview subjects. Given the fact that the study engaged with what occurred concerning the solar policy coalitions in Georgia and Florida, it was important that the interviews had an appropriate geographical distribution. A total of 20 interviews were conducted. There were interview subjects who were knowledgeable about the effort in Georgia and some who knew about Florida. There were also a number who were involved or observed the efforts in both states.

The Georgia coalition is a smaller organization and contains a few highly influential members. The situation in Florida is a larger, more diverse situation, so a larger number of interviews were needed. The individuals who were involved in both efforts proved to be valuable resources. The balance of the interviews targeted members of the public policy community in each of the states who could speak to the *effectiveness* of the coalitions. It is important for the study to couple the examination of the coalitions with their perceived effectiveness. The interview subjects provided valuable information. A point of saturation was reached when
viewpoints from different interview subjects related similar answers. This development provided a significant level of confidence that an accurate view of events had been reached.

**Data Collection**

The collection of data is a critical aspect of a qualitative study. Therefore, it is important to know what qualifies as data in a qualitative study. Maxwell (2013) wrote, “the ‘data’ in a qualitative study can include virtually anything that you see, hear, or that is otherwise communicated to you while conducting the study...There is no such thing as ‘inadmissible evidence” (p. 87). With this directive in mind, this study dutifully engaged information pertaining to the subject matter wherever it was be found.

As has been noted above, a primary method of data collection was from interviews conducted with subjects involved as members of the coalitions. These interviews were semi-structured interviews of those who had been contacted and agreed to participate through purposive or snowball sampling. The interview questions were designed to start a broad conversation and then sequentially narrow the focus. This was designed to allow the subjects a significant measure of freedom when addressing the issues in order to uncover unforeseen information, while also being directed enough to allow for a measure of issue consistency from each interview. This goal of consistency was to keep the interviews within the parameters of the research questions and ensure they addressed the sensitizing concepts. The foundational premises of the ACF also helped guide the interviews
consistency. All information provided during these interviews remains confidential, if that was the subject’s wish.

An equally important method of data collection was an examination of documents that were produced by the coalitions and other sources pertaining to their efforts, as well as an examination of the media coverage of the solar policy debate. This examination of documents was useful in complementing and providing context to the information collected during the interviews. The information gathered from media documents was helpful in answering the questions that pertain to the coalitions effectiveness. Media coverage took place through traditional outlets such as television, newspaper articles and editorials, and magazines. Newer social media platforms such as Facebook, Twitter, and organizational websites shed light on the actions and effectiveness of the coalitions public outreach. These public outreach efforts played a significant role in the events surrounding the solar power policy debate in the American South and were examined to better understand what was happening.

This data, collected from print and electronic sources, was examined and compared with the data from the subject interviews to gain a comprehensive picture of the situation. The research process of triangulation was employed to cross-reference or corroborate data collected from interviews against what was collected from other sources. Triangulation is a powerful research tool that is well regarded in the literature. Marshall and Rossman wrote, “triangulation is the act of bringing more than one source of data to bear on a single point” (2006, p. 202), while Patton observed, “one important way to strengthen a study design is through
triangulation” (1990, p. 187). This time tested method is an important addition to add validity to a qualitative study and was employed in this effort.

**Data Management and Analysis**

Best practices require that serious professionalism and care be employed when handling the data being collected. The process of collecting data occurred over the course of the study. Interviews occurred depending on subject availability and geographical considerations. Interviews were recorded and transcribed if permission was granted, or circumstances allowed. If not, notes were taken during interviews to preserve important points. This interview data is held in confidence within a password protected computer file.

The collection of documents that pertain to the solar coalitions was an ongoing effort and copies of these documents in either printed or electronic form were collected and organized. During the process, all important interview recordings, transcripts, researcher memos, and organizational documents were stored in a locked filing cabinet at the primary residence of the researcher.

The data analysis was carried out with the assistance of a qualitative software program, which helped facilitate the organization of analytic memos, categorizing strategies (coding), and connecting strategies. Maxwell (2013) emphasized:

That reading and thinking about your interview transcripts and observation notes, writing memos, developing coding strategies and applying these to your data, and analyzing narrative structure and contextual relationships are
all important types of data analyses. Their use needs to be planned (and carried out) in order to answer your research questions and address validity threats. (p. 105)

These processes that Maxwell highlighted were continually revisited with the goal of properly analyzing the collected data. Research memos were written in order to provide the researcher with a paper trail of thoughts.

Charmaz (2006) wrote, “coding means categorizing segments of data with a short name that simultaneously summarizes and accounts for each piece of data. Your codes show how you select, separate, and sort data to begin an analytic accounting of them” (p. 58). These coding strategies were employed to fracture the data (initial coding) into categories that enabled comparisons and also reconstitute the data into groupings (axial coding) that helped highlight important connections (Saldana, 2009, p. 42). Various types of codes were employed where appropriate. The types and categories of codes depended on the information provided by the interview subjects or documents.

This process of collecting, sorting, and coding the data resulted in a constant examination and re-examination of the information. Repeatedly engaging the data collected through qualitative methods is a process Glasner and Strauss (1967) called comparative analysis. When properly employed, comparative analysis is designed to result in the building of general patterns and categories that will help illuminate what is happening concerning the area being studied. This information can be used to construct a stand-alone theory or it can be used to help solidify the understanding of a subject and how it might relate to an existing theory. This process ensures that
the information being gathered is “grounded” in the actual data collected, which ensures its validity in comparison to existing theory. “In qualitative research both existing theory and grounded theory are legitimate and valuable” (Maxwell, 2013, p. 49).

Ethics

Taking the ethical considerations that accompany research seriously is of the utmost importance. This has not always been the case. Traianou (2014) wrote in the Oxford Handbook of Qualitative Research that, “generally speaking, until quite recently, ethics was seen as an ancillary matter: as important but not as central to the very task of research. In recent years this has changed significantly” (p. 62). It is important that this change has taken place because the world of research is full of examples of cut corners and ethical lapses that compromise the field. Because qualitative research is continuously working to establish itself on equal footing with the more accepted approach of quantitative research, ethical considerations are even more important. Ethical lapses in qualitative studies not only endanger the particular study, subjects, and researchers involved, it also damages the approach of qualitative research in the eyes of a sometimes skeptical audience of researchers who prefer the perceived certainty of quantitative methods. The satisfaction gained from employing good ethical practices should be enough of a motivation to employ them, but if extra motivation is needed, preservation of reputation, both professionally and methodologically, should provide extra incentive to strive for good practices.
The study of solar power coalitions in the American South does not come with the same ethical landmines that accompany studies of vulnerable populations such as children with cancer or victims of abuse. However, it is still important to be aware of potentially troublesome ethical situations and do what is needed to correctly navigate them. Some of the areas that present potential ethical problems are the need to respect privacy, respect autonomy, and minimize any potential harm (Traianou, 2014, p. 62-65).

The privacy and autonomy issue is important and was addressed. Each of the interview subjects was given the option to keep their identities concealed, if that was their wish. However, many of the potential interview subjects have been in the public spotlight concerning their public activities involving the efforts of the coalitions. Those who already are publicly known for these efforts may or may not have concerns about being identified in an academic study. However, there are also many public documents such as newspaper articles, editorials, book chapters, court decisions, and others that concern this identifiable content. It seems reasonable that these public documents do not require consent from anyone to be used in the research.

Validity

Maxwell observed that the term validity does not imply the existence of an “objective truth,” rather it relates more to the issue of credibility (Maxwell, 2013, p. 122). Maxwell indicated there are a number of validity threats that can surface in qualitative research but the two threats that pose the most risk are researcher bias
and reactivity (Maxwell, 2013, p. 124). Researcher bias is a serious validity threat.

Because the researcher is involved in the process by asking the questions and observing the situation, validity threats cannot be dealt with through elimination. Maxwell (2013) wrote, “it is impossible to deal with these issues by eliminating the researcher’s theories, beliefs, and perceptual lens...Instead...understanding how a particular researcher’s values may have influenced the conduct and conclusions (positive or negative) of the study and avoiding the negative consequences” must be the goal (p. 124).

Within this study, the researcher has two potential areas of bias that are important. The first is the pro-solar beliefs held by the researcher. The second is the generally left of center politics held by the researcher. However, because the main subject of the research is a pro-solar coalition that has two distinct political wings, this bias is less of a threat than if the subjects included a pro-solar and anti-solar camp. That said, it is still important to stay as neutral as possible.

An example of good validity practice would be to avoid leading or over complimentary questions in the interviews such as, “Your coalition has done such a great job, tell me how you are able to strike such a balance between the different wings of your coalition?” A better approach would be, “Maintaining an balance between the wings of the coalition seems like it would be a challenge, can you share some of your strategies for accomplishing this?”

As a researcher, it is impossible to take oneself out of the process; just being present is an influencing factor. Maxwell (2013) wrote, “The influence of the researcher on the setting or individual studied, generally known as ‘reactivity,’ is a
second problem that is often raised about qualitative studies” (p. 124). This is closely related to reflexivity. Maxwell noted again that elimination is impossible, but combating reflexivity requires the application of similar strategies for avoiding bias, like eliminating leading questions. Awareness is the key to combating validity threats and tools offered by Maxwell such as respondent validation, comparison, and triangulation can be employed to minimize this threat as the study moves forward. In summation, “What is important is to understand how you are influencing what the informant says, and how this affects the validity of the inferences you can draw from the interview” (Maxwell, 2013, p. 125).
CHAPTER IV

NARRATIVE OF EVENTS

Georgia Narrative

Georgia Background – Nuclear Issue

In Georgia, the major investor-owned utility (IOU) is Georgia Power Company, a subsidiary of Southern Company, which serves 2.4 million customers across the state (Georgia Public Service Commission-Electric, 2014). “Investor-Owned Utilities, or IOUs, are governed by a board of directors elected by stockholders. IOUs are a state-regulated monopoly. They exist to make a profit for their stockholders, while serving the public” (Florida Municipal Electric Association, 2018). Georgia is also served by “41 electric membership corporations (EMCs) and 52 municipally-owned electric systems in the state,” over which the state has limited regulatory authority (Georgia Public Service Commission-Electric, 2014). Despite the existence of these smaller providers, Georgia Power is, by far, the most influential utility in the state.

On December 21st, 2017, Georgia Power, a subsidiary of Southern Company, won approval by the Georgia Public Service Commission (GPSC) for additional financing to continue construction on the Vogtle 3 and Vogtle 4 nuclear reactors at the Vogtle Electric Generating Plant located in Waynesboro, Georgia (Georgia Power, 2017). This victory, over the objections of many, continued the development of the only two nuclear reactors currently under construction in the United States.
and “has ballooned into the single most expensive capital project in state history that will impact Georgians for decades to come” (Southern Environmental Law Center, 2018). The Vogtle project is currently running over five years late and has a price tag that has risen from $14 billion dollars to a current projected cost of $25 billion (Merchant, 2017). According to Georgia Power, this controversial project now has a completion date of November 2021 and November 2022 for reactors 3 and 4 respectively (Georgia Power, 2017). These continuing cost overruns, coupled with the manner in which Georgia Power worked to finance them, helped create a political landscape where activists and voters started looking closer at the energy issue. This increased attention, helped bring solar power into the policy conversation for serious consideration.

Georgia Senate Bill 31, the “Georgia Nuclear Financing Act”, was signed into law on April 21st, 2009, and authorized Georgia Power to pre-bill customers “...so as to provide for a utility to recover from its customers the costs of financing associated with the construction of a nuclear generating plant...”(Georgia General Assembly, 2009). This surcharge, known as a Construction Work in Progress (CWIP), was put in place to help Georgia Power pay for the cost of financing the project plus a built in 11% profit for Georgia Power (Graham & Hand, 2017, p. 5).

Advent of Tea Party

The CWIP charge and the prior approval of the entire Vogtle project in March of 2009 were met with significant disapproval from different quarters of the public. The approval of the project and the CWIP financing plan coincidentally coincided
with the launch of the Tea Party movement nationally and within Georgia in February of 2009. Senate Bill 31 passed the legislature on February 26th, 2009. The first Georgia Tea Party rally took place one day later on February 27th, 2009 outside the Georgia Capitol Building (Graham & Hand, 2017, p. 2).

At the head of the February 27th Tea Party Rally was a long-time Republican activist named Debbie Dooley. While the issues surrounding the Vogtle power plant expansion were not a motivating issue for the first Tea Party rally in Georgia, it would not be long before a significant portion of the group turned their aim in that direction, with the Georgia Public Service Commission being the primary target.

**Georgia Public Service Commission and Other Motivations**

In Georgia, the Public Service Commission (GPSC) is an elected tribunal of five representatives whose stated mission is to “exercise its authority and influence to ensure that consumers receive safe, reliable, and reasonably priced telecommunications, electric, and natural gas services from financially viable and technically competent companies” (Georgia Public Service Commission, PSC Home, 2018). This rate setting authority has made the GPSC fertile ground for serious political influence campaigns from interested parties. One of the most powerful and prolific of these interested parties is Georgia Power.

Besides the aforementioned CWIP charge that was approved by the GPSC to the benefit of Georgia Power, there have been two other notable instances in which Georgia’s government has appeared to operate in close step with Georgia Power. These instances helped create the conditions for the cross-ideological alliance to
promote solar power to form. The first occurred in 2008 when Governor Sonny Purdue abolished funding for the Consumer Utility Council (CUC), a government agency that served as the consumers’ voice at GPSC meetings. This move proved to be problematic even for members of the GPSC. Concerning this action, GPSC Chairman Doug Everett said, “They were the main voice of the consumer and small business. Now they won’t have anyone representing them directly anymore” (Markiewicz, 2010).

A second instance took place in 2011, when the Georgia Legislature voted to allow utilities to directly contribute to the campaigns of persons seeking public office. The end to this prohibition resulted in significant amounts of money flowing to Georgia politicians from the utilities. “Campaign finance data reviewed by The Atlanta Journal-Constitution found that elected officials have received more than $190,000 in donations from regulated utilities since the law took effect in May” (Athens Banner-Herald, 2012). This flow of money was also directed towards members the GPSC. The Atlanta Journal Constitution reported, “Four of Georgia’s utility regulators have accepted at least 70 percent of their campaign contributions from companies and people that may profit from the agencies decisions... (Swartz, 2012).

These controversial legislative and utility actions led to the formation of a citizens group that became known as the Georgia Alliance for Ethics Reform. The group formed specifically to press for stronger ethics laws in Georgia prior to and during the 2012 legislative session. Membership in the alliance consisted of individuals and groups from the left, right, and middle of the political spectrum.
Some of the groups included Common Cause Georgia, Georgia Watch, and the Georgia Tea Party Patriots (Sheinin, 2011). The effort proved to be partially successful. Gov. Nathan Deal signed into law ethics legislation that passed the 2012 Georgia General Assembly, which put into place a $75 gift cap from lobbyists to lawmakers, along with extra provisions to deal with campaign financing on a local level (Kusnetz, 2013).

Another political debate during the 2012 legislative session also helped set the table for cross-ideological coalitions. This debate surrounded Senate Bill 469 which had a legislative summary that stated "...relating to labor organizations and labor relations, so as to provide that certain provisions prohibiting mass picketing shall apply to certain private residences; to provide for an action to enjoin unlawful mass picketing; to provide for punishment and penalties..." (Jamieson, 2012).

The specific intent of the legislation was to prevent union members from picketing outside private residences or businesses. But, a cross-ideological pushback from groups and individuals like Martin Luther King Jr. III, the NAACP, Sierra Club, AFL-CIO, sheriff of Fulton County, and Tea Party Patriots quickly followed (Jamieson, 2012). Two public statements from opposite sides of the traditional political spectrum highlighted this pushback. Julian Thompson, Georgia State Director for the Tea Party Patriots said, "When we’re talking about the first amendment of the U.S. Constitution, we’re not talking about political right-versus-left. We’re talking about right versus wrong... I’m happy that we’ve reached across party lines with regard to this issue" (Jamieson, 2012). Charlie Flemming, president of the Georgia AFL-CIO was pleased with the Tea Party support stating, "We may
have disagreements about labor and other issues, but the reality is we all agree this is our constitutional right to stand up, speak out, and protest...I would certainly support their right to do likewise. So I think it’s terrific” (Jamieson, 2012).

**Early Coalition Efforts**

While the specifics of these ethics reforms and the resistance to legislation to limit picketing were welcomed by many in Georgia, the cross-ideological nature of these efforts proved to have a significant impact on the future of solar energy in the state. During the efforts to pass or resist these pieces of ethics and protest legislation, Debbie Dooley, leader of the Georgia Tea Party, embraced the power of coalitions. She had come to believe that allies “may disagree on some issues and work together on others. The important thing is to trust each other” (Graham & Hand, 2017, p. 5). This belief led her to establish contact with groups that she had not partnered with in the past. This open attitude eventually put her in touch with Colleen Kiernan, the Director of Georgia’s Sierra Club chapter, who had noticed Dooley’s willingness to work across traditional ideological lines during the ethics and picketing debates (Graham & Hand, 2017, p. 6).

Upon meeting at Kiernan’s request, Dooley and Kiernan discovered that they shared similar goals concerning particular issues facing the state, often for different reasons. One of the major items they both opposed and eventually partnered on was a special purpose local-option sales tax (SPLOST) for major rail and road transportation projects around the metro Atlanta area. Because the funding beneficiary was transportation, the issue became known as T-SPLOST. This 2012 referendum would have instituted a 1% sales tax for 10 years and was slated to
raise approximately 7.2 billion dollars in order to fund various transportation initiatives (Hart, 2012). The Tea Party opposed the referendum because it would raise taxes. Sierra Club opposition was rooted in their belief that rail funding was being shortchanged in comparison to the proposed $4 billion dollar allocation towards new road construction, which they claimed would worsen sprawl and pollution (Kiernan, 2012).

The issue pitted the Tea Party, Sierra Club, NAACP, and other allies against the established political class of Governor Deal, Atlanta Mayor Kasim Reed, the Metro Atlanta Chamber, and other groups who approved the financial support it would provide metro, rail, and road service. The Sierra Club/Tea Party war chest raised only $15,000 dollars in their efforts to oppose the plan versus the $8 million dollar budget the establishment had at their disposal to promote the referendum (Schneider, 2012).

When the votes came in on the evening of July 31st, 2012, the T-SPLOST referendum was defeated and the political partnership of the Sierra Club and Tea Party notched a notable political victory against significant odds. After the results of the referendum came in, Debbie Dooley said, “We took on the governor, lieutenant governor, the mayor, big business and slick political consultants. We emerged victorious” (Schneider, 2012). The result solidified the political partnership between Dooley and Kiernan who were named “Atlanta’s Best Odd Couple of 2012” by Creative Loafing magazine (Best of Atlanta, 2012). Besides raising their profile, this victory raised their sights, and put the Georgia Public Service Commission’s
(GPSC) unwavering support for Georgia Power and Plant Vogtle squarely in their crosshairs.

**Green Tea Coalition challenges the GPSC**

As has been noted, the GPSC and Georgia Power have been involved in a mutually beneficial relationship. Individuals and groups connected with Georgia Power lavished gifts and campaign contributions onto members of the GPSC, who, in turn, tended to be very friendly to the concerns of Georgia Power (Graham & Hand, 2017, p. 7). The poster boy for the close relationship between the GPSC and Georgia Power was Commissioner Stan Wise, who regularly accepted donations and jobs for family members from those he was charged with regulating (Graham & Hand, 2017, p. 7). Wise had been a member of the GPSC since 1994 and had served as chairman four times. This cozy relationship between the regulated and the regulators was opposed by the newly formed political partnership of Dooley and Kiernan, who both objected to the lack of separation. Dooley commented that, “A lot of activists don’t like the closeness that Stan Wise appears to have with lobbyists for the utilities that are regulated. I think that is a problem” (Graham & Hand, 2017, p. 8).

Wise was up for re-election to a new six-year term in 2012 and expected little opposition. However, Dooley and Kiernan had other ideas. Wise first had to win the Republican primary against Republican Pam Davidson. Davidson was an experienced renewable energy consultant who pledged not to accept any money from entities the GPSC regulated. In the press release announcing her bid, Davidson said, “Over the past 18 years, the incumbent candidate has received about 95 percent of his campaign money from the utilities he is supposed to be regulating,
fostering a cozy relationship with those utilities while Georgia consumers have paid the price” (Wheatley, 2012).

Kiernan and Dooley threw their support behind Davidson, with no illusions about the outcome given the significant financial and institutional advantages held by the incumbent Wise. On primary day, the Republican vote totals were surprisingly respectable with Wise winning 56.5% to Davidson’s 43.5% (Georgia Secretary of State, 2012). This 13% victory for Wise in a primary seemed to show that the criticisms surrounding the GPSC were gaining some traction with the electorate.

Despite the lack of a Democratic candidate for the seat in the general election Kiernan and Dooley decided to keep the pressure on Wise, and by proxy the entire GPSC. The duo endorsed David Staples, a 31-year old Libertarian who was set to run against Wise. In their endorsements, Dooley indicated she did not like how close Wise was to Georgia Power and Kiernan stated, “David Staples pledged not to take gifts from lobbyists and is in favor of developing renewable resources. He thinks public health needs to be a consideration in thinking about the appropriate mix of power generation sources” (Shapiro, 2012). Staples’ call for more renewable resources provided a glimpse into an eventual shift around the issue, but on Election Day 2012, Staples came up short, winning only 34.2% of the vote compared to Wise’s 65.8% (Georgia Secretary of State, 2012).

While the candidates Dooley and Kiernan endorsed both lost, the renewable energy messages they promoted, coupled with respectable showings against well-known and well-funded opponents, seemed to indicate a changing public attitude
towards business as usual on the GPSC. The timing of the voter’s message had a significant impact, because in 2013, the GPSC was slated to conduct a major review of Georgia Power’s plan for the next two decades of power generation (Graham & Hand, 2017, p. 9).

**Commissioner McDonald’s Solar Proposal**

Lauren “Bubba” McDonald, a veteran politician who represented District 4 on the GPSC, was one particular commissioner who quickly picked up on the message voters were sending and by doing so, became a major champion for the expansion of solar power in the state of Georgia. McDonald served in the Georgia State Legislature as a Democrat for 20 years. In June 1998, he was appointed to the GPSC by Democratic Governor Zell Miller to fill a vacancy. He won re-election to that seat five months later as a Democrat in a special election in November 1998 (Georgia Public Service Commission, McDonald, 2018).

After serving four years on the GPSC, McDonald was defeated by half a percentage point in his first scheduled general election defense of the seat. McDonald had switched parties to Republican in 2004, prior to an unsuccessful run for Georgia State Senate. This party switch, in a state that was increasingly trending Republican, positioned him well for the election that returned him to the GPSC in 2008, a race he won handily over his Democratic opponent (Graham & Hand, 2017, p. 9). His return to the GPSC provided him time to hone his conservative bona fides and build important relationships. This also placed him in a critical position from which he could guide the GPSC towards a future that included significant amounts of solar power.
The energy situation in Georgia was changing due to a number of factors, which included the ongoing financial issues surrounding Plant Vogtle, and the Obama administration’s Clean Power Plan, which was projected to result in the closing of 15 coal fired power plants in Georgia (Landers, 2013). Commissioner Bubba McDonald labeled these issues, when coupled with other important drivers concerning solar power, a “perfect storm” when he said, “The technology has improved, panel prices are down 40% in the last two years, interest rates are favorable, and Georgia is in the top five states for what an Arizona State University study calls ‘optimal for the deployment of solar’” (Landers, 2013).

McDonald’s understanding of these drivers and his awareness of the changing political situation surrounding energy in Georgia led him to encourage Georgia Power to incorporate solar power into the company’s triennial Integrated Resource Plan (IRP). However, Georgia Power ignored McDonald’s request when they released the 2013 IRP, which contained no plan to increase solar in the Peach State. This rejection did not sit well with the veteran politician. In a recent 2018 meeting with utility and economic leaders, McDonald described what happen next:

In their 2013 IRP, they did not have a single watt — not a single kilowatt — of solar power in there. I went to my four colleagues at the commission and I said, ‘I want to do something, and I’m going to take the Nancy Pelosi approach to it.’ I said, ‘I need you to tell me you’ll support me and trust me, but I can’t tell you what it’s going to be until they get it done. And, two of the four gave me their pledge they would support me. (Wolfe, 2018)
After securing cooperation from those two members of the GPSC, McDonald controlled a majority of the five votes on the panel. He then went to Georgia Power and informed them of his plan. McDonald related that,

I told them I wanted 525 megawatts of solar power put in the IRP...And I said, We can do it one of two ways, guys — we can do it as partners, PSC and Georgia Power, and when we win, we both win. Or, we can do it as adversaries, and there’s going to be a winner and a loser — one of them.

What you want to do?...Oh, and by the way, I have three votes. (Wolfe, 2018)

**Public Debate of Commissioner McDonald’s Solar Proposal**

McDonald then introduced an amendment to the 2013 IRP that would increase Georgia’s solar footprint by 525 MW of new solar generation by 2016. The introduction of this amendment set off a six-month lobbying effort by every party interested in the future of solar power in Georgia. In Kiernan and Dooley, McDonald had cross-ideological outside allies who had a pre-established working relationship formed during the ethics and T-SPLOST efforts. Other groups that supported McDonald’s amendment were the Southern Alliance for Clean Energy (SACE), the Georgia Solar Energy Industries Association, and Georgia Watch. Joining Southern Company, the parent company of Georgia Power, in opposing the plan was the conservative advocacy group Americans for Prosperity (AFP) founded by the Koch Brothers (Graham & Hand, 2017, p. 9).

While many groups were interested and somewhat involved in the debate, the public face of the campaign on the steps of the Georgia State Capitol pitted the
Sierra Club/Tea Party coalition led by Kiernan and Dooley against the Koch Brothers and AFP. The public Kiernan/Dooley partnership and their Sierra Club/Tea Party email lists were able to quickly dispute any claims made by Georgia Power and AFP. They were also able to help advertise and populate pro-solar demonstrations that dwarfed the pro-utility demonstrations leading up to the GPSC vote (Graham & Hand, 2017, p. 10).

During the period leading up to the GPSC vote, Debbie Dooley became an increasingly active advocate for the solar cause who regularly appeared in public. The evening before the vote, July 10, 2013, Dooley appeared on the nationally televised *All In with Chris Hayes* show on MSNBC to talk about the GPSC vote and the cross-ideological coalition that was supporting the plan. During her appearance, she noted she was a grandmother who was concerned for the future, and described the cross-ideological pro-solar partnership by saying, “In Georgia, we can show where groups from the left and right are putting our differences aside...and it has brought together people on the left and right. We are forming what we call a Green-Tea Coalition” (Hayes, 2013). The effective partnership between the Sierra Club’s Kiernan and Dooley’s Tea Party had been branded with a catchy, media-friendly moniker that was destined to drive pro-solar publicity.

**Georgia Steps into the Sun**

The next day, July 11, 2013, the GPSC voted on Commissioner McDonald’s amendment to Georgia Power’s IRP plan. Commissioners Doug Everett and Tim Echols joined McDonald in voting for the amendment while Commissioners Stan
Wise and Chuck Eaton opposed passage (State of Georgia-GPSC, 2013). The July 11, 2013 GPSC press release read:

The Commission also approved by a vote of 3-2 a motion proposed by Commissioner Lauren “Bubba” McDonald, Jr., that Georgia Power include in this IRP an additional 525 Megawatts (MW) of new solar generation. The amended motion requires that 260 MW be brought online by 2015 and 265 MW by 2016. The new solar generation will be composed of 100 MW of distributed generation and 425 MW of utility scale solar and will require competitive bidding. (State of Georgia-GPSC, 2013)

This vote was a significant victory for the future of solar in the state of Georgia and the legacy aspect of the decision was not lost on McDonald who echoed the comments Dooley make the night before on national television. Hours after the vote, McDonald told Georgia Public Broadcasting:

I’ve got grandchildren that, 20 years from now, I hope that they can look back as we are graded on what we have done and say, ‘You know what, my grandfather was on the Georgia Public Service Commission in 2013 and because of some issues that he took grasp of, we’ve got good, reliable, clean energy that we can depend on in the state of Georgia. (Stewart, 2013)

After the votes were counted, Kiernan praised McDonald’s leadership on the issue by saying, "Georgia’s Public Service Commission is providing true leadership and protecting consumers. Solar is the best bet against rising electric rates. The fuel will always be free, and you’ll never have to spend millions on environmental
controls” (Kraften, 2013). The victory established the Green-Tea Coalition as one of the most effective advocates for solar power in the more conservative parts of the country. The coalition understood the power of smart, cooperative, cross-ideological public relations and continuously put this understanding to work.

A few weeks after the GPSC decided to add 525 MW of solar power in Georgia by 2017 by passage of McDonald’s amendment, Dooley penned an op-ed for the influential environmental website *Grist* in which she wrote,

> It’s a big deal because it shows that Southern states are getting in the game and letting clean energy compete. Georgia is ranked fifth in solar energy potential in the U.S., but until now has been only 38th in solar power projects installed. We hope Georgia will be a role model that other states will follow. (Dooley, 2013)

Other states did follow with significant solar efforts, which will be addressed later, but Georgia was not finished in its move towards a more friendly posture towards solar energy. McDonald’s amendment opened the door to other solar friendly legislation to be considered, not by the GPSC, but by the actual Georgia legislature. During the 2015 Georgia Legislative session, Republican Rep. Mike Dudgeon introduced HB57 – The Solar Power Free-Market Financing Act, which passed the Georgia Legislature and was signed into law by Governor Deal on May 12, 2015 (Georgia General Assembly, 2015). Upon passage, Stephen O’Day, one of the principle legislative negotiators and head sustainability lawyer at Smith Gambrell and Russell, LLP, said “Georgia has created a market for solar energy
financing that did not previously exist in the state or any other Southeastern state” (O'Day, 2015).

This legislation legalized third-party ownership/power purchase agreements (PPAs) in Georgia. The Georgia legislation termed the third-party ownership agreements “solar energy procurement agreements” (SEPA), and while the title of the agreements may differ, their intention is the same as a PPA. This legislation allowed for the “financing of solar technology by retail electric customers for the generation of electric energy to be used on and by property owned or occupied by such customers or to be fed back to the electric service provider” (Georgia General Assembly, 2015).

This financial arrangement was designed to increase the deployment of residential and commercial solar installations and to augment Georgia’s significant utility-scale solar deployment. The adoption of this legislation solidified Georgia’s newfound leadership in solar policy in the region, and national leaders took note. Rhone Resch, Solar Energy Industry Association President and CEO, said,

Because of the strong demand for solar, thousands of new good-paying jobs are expected to be added in Georgia in the coming years, benefitting the economy and environment...We applaud Gov. Deal, Rep. Dudgeon and all the stakeholders for championing this important legislation, which we believe will serve as a model for other states to follow. (SEIA-Georgia on Pace, 2015)

Solar activists in other Southeastern states were watching Georgia and were motivated to follow the lead of the Peach State. Just to the south was Florida, the Sunshine State, home to some of sunniest skies and most anti-solar laws in the
country. Because of its incredible potential and restrictive laws, Florida was poised to become the next big battleground in the effort to advance solar energy.

**Florida Narrative**

**Utility Control in Florida**

In 2015, when Georgia passed a law legalizing Solar Energy Procurement Agreements (SEPA), Georgia’s version of third-party financed Power Purchase Agreements (PPA), Florida was left as one of only four states in the country that did not allow PPAs in some form. The three other states were Oklahoma, Kentucky, and North Carolina (Zientara, 2018).

The major utilities in Florida, Duke Energy, Gulf Power, Florida Power & Light (FPL), and Tampa Electric (TECO) are investor-owned utilities and have monopoly status. Florida is also served by “34 municipal electric utilities in the state, and they serve approximately 3 million customers, or 25 percent of Florida’s population” (Florida Municipal Electric Association, 2018). However, when it comes to having influence over the policy decisions taken by the state government, it is the four large IOU’s that hold the most influence.

One of the main ways they guard their status has been the use of campaign contributions to Florida lawmakers. In 2015, it was reported that, “An analysis of campaign records by the Florida Center for Investigative Reporting shows that the utility companies have sunk $12 million into the campaigns of state lawmakers since 2010” (Barton, 2015). This report also noted that the money being used for these campaign donations originated from the wallets of ratepayers, that
contributions went to every member of the Senate and House leadership, and "The recipient of the most utility money since 2010 is Gov. Rick Scott’s 2014 re-election campaign, which took in more than $1.1 million through two political action committees" (Barton, 2015).

The IOUs have maintained their tight grip on the energy sector in the Sunshine State by not only rewarding those lawmakers who tow the line, but also by punishing those lawmakers, regardless of party, who act against their preferred policies. In 2014, Republican Senator Jeff Brandes, from St. Petersburg, submitted a bill that would have given individuals or businesses a tax break if they installed solar panels. This legislation never even got a hearing. Rep. Brandes’ 2015 pro-solar legislation met a similar fate, to about which he said, “Here’s how the power companies control the Legislature: They ask the chairman of committees to never meet on the issue” (Barton, 2015).

Blocking a member’s legislation is typical political maneuvering, but ostracizing a committee chairman for the introduction of legislation the utilities find objectionable indicates another level of control. Republican Representative Dr. Paige Kreegal of Punta Gorda, chairman of the House’s Committee on Energy, found out the hard way about the level of utility control. In 2009, after he introduced legislation that would encourage the deployment of rooftop solar by individual homeowners, the office doors of other legislators were literally, not figuratively, closed in his face when he approached. About this treatment, Kreegal said, “you know how Tallahassee has an in-group and out-group? I didn’t know I was on the outside until I went against the public utilities and then–holy hell” (Barton, 2015).
Kreegal left the state legislature in 2012 to run for a vacated seat in the U.S. House of Representatives, but all was not forgiven. The Republican Party withheld support for his bid, and without party backing he finished third, effectively ending his political career. Kreegal, the free-market Republican, claimed that his support for solar in 2009 got him labeled a nonconformist. Reflecting on the experience Kreegel said, “The whole point was that government shouldn’t be impeding in good business. But I learned you don’t go against the utilities” (Barton, 2015).

This was indicative of the political situation in Florida as it related to the significant control the utilities were able to impose on members of the legislature in 2014. This legislative discipline, coupled with Governor Scott’s close financial relationship with the utilities, produced a challenging environment against pro-solar policies. However, pro-solar activists, fresh off their victories in Georgia, were not deterred.

**Founding of Floridians for Solar Choice (FSC)**

In July 2014, Debbie Dooley founded a new organization, Conservatives for Energy Freedom (CEF). According to the organizations website, CEF was founded “to be a strong conservative voice advocating for consumer choice in the energy field and to provide competition for government created monopolies” (Conservatives for Energy Freedom, 2014). Dooley sought to take her Green-Tea Coalition experience of fighting for solar power in Georgia with a diverse group of partners and apply it in different venues. The first target for CEF action was across the border in Florida.
Given the fact that Dooley was not based in Florida, coupled with the size of the state and the magnitude of the fight that was coming, she decided that professional help was needed to organize Florida’s own cross-ideological solar power coalition. To lead the effort within the state, she recruited a conservative political operative from Tampa named Tory Perfetti (Perfetti, 2017).

Perfetti’s conservative portfolio in Florida politics had no particular attachment to solar energy, but at the urging of Dooley, he did his research into the issue and became convinced that the consumer should have the right to enter into a PPA with a solar company if that were their wish. For him, it was an anti-monopoly, free-market policy decision. With this information in hand, he agreed to become involved in the effort as both the Florida Director of CEF and, importantly, as chairman of Floridians for Solar Choice (FSC), the cross-ideological public advocacy group that was forming to promote solar in Florida (Perfetti, 2017).

**Floridians for Solar Choice – Referendum Proposal**

On January 14, 2015, this newly formed coalition, Floridians for Solar Choice, held a press conference to announce a new push for solar power in the Sunshine State. In attendance were leaders of various political, business, and social organizations from different sides of the political spectrum that supported the expansion of solar power in Florida. The roster for this initial press conference included: Dooley (CEF-Founder), Perfetti (CEF – Florida Director), Dr. Stephen Smith (Southern Alliance for Clean Energy – SACE – Executive Director), Mike Antheil (Florida Solar Energy Industry Association - FlaSEIA – Executive Director),
Randy Miller (Florida Retail Federation – Executive Director), and Alex Snitker – (Libertarian Party of Florida – Vice Chair), among others. At the press conference, it was announced that the goal of the coalition was to place a pro-solar amendment referendum on the November 2016 election ballot that would allow third-party financing or PPA’s to become legal in Florida (Floridians for Solar Choice- Jan. Press Conference, 2015).

The leadership of the FSC coalition decided on this course of action because of the extreme influence the utilities held in the legislature and with Governor Scott. Time after time, pro-solar legislation had been systematically derailed by the legislature at the behest of the utilities (Barton, 2015). Within this context, the idea of going around the legislature and straight to the people in the form of a constitutional ballot referendum gained momentum. However, passing a constitutional amendment referendum in Florida is a difficult proposition that requires proponents to adhere to a number of significant steps. The specific steps that must be followed are listed in Appendix B. Some of the necessary steps are referenced in the following narrative.

**Floridians for Solar Choice - Referendum Language**

Detailed steps and rules must be followed when attempting to place a constitutional amendment proposal on the ballot. The language for the amendment being proposed by FSC adhered to the first two rules of one subject and had a length of 75 words, right up to the allowable length. The language of the proposed amendment’s ballot summary was:
Limits or prevents government and electric utility imposed barriers to supplying local solar electricity. Local solar electricity supply is the non-utility supply of solar generated electricity from a facility rated up to 2 megawatts to customers at the same or contiguous property as the facility. Barriers include government regulation of local solar electricity suppliers’ rates, service and territory, and unfavorable electric utility rates, charges, or terms of service imposed on local solar electricity customers. (Florida Division of Elections, 2014)

In the case of the Floridians for Solar Choice amendment, while the subject and length of the ballot were correct, a significant number of the steps concerning the initiative process became issues that had a material effect on how the process played out.

**Floridians for Solar Choice Signature Effort**

One month after the FSC kickoff press conference, the leaders of FSC joined together again for a public update on February 17, 2015. While there were a number of participants at this press conference, the chosen leadership of the FSC coalition was on full-display. The two principals leading the cross-ideological effort were Tory Perfetti, chairman of FSC and Florida Director of CEF on the conservative side of the coalition and Dr. Stephen Smith, Executive Director of (SACE) Southern Alliance for Clean Energy on the liberal/environmentalist side.

In his opening remarks, Perfetti announced “that we have reached the 100,000 mark of signatures in roughly a month. Which is a very big feat, which
means we can move onto the Supreme Court (Floridians for Solar Choice – Feb. Press Conference, 2015).” The 100,000 signature figure represented more than 10% of the required total for Supreme Court review of the ballot language and signaled an excellent start to the FSC effort (Ballotpedia, 2018). Dr. Stephen Smith of SACE closed the official remarks of the press conference by outlining to the public and press, a step-by-step update of the signature verification process outlined above. Smith then celebrated the achievement of 100,000 by stating “that this is a very exciting day...it is a testament to the popularity of this, the fact that so many people from the right and the left have come together to give people a voice and a choice in Florida and we look forward to other important milestones” (Floridians for Solar Choice – Feb. Press Conference, 2015).

In many ways, this particular milestone represented the most optimistic and momentum-filled moment of the FSC constitutional ballot referendum effort. The coalition’s quick start served to wake the slumbering giant of the utilities who, until this point, had not significantly reacted to the formation of FSC and its efforts. That lack of reaction was about to change.

The quick-start of the signature gathering effort for FSC was made possible by the number of volunteers who took to the streets and the fact that the FSC ballot initiative was embraced by the public. A poll taken in May 2015 by St. Leo University showed a 78% approval/support rating for the FSC proposed amendment. Of the 78% support, 28% was “strongly” in support and 50% was “somewhat” in support (St. Leo Polling Institute, June 2015).
As the word of the FSC effort spread and as the cross-ideological makeup of the coalition was constantly highlighted in public pronouncements, the number of organization joining from the left and right continued to increase. Beyond the founding members, a listing of organizations supporting the effort on the FSC website numbered 60 from all sides of the political spectrum (Full listing at Appendix C). Examples of supporting organizations from the right included the Evangelical Environmental Network, the Libertarian party of Seminole County, Conservatives for Responsible Stewardship and the Tea Party Network. From the Left, the list included the Ecology Party of Florida, Greenpeace USA, the League of Women Voters of Florida, and the Green Party of Florida (Floridians for Solar Choice, Supporting organizations, 2015). With these new supporting organizations came more volunteers, a higher profile, and more signatures.

The Utilities Begin to React

As the FSC effort began to gain momentum, the major utilities in Florida did not react immediately. However, as the FSC coalition continued to add members and collect signatures, the utilities began to push back. At first, the pushback took the form of public statements and press releases. Eventually, it appeared that they started to put pressure on those in political office who had influence on the time frame, and used the administratively complex steps to slow down the process.

For example, after 10% of the needed signatures were collected, (step 5 and 6 of the ballot referendum procedure listed in Appendix B), state law requires that the signatures go to the local election boards for verification and then to the
secretary of state. The secretary of state reviews the submissions, and then turns the paperwork over to the Attorney General, who reviews them within 30 days. The signatures are then forwarded to the Supreme Court for final approval.

Republican Florida Attorney General Pam Bondi was no friend to the solar effort when she took the entire 30 days allotted to her to forward the paperwork to the Supreme Court for consideration. Tory Perfetti, FSC chairman was quoted, “While we were disappointed it has taken the full 30 days to advance to this critical step, we now eagerly await the Supreme Court’s opinion and hope they will move quickly to render their decision... so we can secure a place on the 2016 ballot for this amendment” (Richie, 2015).

**Consumers for Smart Solar (CSS)**

The progress that the FSC effort continued to make during the summer of 2015 alarmed the utilities and compelled them to move their opposition directly to the sidewalks of Florida. This more serious phase of utility opposition developed in the form of a rival ballot amendment. In order to organize and operate this opposition ballot initiative, the four major utilities, NextEra Energy’s, Florida Power and Light, Duke Energy, Southern Company’s Gulf Power, and Tampa Electric hired experienced political consulting firms Bascom’s Communications and Consensus Communications. “Bascom was hired in 2015 to help with the Consumers for Smart Solar/Amendment 1 campaign in Florida. The campaign was created and funded to the tune of $20 million dollars by the four monopoly utility companies in the state” (Energy and Policy Institute, 2017).
On July, 13th, 2015, Consumers for Smart Solar (CSS) filed the necessary paperwork with the Florida Division of Elections to operate as a political action committee. Upon approval, they quickly began operations to counter the FSC effort (Florida Division of Elections, 2015). Bascom Communications and Consensus Communications, directed by their principals, Sarah Bascom and John Sowinski, put together the ballot language and sent their signature gatherers out onto the street. The language of the Consumer for Smart Solar ballot initiative was entitled Rights of Electricity Consumers Regarding Solar Energy Choice and its ballot summary read:

This amendment establishes a right under Florida's constitution for consumers to own or lease solar equipment installed on their property to generate electricity for their own use. State and local governments shall retain their abilities to protect consumer rights and public health, safety and welfare, and to ensure that consumers who do not choose to install solar are not required to subsidize the costs of backup power and electric grid access to those who do. (Florida Division of Elections, 2015)

This constitutional amendment sounded reasonable to the general public, but in reality it was designed to solidify the status quo, which was the goal of the utilities.

The CSS pro-utility amendment language made it through the Florida Supreme Court by a 4 to 3 vote. The majority opinion of the court concluded that the CSS amendment put forward by the utilities was designed to enshrine into the state constitution, solar rights that the consumer already possessed. The Supreme Court opinion read,
By enshrining a constitutional right ‘to own or lease solar equipment installed on their property to generate electricity for their own use’ in the Florida Constitution, the proposed amendment provides stronger protection for solar energy consumers than previously existed under the Florida Constitution. (Rosica, 2016)

The majority opinion was not offered without a vocal dissent placed into the record by Justice Barbara Pariente. Justice Pariente wrote:

The combined effect of constitutionalizing a very narrow, but already existing right, and simultaneously constitutionalizing the government’s powers to regulate when Floridians avail themselves of that right, is the status quo... Clearly, this is an amendment geared to ensure nothing changes with respect to the use of solar energy in Florida — it is not a ‘pro-solar’ amendment. Let the pro-solar energy consumers beware. (Gainesville Sun, 2016)

This split in the Supreme Court over the language of the CSS-utility counter amendment was indicative of the division and confusion the entire matter would soon inflict on the citizens of Florida.

**Dueling Proposals Create Confusion**

The approval and consideration of the CSS pro-utility amendment, which stood in opposition to the FSC pro-solar effort was legal under Florida law. “Florida law does not establish procedures for adjudicating conflicting measures” (Ballopedia, 2018-Florida Constitution, Article XI). Because there were no
procedures in place to govern how there two opposing referendums would co-exist, the stage was set for a significant amount of conflict between the camps.

This competing pro-utility measure, when introduced to Florida voters, caused an extreme amount of confusion concerning the whole situation. The FSC pro-solar signature gathering operation was a combination of volunteers from the coalition’s member organizations, and workers from a professional signature gathering operation. This combination was making steady progress while they had the field to themselves.

However, everything changed when the CSS operation began, and what ensued was a bidding war for signatures. To get on the November 2016 general election ballot, each group needed to gather 683,149 signatures by February 1, 2016. This total represented the required 8% of the total number of votes cast in the previous presidential election, as enumerated in Article XI, Section 3-4 of the Florida Constitution.

In order to gather the signatures they needed, CSS and the utilities hired two large, professional signature-gathering companies, National Voter Outreach and Silver Bullet, Inc. “The political committee spent $2.4 million on signature gathering in October [2015] alone. Since July [2015-Nov. 2015], the committee paid National Voter Outreach nearly $2.5 million and paid Silver Bullet Inc. $611,334 for signature gathering”(Ritchie, 2015). Dr. Stephen Smith, Executive Director for SACE, one of the main sponsors of the FSC effort commented on the bidding war for signatures, by saying, “When Solar Choice [FSC] paid $1, Smart Solar [CSS] paid $2. When we went to $2, they went to $4” (Klas, 2015).
The existence of two petitions that sounded pro-solar to the typical signers’ ear caused confusion for signers and distress for the organizers of FSC. This distress and confusion was evident across the entire state. State director of St. Petersburg Environment Florida, Jennifer Rubiello, claims “she often sees gatherers for Smart Solar (CSS-pro-utility) promoting their plan as if it were the Solar Choice (FSC-pro-solar) initiative... it infuriates me on a daily basis” (Klas, 2015).

The media reported on a few different types of confusion that grew out of the seemingly pro-solar message of both petitions and the difference in pay scale between the two sides for signatures. Mary Ellen Klas of the Miami Herald, who closely reported on the entire solar amendment effort, published an extensive article titled Rival solar petitions spawn confusion, race for signatures. Klas (2015) reported of:

- Persons “feeling duped” after signing the CSS-utility petition thinking they were signing the pro-solar FSC petition.

- Persons feeling “scammed” into signing the CSS petition when it was “described as a revised, updated version of the competing Floridians for Solar Choice initiative she had already signed.”

- People being manipulated into signing one petition over another: A third example was when Greg Fussell, who was aware of the differences in the petitions, rejected the CSS-utility petition he was handed. He was then offered the FSC-pro-solar petition. When he asked the petition gatherer why he was given the CSS-utility petition first, the answer was, “I get paid more.”
Sarah Bascom, the spokeswoman and political advisor for CSS, dismissed the allegations by saying “It defies all logic to suggest that we think confusing our amendment with theirs will help us get signatures” (Klas, 2015). However she did admit “there are occasionally bad actors who, despite agreeing not to carry both, do so in the hopes of not getting caught. When they are caught, our vendor no longer uses their services” (Klas, 2015).

The Collapse of FSC Ballot Amendment Effort

The confusion and expense that the CSS/utility ballot amendment was able to place on the FSC/pro-solar ballot amendment ultimately broke the back of the FSC signature gathering effort. The FSC/pro-solar effort was severely underfunded in relation to the CSS/utility effort. According to a report by the Florida Department of State Divisions of Elections, “As of January 30, 2017, the support campaign had a total of about $26.36 million in contributions, roughly 10 times the amount that the opposition campaign group, Floridians for Solar Choice, had raised [$2.48 million] (Florida Solar Energy Subsidies and Personal Solar Use, Amendment 1 , 2016).

Further highlighting the troubles the FSC ballot initiative had run into was a lawsuit between PCI Consulting, the firm collecting paid signatures for the pro-solar effort, and FSC over claimed unpaid expenses. PCI Consulting refused to release over 212,000 signatures to FSC for verification until the debt was paid (Perry, 2015). Without these signatures, FSC was over 400,000 signatures short, rather than within possible striking distance.
On December 17, 2015, the Floridians for Solar Choice team effectively admitted they would not get enough signatures to make the ballot. Tory Perfetti, Chairman of Floridians for Solar Choice, released a statement that said, “During the campaign, we have faced vicious opposition with a goal to stop the grassroots movement comprising the full political spectrum as well as the business community. The monopoly utilities have succeeded in making the qualification for 2016 very difficult…” (Perry, 2015).

The utility plan of running an alternate initiative had succeeded in stopping the FSC effort to put the question of third-party ownership (PPAs) of solar power on the November 2016 ballot. While Perfetti’s statement represented an end to the offensive phase of the amendment process, an equally contentious phase of playing defense had begun.

**Solar Amendments Face The Vote**

**Amendment 1 and Amendment 4**

While the FSC ballot initiative failed to gather enough signatures, the well-funded CSS-utility initiative submitted 720,395 valid signatures by February 1, 2015. This number qualified the CSS utility-backed initiative for the November 2016 General Election ballot and it was assigned the ballot number of 1. From this point on, the Consumers for Smart Solar ballot initiative entitled *Florida Solar Energy Subsidies and Personal Solar Use Initiative* became known as “Amendment 1” and was placed on the November 2016 ballot for voter consideration (Florida Solar
Energy Subsidies and Personal Solar Use, Amendment 1, 2016). While Amendment 1 was the first solar power amendment certified to be voted on in 2016, it was not alone.

**Amendment 4**

In Florida, proposed amendments can also make their way onto the ballot is through legislative referral. House Joint Resolution 193 entitled *Florida Property Tax Exemptions for Renewable Energy Equipment* was introduced on September 17, 2015 and unanimously passed both houses on March 9, 2016. The purpose of this legislation was to make renewable energy equipment exempt from property tax for business and commercial entities. Residential renewable energy equipment had already been made exempt from taxes by referendum in 2008 (Turner, 2016).

This proposed amendment was given the number 4, and became publically referred to as “Amendment 4”. The vote on Amendment 4 was scheduled to take place on the August 2016 primary election ballot, as opposed to the November ballot to avoid confusion between the two proposals (Florida Property Tax Exemptions for Renewable Energy Equipment, Amendment 4, 2016).

This amendment was a fairly uncontroversial proposal and gathered support from all sides. Mark Bubriski, a spokesman for Florida Power & Light, said the “utility anticipates customers will save money on future FPL solar installations if Amendment 4 is approved” (Turner, 2016). Dr. Stephen Smith, executive director of SACE indicated that they planned to spend $250,000 in support of Amendment 4 and that “The overall benefit, we believe, is it would lower energy costs as more
solar is developed (Turner, 2016). Chris Spencer, legislative aide for Sen. Jeff Brandes, the St. Petersburg Republican who sponsored the amendment said it would help create jobs because, “There will be more solar panels circulating in the market and more solar installers” (Turner, 2016). Amendment 4 easily passed with a vote count of 72.62% in favor and 27.38% opposed (Florida Property Tax Exemptions for Renewable Energy Equipment, Amendment 4, 2016). While this was an uneventful solar amendment vote, the events surrounding Amendment 1 in November were controversial.

**Amendment 1 Takes Center Stage**

Amendment 1 landed on the November 2016 ballot as a utility sponsored alternative to the Floridians for Solar Choice effort to pass a pro-solar amendment to the Florida Constitution that would allow third-party financing of solar installations or PPAs. As discussed earlier, and confirmed by Supreme Court Justice Barbara Pariente in her dissent of the Amendment 1 ballot approval, this initiative would essentially enshrine into the Florida constitution the status quo. This status quo restricted the ability of solar companies to offer third-party agreements or PPAs and kept the monopoly status of utility companies in place.

Before the collapse of the FSC pro-solar ballot initiative, the public debate was confused and largely centered on the *process* by which each camp was attempting to gather the necessary signatures to get their proposed amendment on the ballot. After the FSC effort fell short and the CSS-utility effort reached the ballot,
the primary issue switched from a signature-gathering race to a real public debate concerning the merits of the CSS-utility ballot amendment.

The engagement of regular citizens, powerful utilities, public-policy groups, along with FSC and CSS underscored the intense public interest in the stakes surrounding the solar amendment process in Florida. Throughout the effort, public, private, and political attention had become focused on the future of solar in the Sunshine State as never before, and the eyes of the nation were trained on Florida to see the eventual outcome. During a February 2015 interview with The New Yorker magazine as she was heading down to Florida to help organize the FSC ballot initiative, Debbie Dooley indicated she was aware of the stakes at the beginning of the process. She said, “I’ve got other states saying, ‘Please help us.’ But Florida is ground zero” (Kormann, 2015).

**The Public Thinks Two Opposites are True**

Over a year and a half later, after some minor victories like Amendment 4 and a crushing defeat of their own ballot initiative, the FSC coalition was clearly on the defensive. FSC was looking at the likely victory of the CSS/utility Amendment 1 initiative at the ballot-box, which would codify into the Florida Constitution a status quo concerning the development of solar that was very much to the utilities liking. Such an outcome would represent a significant failure for the FSC coalition and place the development of Florida’s solar resources squarely in control of the utilities and their political allies for years to come.
Public approval for “solar” had stayed strong throughout the whole amendment process, as was reflected by the approval of the pro-solar Amendment 4 by a margin of over 45%. In the case of Amendment 1, the issue seemed to hinge on how well the public really understood what the language of Amendment 1, which sounded pro-solar, actually meant. Public polling reflected this confusion.

In October 2014, when voters were asked if they support the FSC proposal of allowing third-party financing (PPAs) for solar installations, the results for all voters was 74% in favor. All political affiliations polled over 70% in favor of the FSC proposal with Democrats at 79%, Republicans at 71%, and Independents at 71% (North Star Opinion Research, 2014).

One the other side of the issue, support for Amendment 1 was also polling very well leading up to the November 2016 ballot. According to a series of polls conducted by the Polling Institute at St. Leo University, support for Amendment 1 was strong in the summer of 2016. Support among likely voters in June was 77.3%, in August was 81.4%, and in September was 84.0% (Orlando, 2016).

This overwhelming support by the public for two amendments that would result in drastically different outcomes for the future of solar in Florida pointed to a confused electorate. Within the electorate, the idea of “solar power” polled well, but the policy details hidden in the amendments language were lost to the public.

**FSC and CSS Campaign for Their Cause**

After the approval of Amendment 4 in August, only the question of Amendment 1 remained in front of the public, and as such, both sides unleashed
significant public outreach efforts. Each side adopted campaign slogans to help convey their message. The CSS-utility pro-amendment 1 had a slogan of “YES on 1 – For the Sun” while the FSC anti-amendment 1 slogan was “Amendment 1 Blocks the Sun – Vote No on 1” and the offshoot of “Vote No on 1 – Don’t Block the Sun.” (Florida Solar Energy Subsidies and Personal Solar Use, Amendment 1, 2016). The use of these slogans reflected the true campaign nature of this debate.

Like all good campaigns, this one had a number of spokespersons pushing their positions in print and electronic media. The following are quotes from issue proponents from both sides of the debate, most of who have not been previously referenced in this study.

Supporters of Amendment 1 focused on the threat they claimed “third-party financing” options presented to citizens of Florida and continually stressed the idea that the poor would end up paying higher rates because of solar adoption:

• Screven Watson, board member for CSS said, “Believe it or not, there are out-of-state companies that don’t want consumers to own their own solar equipment and generate their own electricity. They prefer an arrangement called ‘third party leasing’ where solar companies set up shop in Florida, immune from consumer protection laws … (Watson, 2016)

• Adora Obi Nweze, president of the Florida State Conference of the NAACP said, “However, there is a downside to increased solar participation – a downside that Amendment 1 addresses. As solar consumers contribute less to maintaining the electric grid, consumers who continue to rely
completely on the grid will be left picking up more of the cost of the grid. This means the possibility of higher rates imposed on the poor. (Nweze, 2016)

- Julio Fuentes, president of CEO of the Florida State Hispanic Chamber of Commerce and Javier Palomarez president and CEO of the United States Chamber of Commerce penned a op-ed in Florida Politics in which they wrote, “Pragmatic and equitable answers to energy issues, such as Amendment 1, will result in a more affordable, efficient and secure future for all, and not just a few. It’s simple, those who don’t or can’t afford to choose solar, shouldn’t have to subsidize the energy choices of those who do. (Palomarez & Fuentes, 2016)

Spokespersons who were opponents of Amendment 1 were telling a different story and included some high profile individuals:

- Jimmy Buffett, musician and unofficial cultural spokesman for the state of Florida, went on the record when he said, “This solar power amendment, you have heard about it, I have read a lot about it and it’s obvious what is going on there. We’ve been enjoying the sun for most of our lives living in Florida. Now it’s time to use it right and to use it for everybody’s benefit. That is why I am voting no on 1. (Buffett, 2016)

- Al Gore, former U.S. vice president said, “They are trying to cloud the truth by putting forward a phony-baloney initiative that sounds like it protects solar. It doesn’t protect solar”. He added that the utilities have
spent “more than $20 million to pull the wool over your eyes – and $20 million may buy a lot of wool” (Mazzei, 2016).

Other individuals who went on the record in opposition to Amendment 1 may not have had the star power of Buffet and Gore, but they were clear in their opinions.

- Wes Wheeler an attorney in Gainesville, Florida wrote, “Amendment 1 is a Florida public utilities ploy to prevent third-party solar power sales, and ultimately, the home solar power generation market in Florida. Despite its catchy, misleading name, it would limit solar power production in Florida. Indeed, it would be much more honest to describe it for what it is: “Amendment 1: The Florida Public Utilities Protection Act.” (Wheeler, 2016)

- Carl Hiaasen, columnist for the Miami Herald wrote in an October 21, 2016 editorial, “The solar-power amendment on Florida’s ballot is a slick, oily fraud. Promoted as a way to expand solar energy and protect residents who want it, Amendment 1 would do just the opposite. (Hiaasen, 2016)

- Another line from Florida Supreme Court Justice Barbara Pariente’s dissent further clarified her feelings on the legitimacy of the amendment when she wrote, “Masquerading as a pro-solar energy initiative, this proposed constitutional amendment, supported by some of Florida’s major investor-owned electric utility companies, actually seeks to constitutionalize the status quo. (Kassab, 2016)
As was noted earlier, after Amendment 4 passed at the end of August 2016, a September 2016 poll conducted by St. Leo University placed the approval rate for Amendment 1 at 84% among likely voters. Turning these numbers around represented a major challenge for the FSC coalition, one they had to wage with very limited resources because “after using up their funds on their petition drive, they (FSC) had no budget for a “vote no” campaign.” (Klas, 2016)

**Floridians for Solar Choice Fights Back**

However, once the political field cleared and Amendment 1 was the only question in front of the public concerning solar, the FSC/pro-solar coalition activated their significant social media network. This network had been constructed over the previous two years in hopes of passing the FSC amendment, but that network was now called to play defense and help defeat the CSS-utility sponsored Amendment 1. The activation of this social network spawned volunteer phone banks, independent companies posting messages on their business websites, and high profile celebrity endorsements like that of Jimmy Buffett (Klas, 2016).

The online effort also got assistance from a dot-com millionaire named Jonathan Taylor who put-up $100,000 of his own money and used his digital expertise to operate a website landing page called FloridianSolar.org to help explain the issue to confused voters. Taylor was quoted as saying, “The language reads pro-consumer when in reality it’s pro-confusion…I have many intelligent friends who are pro-solar, who just didn't understand the realities of Amendment 1. It’s pretty amazing, actually” (Klas, 2016). His knowledge of social media enabled him to set
up a system that reached five million voting age Floridians, three million of those through Facebook (Klas, 2016).

He also claimed to discover that the Amendment 1 backers were using a Google ad buy strategy that produced multiple ads for the CSS-utility effort with every search for information on Amendment 1. Taylor, who had 15 years of experience in online marketing said, “I’ve never seen anyone abuse the Google advertising ability in that way. It’s been banned since the very beginning of search advertising. It’s just cheating” (Klas, 2016). After reporting it to Google, the multiple ads came down. Sarah Bascom defended the need for multiple accounts producing multiple ads and rejected the report that CSS/utility ads were “reported, flagged, or taken down by Google” (Klas, 2016).

The effort to stop the adoption of Amendment 1 was largely a grassroots effort that started to gain traction in September of 2016. Much of this change likely was due to the attention that newspaper editorials from every corner of the state began to give Amendment 1. Many of those editorials were critical of the language and intent of Amendment 1 and called into question the honesty of the effort.

The Audio Tape

These editorial criticisms got turbocharged when an audio tape of a speech given by Sam Nuzzo, vice president of the James Madison Institute (JMI), a Florida based think-tank, surfaced. Nuzzo and the JMI worked with CSS and the utilities to design the plan for a counter-amendment drive and to write the language of Amendment 1. On October 2, 2016, Nuzzo spoke to the State Energy/Environment
Leadership Summit, a gathering of conservative operatives who work in the policy areas of energy and the environment.

During Nuzzo’s 12-minute remarks, he confirmed many of the criticisms about the tight relationship CSS had with the utilities and the loose relationship Amendment 1 and its backers had with the truth. Nuzzo said that “solar polls very well” and that Amendment 1 was an “incredibly savvy maneuver” to use the popularity of solar to ensure that it only grows at the pace allowed by the utilities and local governments. He described this use of solar power’s popularity against itself to the utilities benefit as “a little bit of political jujitsu.” Nuzzo noted that Amendment 1 was so important this election cycle because while the FSC initiative failed “they are coming back...and this [adoption of Amendment 1]...would completely negate anything they would try to do either legislatively or constitutionally down the road.”

Nuzzo also attacked the cross-ideological nature of the FSC movement by stating:

They leveraged some of the less savvy, less informed tea party groups and formed what is called the Green Tea Movement – So they come in and they merge and they start a constitutional ballot initiative,” he said. “...They go out and sell a ballot initiative saying if you put solar on our rooftop, shouldn’t you have ability to sell to your neighbor? Yes, that’s free-market ... that’s exactly what they were marketing as a free market principle and the tea party got behind this. (Klas, 2016)
These comments got Nuzzo into significant trouble with his employer and allies, who could not distance themselves from his comments fast enough. Robert McClure, executive director of the JMI, responded by saying Nuzzo, “misspoke when he characterized the effort as a strategy to deceive voters into thinking the plan was a pro-solar amendment” (Klas, 2016). In a prepared statement McClure said “At an event with an unfamiliar, national audience, Mr. Nuzzo generalized his commentary and misspoke in reference to JMI partnering with Consumers for Smart Solar in any capacity” (Klas, 2016). Sarah Bascom, spokesperson for Consumers for Smart Solar said, “Consumers for Smart Solar did not engage or hire JMI to do research regarding this effort” (Klas, 2016).

The Numbers Turn

The reaction on the editorial pages of the state was swift. The comments on the tape allowed the newspapers to intensify their criticism of Amendment 1. The Bradenton Herald, Florida Courier, Florida Times-Union, Gainesville Sun, Jacksonville Business Journal, Miami Herald, Orlando Sentinel, Palm Beach Post, Sarasota Herald-Tribune, Tampa Bay Times, and over a dozen other papers urged the rejection of Amendment 1 (Floridians for Solar Choice-Who Opposed Amendment 1?, 2016).

During Nuzzo’s comments, which took place on October 2, 2016, he said, “Amendment 1 is polling right now anywhere from 66% to 73%...what we are finding is that it has got some staying power” (Nuzzo, 2016). In a poll conducted by the St. Leo Polling Institute over October 22-26, four days after the story was first
published in the Miami Herald, support for Amendment 1 fell to 59.8%, which is under the 60% threshold for amendment adoption. This poll was conducted about three weeks after Nuzzo’s comments and a week after his comments were published in the media and reacted to on the editorial pages.

Frank Orlando, director of the St. Leo Polling Institute said, “This movement away from support for Amendment 1 is a sign that the social media campaign is working.” Orlando continued,

Opponents of Amendment 1 clearly don't have the financial power that the utility companies do, but they've been very effective at getting their message out via forums like Facebook. In addition, the fact that almost every major newspaper has come out against the amendment has made this a much tighter race. (Orlando, 2016)

This poll was published on October 31, 2016, eight days before the Florida primary election of November 8, 2016. The days leading up to the election were filled with multiple editorials across the state urging voters to cast a “no” vote on Amendment 1.

**FSC Snatch Victory from the Jaws of Defeat**

When the Florida polls closed on the evening of November 8th, 2016, Amendment 1 won a majority of the vote, 50.8% to 49.2% but fell 9.2% points short of the 60% needed to pass an amendment through the ballot box (Florida Department of State - Division of Elections, 2016).
The FSC leadership was very pleased with the outcome of the vote, and felt it represented a vindication of the coalitions efforts to improve the status of solar in the state. Tory Perfetti, chairman of FSC and a director for Conservatives for Energy Freedom said:

Today, as a coalition representing every part of Florida’s political spectrum, we defeated one of the most egregious and underhanded attempts at voter manipulation in this state’s history. With God’s blessing and the hard work of every member of Floridians for Solar Choice, we won against all odds and secured a victory for energy freedom. This is a win for the people and I could not be more honored to be a part of this historic victory as Chairman of Floridians for Solar Choice. (Ola, 2016)

Stephen Smith, board member of FSC and executive director of SACE said,

Today was truly a Solar Uprising. For the second time this year, Florida voters have seen the light – first by supporting Amendment 4 this summer lowering burdensome taxes on solar power and now by defeating the utility-backed attempt to choke off customer-owned solar with the deceptively-worded Amendment 1. The Sunshine State voters have spoken clearly: they want more solar friendly policies and the freedom to harness the sun’s power for the benefit of all Floridians and not just the monopoly utilities. (Ola, 2016)

Finally Debbie Dooley, co-founder of the Green-Tea Coalition and early organizer of FSC, said the defeat of Amendment 1 was a repudiation of the
CSS/utility tactics by voters and an important victory for solar. Dooley said the utilities tried

To trick voters and deprive them of energy freedom...I think voters showed they are not going to be fooled by the trickery of the monopolies and their minions. Floridians sent a message that they want solar freedom. I think it’s huge. (Sheppard, 2016)

Victory on the Amendment 1 vote allowed the citizens of Florida to retain a significant amount of decision-making control over the future of solar in the state. Rather than being codified in the Florida Constitution, the defeat of Amendment 1 will allow decisions concerning the future of solar to be made at family kitchen tables, in business boardrooms, in the legislative chambers of the Florida General Assembly, and at the desk of the Governor.
Chapter V

Addressing the Research Questions

Introduction to the Research Questions

During the early development of the electricity generation and distribution system that would eventually power the nation, it became apparent that the “wild-west” atmosphere of decentralized companies and open, unregulated competition was an unwieldy, dangerous, and inefficient option. Independent companies had created a haphazard web of competing power grids delivering electricity to light bulbs and the growing number of other inventions that were dramatically changing the lives of people in the country’s metropolitan areas. The constant increase of multiple power lines strung above the streets and sidewalks of America’s large cities created an unsustainable situation (Hirsh, 2002).

As stated in Chapter 1, this problem was addressed by a combination of mergers and acquisitions that helped consolidate the electricity providers across the nation, along with the government’s decision to begin regulating this new and increasingly important utility. The consolidation process resulted in the formation of large, centralized electricity production and distribution systems that were granted a “regulated monopoly” status in order to provide stability and cohesiveness.

This arrangement of investor-owned utilities and municipal power operations worked well to power the development of the country through most of
the 20th century. The latter part of the century saw the beginnings of change. In 1996, the Federal Energy Regulatory Commission (FERC) issued Order 888, the “open access” rule entitled *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities* (FERC: Landmark Orders - Order No. 888, 2018). This order challenged the monopoly transmission arrangement and stimulated efforts in deregulation. These efforts represented a fundamental reexamination of the existing structure and set off a series of major political battles around the country that have resulted in 24 states currently having some level of deregulation (Electric Choice, 2018).

Alongside the process of deregulation, a new challenge to the existing structure of electricity production and distribution got underway across the country and around the world. During the early part of the 21st century, technological improvements and economies of scale began to improve the economic viability of renewable sources of electricity. “Energy from utility-scale solar plants — plants that produce electricity that feeds into the grid — has seen the biggest price drop: an 86% decrease since 2009” (Berke, 2018).

Public support for renewable sources of energy, coupled with falling prices, set off a series of nationwide political debates about how renewable energy should be incorporated into the existing system. The tone and texture of these debates have varied depending on the attitude of the regional population and the level and shape of entrenched utility influence.
Georgia and Florida: Southern Epicenters of a National Debate

The public debate that has played out over this issue in Georgia and Florida has been so contentious that it resulted in non-traditional allies coming together to support solar power and work for a more solar-inclusive energy portfolio in each particular state. The results of these debates would echo across the region, and ultimately the country. In order to understand why the coalitions in this study formed, how they influenced the events described earlier, and to test the “academic fit” that a proposed public policy theory may have in explaining this situation and others like it, it is important to address the proposed research questions that are the foundation of this study.

The Research Questions

In order to briefly clarify the situations to which the research questions apply, it is important to keep in mind that the Green-Tea Coalition effort to promote solar in Georgia was a precursor to the Floridians for Solar Choice effort. The success of the Green-Tea effort in Georgia helped provide momentum, personnel, a blueprint, and a message that could serve as a launching point for the larger, more complex FSC effort in Florida. The research questions that apply to this part of the study are:

1. Why did supporters of solar power organize themselves into the particular coalition structures represented by Georgia’s “Green Tea Coalition” and the Floridians for Solar Choice?
2. How have the Green Tea Coalition and the Floridians for Solar Choice successfully managed their policy coalitions?

3. How effective are these coalitions perceived to be by public policy players outside the coalition?

4. Do the Green Tea Coalition and the Floridians for Solar Choice coalition represent an Advocacy Coalition approach?

The Research Questions Addressed

In the previous chapter, many of the motivations and events surrounding the formation and actions of the coalition partnerships were referenced within the timeline of events. However, to address how and why the cross-ideological, pro-solar coalitions formed in both Georgia and Florida, it is important to look closer at the basis of these motivations. To help in this, an examination of the founding statements of the organizations involved is useful. The publically stated positions and/or published mission statements and goals of the involved organizations provide insights into why the two cross-ideological sides decided to work together supporting pro-solar policies. Because the Green-Tea Coalition effort in Georgia was the first of the two coalitions, this examination will begin there.

Research Question #1: Coalition Formation

Why did supporters of solar power organize themselves into the particular coalition structures represented by Georgia's Green Tea Coalition (GTC) and/or the Floridians for Solar Choice (FSC) Coalition?
Georgia: Why the coalition formed - Sierra Club (Green) perspective

The media’s appetite in covering the pro-solar effort that came to be known as the Green-Tea Coalition often centered on the “politics makes strange bedfellows” aspect of the partnership. The unexpected angle of Tea Party support for solar power, coupled with the effective spokesperson personality of Tea Party leader Debbie Dooley, established a compelling storyline that attracted a significant amount of media attention around the usually dry subject of energy policy. However, it is important to remember that within the timeline of the coalition’s formation narrative, it was Colleen Kiernan of Georgia’s Sierra Club who first recognized the potential power of the partnership and reached out to Dooley to explore partnership possibilities.

The first partnership opportunity proposed by Kiernan to Dooley was centered on the idea of challenging Commissioner Stan Wise, the most anti-solar member of the Georgia Public Service Commission, and branched out from there into other areas such as transportation and infrastructure. Without Kiernan’s leadership at the helm of the Georgia Sierra Club, the partnership with Dooley’s faction of the Tea Party in support of solar, may not have come into being. Why did Kiernan propose the alliance? And, why did Dooley accept the proposal?

A mission statement is an expression of the core values that inform and drive an organization’s efforts. A close examination of the Sierra Club’s mission statement and the goals connected to it illustrates the organizational values from which
Kiernan could proffer a proposal of partnership. The full text of the national Sierra Club’s Mission Statement reads:

*To explore, enjoy, and protect the wild places of the earth; To practice and promote the responsible use of the earth's ecosystems and resources; To educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives.* (Sierra Club Mission Statement, 2018)

An important supporting document concerning what the Sierra Club works to accomplish is entitled: **Sierra Club Strategic Plan - Overarching Visionary Goals**. This document spells out four overarching goals and outlines specific supporting strategies that are to be employed to reach them. The following is an edited version of the “Goals and Strategies” document that highlights the most important aspects of the Sierra Club’s plan as it relates to their important issues, and in this case, solar power. Please note that this author italicized particular portions of the strategic plan that have direct relevance to the ensuing discussion.

The entire document is available online at the address listed in the References.

**Sierra Club Strategic Plan - Overarching Visionary Goals**

**Goal #1: Achieve Ambitious and Just Climate Solutions**

Most applicable strategies to achieve goal:

1. *Transition to 100% clean energy*

2. *Return greenhouse gas concentrations to a safe level below 350 ppm.*

**Goal #2: “Explore, Enjoy, and Protect or Nation’s Lands, Water, Air, and Wildlife.”**
Most applicable strategies to achieve goal:

1. Defend our wild heritage, onshore and offshore, from extractive energy development. Put an end to damaging mining, logging, and other highly disruptive resource exploitation practices.

2. Protect our air, water, land, and communities from pollution. Promote environmentally sensitive land use and urban design to minimize sprawl, provide a healthy environment for all, and minimize resource use.

(Sierra Club Strategies and Goals, 2018)

Goal #3: Engage and Support a Broad, Diverse, Inclusive, and Powerful Movement

Most applicable strategies to achieve goal:

1. Have the clout to influence public perception and public officials on our core issues, and to elect and hold accountable environmentally committed leaders at all levels of government.

2. Help our activists, local communities and allies win on the environmental issues most important to them. Engage in strategic alliances on broader issues if this can help further environmental causes and remain consistent with our values. (Sierra Club Strategies and Goals, 2018)

The mission statement, coupled with these supporting goals and strategies, provides useful insight into the organizational thinking of the Sierra Club. The text of these documents provides an explanation about why the Sierra Club pursues its goals and what strategies they will use to get there. The documents also provide insight into why the Sierra Club is willing to work in concert with other parties in
pursuit of their goals, even parties who possess a different ideological makeup, like the Tea Party.

**Case in point: Sierra Club Goal 1 and Goal 2**

Examining the mission statement, goals, and strategies outlined is important to help understand the motivations and actions that were taken by Colleen Kiernan and the Sierra Club in support of solar power in Georgia. Sierra Club Goal #1 reads “Achieve Ambitious and Just Climate Solutions.” Important verbiage contained in the two strategies outlined to meet this goal state that society should “1) Transition to 100% clean energy, and 2) Return greenhouse gas concentrations to 350 ppb.” In the view of the Sierra Club, both of these strategies require a large-scale transition to renewable sources of energy and demand the promotion of pro-solar policies wherever feasible.

Sierra Club Goal #2 reads “Explore, Enjoy, and Protect our Nation’s Lands, Water, Air, and Wildlife.” The applicable portion of the strategies outlined to meet this are to, “defend our wild heritage, onshore and offshore, from extractive energy development; [and] protect our air, water, land, and communities from pollution...and minimize resource use.” The goals of reducing resource extraction, reducing pollution, and minimizing resource use, all converge at a point that argues for a significant increase in the deployment of solar power. Increasing solar reduces the need for the extraction of coal and natural gas, and would reduce the emissions that come from the burning of these fossil fuels. Sierra Club policy intimates that
increasing the viability of solar will generally help reduce the amount of non-renewable resources employed to create energy.

The promotion of pro-solar policies in Georgia by the Sierra Club is entirely consistent with their mission statement and goals. The Sierra Club believes that solar power is a cleaner and more responsible form of energy production than fossil fuels and has been promoting solar adoption for years. They also believe that the extraction and burning of fossil fuels is harmful to the ecosystem and should be replaced by renewables. The destruction of landscape and waterways, the introduction of chemicals as surface pollution from mining, and the production of greenhouse gases from the burning of fossil fuels are primary objections to the existing energy structure, which argue for an expansion of renewables. The Sierra Club has also long opposed nuclear power because of the long-standing risks it sees associated with its use, which has put the Sierra Club in direct opposition with Georgia Power over the issue of the Vogtle Nuclear Plant in Burke County, GA.

**Sierra Club Goal 3**

These previous excerpts help highlight ‘why’ the Sierra Club supports solar power as good governmental policy and in many parts of the country, these policies are readily adopted. However, in Georgia, promoting a greater adoption of renewables has historically been a difficult undertaking. Traditional environmental organizations, like the Sierra Club, lack sufficient political influence to bring about a greater role for renewables, even when partnered with other environmental groups committed to their goals. Therefore, moving solar forward in Georgia required
additional partners, and those partners would have to come from the other side of the ideological divide.

Further examination of the Sierra Club documents provides a window into ‘why’ they are prepared to partner with persons and/or groups that would seem to be ideologically mismatched. Consider the third and fourth phrases of their mission statement, which reads, “To educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives” (Sierra Club Mission Statement, 2018). Key parts of these phrases are “enlist humanity...” and “use all lawful means to carry out these objectives.” The mission statement does not say enlist only that part of humanity that agrees with us on all of our stated views, it just says humanity. By going on to note that the organization should “use all lawful means to carry out these objectives” fully opens the organization’s toolbox. Coalition building, even with seemingly “strange political bedfellows” is a lawful activity, one that has the Sierra Club’s seal of approval.

In support of this portion of the mission statement, Sierra Club Goal #3 reads Engage and Support a Broad, Diverse, Inclusive, and Powerful Movement. Two applicable strategies are designed to reach this goal. The first strategy reads, “To have the clout to influence public perception and public officials on our core issues, and to elect and hold accountable environmentally committed leaders at all levels of government” (Sierra Club Goals and Strategies, 2018).

The second strategy designed to meet this goal piggybacks on the first and applies very succinctly to a political venue like Georgia. This strategy encourages
the Sierra Club to "engage in **strategic alliances** on broader issues if this can help further environmental causes and remain consistent with our values" (Sierra Club Goals and Strategies, 2018). This strategy grants leadership permission to strike strategic alliances, and helps explain ‘why’ the Sierra Club would be willing to partner with Dooley’s faction of the Tea Party to help promote solar in the challenging political venue of conservative Georgia politics. The first concrete example of this strategic alliance was evidenced by their combined effort to challenge anti-solar Commissioner Stan Wise at the ballot box, and by example, send a larger message to the membership of Georgia’s Public Service Commission that a new, focused, political force was now engaged.

Why would Kiernan and the Sierra Club leadership look outside their normal lanes of operation towards a partnership with Dooley and her faction of the Tea Party? Because it improved their chances at success in a political venue that did not readily cater to their concerns. They did so in fulfillment of their stated mission. Kiernan’s actions to reach out to Dooley may have seemed questionable at first glance, but were actually understandable “retail” political actions which fell squarely in line with her organization’s mission statement, goals, and strategies. The willingness of the Sierra Club to reach out to unconventional allies, and the positive response received in return, set off a series of political events that significantly changed the direction of the renewable energy debate in Georgia, Florida, and beyond.
**Important Interlude: Tea Party Divide**

Before an examination of why Debbie Dooley's faction of the Tea Party Patriots would be willing to partner with the Sierra Club in support of solar power, it is important to remember that the Tea Party movement was not monolithic and was more decentralized than generally thought. This decentralization often led to Tea Party groups in disagreement with one another. To this end, Debbie Dooley's viewpoints and principles concerning solar power were not accepted by many traditional conservative organizations and were rejected by other influential factions of the Tea Party. Revisiting this fact is important for situational clarity going forward.

As was noted in the previous chapter, Americans for Prosperity (AFP), the Koch Brothers-funded political advocacy group, opposed Dooley's pro-solar efforts. Dooley thought AFP represented a pro-utility, business as usual approach, and was vocal about her concerns. While AFP is not technically an independent Tea Party organization, they shared many of the same policy ideals and were instrumental in helping to organize, fund, and capitalize on the political anger driving the Tea Party.

AFP's financial relationship to the Koch Brothers, and AFP's hostility to solar power, put the two Tea Party entities on a collision course. *The American Spectator*, an influential conservative publication, attacked Dooley's criticism of AFP's importance to the Tea Party movement. Cassidy wrote,

Dooley and her friends are tricking conservatives, misrepresenting the numbers, and accusing AFP — which has done more for the Tea Party than anyone — of putting out 'completely false information.' This has made it easy
for the local press to paint AFP as the press agents of Koch Industries. (Cassidy, 2015)

By September 2010, which was still fairly early in the Tea Party movement, the Washington Post reported that AFP had already become, by far, the largest Tea Party affiliated umbrella organization with 500 local affiliated groups, 1.5 million members, and millions of dollars dedicated to Tea Party affiliated causes ("The top national players in the tea party," 2010). This influence had staying power and continued over the course of the movement. In 2015, Bloomberg news reported that AFP had,

Harnessed the Tea Party's energy in service of their own policy goals, including deregulation and lower taxes.... As the Tea Party movement grew in the aftermath of Obama's election, the Koch's positioned Americans for Prosperity as the Tea Party's staunchest ally. (Bykowicz, 2015)

As such an influential backer of various Tea Party efforts, AFP’s statements reflected the views of many who identified with the Tea Party. During the contentious solar debate in both Georgia and Florida, AFP vigorously pushed their opposition to solar power in the press and pro-solar conservatives quickly pushed back.

In an article examining the rift the solar debate created within the Tea Party movement during the Georgia debate, Grist reported,

Virginia Galloway, director of AFP for the state, warned the group's 50,000 Georgia members that the proposal could increase electricity rates by up to 40 percent, and that this “mandate” — as she called it — would ‘reduce the
reliability of every appliance and electronics gadget in your home.’

(Thompson, 2013)

The online edition of the Athens-Banner Herald addressed the rift by reporting that,

Disagreement between the two groups isn’t unusual. Dooley says Galloway is using outdated figures since solar-panel prices have dropped by more than half in the last three years. She also accuses Galloway of being swayed by the fossil-fuel interests that contribute to AFP nationally. (Jones, 2013)

This political sniping quickly followed the debate into Florida. The Huffington Post reported the AFP position that “The Floridians for Solar Choice (FSC) ballot initiative isn’t about freedom or choice — it’s about money, and using government and taxpayers to prop up the solar industry” (Sheppard, 2015). Conservatives for Energy Freedom (CEF) quickly shot back claiming there were no “subsidies or mandates” in the bill. Dooley told the Huffington Post, "AFP is supposed to espouse free-market principles, but they’re trying to prevent Floridians from engaging in commerce in a free-market manner...They are resorting to outright lies" (Sheppard, 2015).

This heated back and forth between the factions of the Tea Party continued throughout the solar debate in Georgia and Florida and highlighted the fact that the Tea Party movement was in many ways far more decentralized and loosely organized than the overriding public perception of the movement. This often
overlooked decentralization played an important role in how and why the pro-solar coalitions under study developed.

**Georgia: The Tea Party Perspective**

The unconventional ally that Kiernan partnered with in the renewable energy effort in Georgia was Georgia Tea Party Patriot leader Debbie Dooley, who sparred with other Tea Party factions over solar policy and its place within conservative ideology. As recounted in the previous chapter, the Kiernan/Dooley partnership was effective in assisting Commissioner Lauren “Bubba” McDonald’s effort to amend the proposed Georgia Power proposed integrated resource plan (IRP) to include 525 MW of solar development. During this partnership, while Kiernan was operating as the state chapter leader of an established national environmental organization, Dooley was operating as a factional leader of a new, more organic, and somewhat chaotic group of political insurgents.

While Kiernan had the institutional guidelines of the Sierra Club to inform her actions, Dooley, and the Tea Party Patriots she helped establish, operated under their stated over-arching core principles of “personal freedom, economic freedom, and a debt-free future” (Tea Party Patriots, 2018). Being an established, high profile leader of a fairly decentralized group like the Tea Party allowed Dooley a significant amount of leeway in choosing her issues and direction. Dooley’s ability to harness her group’s opposition to the Vogtle Nuclear Power Plant into vocal support for third-party financed solar power, (which she defended under the
banner of personal freedom, economic freedom, and fiscal responsibility),
showcased her abilities as a nimble political activist.

When Debbie Dooley defined these issues from her viewpoint and explained
why she felt they dovetailed with her Tea Party beliefs, she helped significantly reset
the terms of the solar power debate in Georgia and across the more conservative
areas of the country. The arguments she was able to put forward allowed her
faction of the Georgia Tea Party to position itself as an important partner with the
Sierra Club in support of solar power and provided political cover to Commissioner
McDonald’s efforts to increase its use within the state.

An examination of her public statements illustrates why she takes pro-solar
positions and demonstrates the certainty with which she defends how they comport
with the beliefs of the Tea Party. In an interview with the Yale University School of
Forestry and Environmental Studies, Dooley highlighted how she believes solar
power is an important component of personal freedom:

The reason I am so focused on solar now is because I believe that solar
empowers the people. I believe that solar equals energy freedom. The
average person cannot go out and construct a new power plant, they can’t
put a nuclear reactor on their rooftop, and they can’t go out and build a big
wind farm. But they can install solar panels on their rooftop and become
energy independent. (Toomey, 2015)

During another interview with the Guardian she highlighted her opinion that solar
power falls right in line the Tea Party/conservative beliefs of free-market
economics.
True conservatives champion free-market choice, not government-created monopolies that stifle competition. Trying to protect monopolies from competition is not free market. You should be bound by your principles and develop your position on issues based on your principles, not who your financial donors are. (Luscombe and Pietrasik, 2015)

Dooley’s activities during the foundation of the Tea Party, her adherence to her interpretation of those values, and the willingness she developed to work across the ideological divide provided her an important seat at the table as events developed in Georgia and beyond. Her voice became consequential concerning the future of solar power in Georgia and Florida. The influential manner in which she would publically articulate why this approach was consistent with conservative values was a development that provided many conservatives political cover to support actions that favored the expansion of solar power. Dooley helped change how many people on the right, conservative citizens and officials alike, view solar power’s potential.

**Florida: Floridians for Solar Choice**

**Foundational Mission Statements of Florida Coalition Leaders**

Georgia Power’s commitment to bring 525 MW of solar power into the IRP was a significant political accomplishment by the Green Tea Coalition and validated Commissioner McDonald’s plan. With this significant victory in Georgia providing momentum, the pro-solar effort moved south into Florida.
In Georgia, the two partnering organizations were Colleen Kiernan’s Georgia Sierra Club chapter and Debbie Dooley’s Atlanta-based Tea Party Patriots. In Florida, the two organizations at the head of the Floridians for Solar Choice (FSC) coalition were the Southern Alliance for Clean Energy (SACE) led by Dr. Stephen Smith, and Conservatives for Energy Freedom (CEF) led by Tory Perfetti. These two men would serve as the point persons for the FSC coalition, much like Dooley and Kiernan did for the Georgia effort. As was done with the Sierra Club and Tea Party Patriots, an examination of the mission and/or belief statements of SACE and CEF is important to understand the platforms of these two leaders of the FSC movement.

The SACE was founded in 1985 and the text of their mission statement reads as follows: “Southern Alliance for Clean Energy promotes responsible energy choices that work to address the impacts of global climate change and ensure clean, safe and healthy communities throughout the Southeast” (Southern Alliance for Clean Energy, 2018). In addition to this mission statement, the organization lists 7 values that inform their efforts:

1) Protecting treasured places
2) Promoting energy independence,
3) Advancing a clean energy economy
4) Creating job opportunities
5) Saving energy and saving money
6) Empowering diverse constituencies
7) Ensuring safe, health communities
The combination of the mission statement and the provided list of organizational values should leave no doubt about where SACE stands on solar policy. One listed value of note is value number 6: “Empowering diverse constituencies.” Much like the Sierra Club’s call for “strategic alliances,” this enumeration of “empowering diverse constituencies” can help in the justification of seeking partnership with groups of different ideological make-ups. In addition to empowering diverse constituencies/strategic alliances, other values listed by the SACE hold potential points of agreement with more conservative allies. These include: promoting energy independence, advancing a clean energy economy, creating job opportunities, and saving energy and saving money.

Conservatives for Energy Freedom (CEF) was founded by Debbie Dooley to become a national platform for promoting renewable energy from a conservative viewpoint. Tory Perfetti was brought on board by Dooley to act as the Florida Director of CEF and became the Chairman of the FSC coalition (Perfetti, 2017). Essentially, CEF took the lessons learned from the Green Tea experience in Georgia and combined them with a more defined outline of why decentralized renewable energy is agreeable with conservative/Tea Party values. Some important verbiage from the “What We Believe” section of the CEF website states their case:

> We support allowing energy sources to compete on a level playing field in the free-market. We believe consumers should determine which energy source is best – not the government nor giant monopolies. We support fossil fuel energy sources but believe that decentralized energy has the best potential to provide choice and competition to government created
monopolies. The average citizen can’t construct their own nuclear power plant or coal fire plant but they can utilize decentralized energy forms to help put them in control of their energy needs...We strongly believe that moving to a more decentralized structure in our nation’s energy needs is a matter of national security. (Conservatives for Energy Freedom, 2018)

**Specific Reasons for Why FSC Coalition Formed**

While much of the "why" for the Georgia partnership could be found in the mission statement of the Sierra Club and the foundational principles of the Tea Party movement, the reasons why the FSC effort formed were two fold. The first was that the size and scope of the challenge, brought on by government inaction on solar issues, required an “all hands on deck” response from the FSC. The second area concerned why different individuals and groups, including the coalition's founders, would organize and take action to support solar.

Because of the inaction, and outright hostility, to any truly significant pro-solar policies in the legislature and executive branches in Florida prior to 2015, the decision was taken by the organizers of the FSC to go around the lawmakers and straight to the people in the form of a ballot referendum. This proposal was a very labor-intensive effort requiring support from anyone who supported solar in the state, regardless of political affiliation.

In what amounted to a symbolic handing of the baton across state lines during the initial January 2015 press conference launching the FSC initiative, Debbie
Dooley, who did not directly lead the FSC effort, emphatically laid out why it was necessary to go straight to the people by stating,

This ballot initiative is extremely important because the legislature has not acted in the last few years to open up the market for solar and this is why we are taking our voice to the people, this gives the people the say so in their energy future...free market principles should not be cherry picked by groups that have donors in fossil fuel, a monopoly is not free market... (FSC Press Conference Jan. 2015: Debbie Dooley, Conservatives for Energy Freedom Founder)

Placing a constitutional amendment proposal on the ballot via a signature petition drive was a major undertaking that required widespread support. Getting widespread support required cooperating with all interested parties, regardless of their position along the ideological spectrum, as long as they supported expanding solar rights. During the January 2015 kickoff press conference for FSC, Tory Perfetti, the Chairman of FSC, highlighted this cross-ideological cooperation, and noted how that cooperation would help grow the movement. Perfetti (2015) said,

This referendum...is simply going to give choice and freedom...and let the free market into Florida’s energy market...this is something many individuals, right, left, and business have argued for, for many, many years. So finally all of us are coming together - and it is a continually growing group with momentum that has even surprised me at times with how responsive people have been (FSC Press Conference Jan. 2015: Tory Perfetti, Conservatives for Energy Freedom).
While the FSC leadership was cautiously optimistic concerning their chances, they were under no illusions about the type of resistance they would encounter from the start. Their awareness of the power their opponent possessed also helped define the size and scope of the challenge, and reinforced why the coalition’s cross-ideological strength in numbers aspect was so important. Dr. Stephen Smith of SACE highlighted the scope of this challenge during the kickoff press conference when he said,

*We know it [solar] is very popular... Remember FPL [Florida Power & Light] cleared one billion, billion with a b off their rate base in Florida... it is still a David and Goliath issue relative to the financial resources...Anyone who says it is not going to be a challenge is naïve. We expect significant opposition, financial opposition, from the monopoly utilities. And that in and of itself is a statement and it is a sad statement of the state of affairs in Florida, the Sunshine State (FSC Press Conference Jan. 2015: Dr. Stephen Smith, Southern Alliance for Clean Energy, Executive Director)*.

The second reason why the FSC coalition formed is more in keeping with the situation in Georgia and concerned the motivations of why particular organizations or individuals would become members of the FSC coalition in support of solar power. Any particular organization’s reasons for supporting FSC would likely be grounded in the ideological, environmental, economic, or religious view points around which it is founded and how those intersect with the issue of solar power. The Floridians for Solar Choice website listed 10 founding organizations and 60
supporting organizations that decided that their view of solar expansion was in agreement with FSC’s organizational goals (FSC website, 2018).

During the effort to bring the FSC referendum to the attention of the public, spokespersons from many of the organizing and supporting organizations that joined the effort went on the record during press conferences, media interviews, or written press releases to verbalize why they supported the FSC effort. A sampling of these statements will help highlight the reasons why different organizations joined the coalition and illustrate the multifaceted makeup of the FSC coalition. (This author has added italics to their statements to highlight where their organizations goals are met by increased solar deployment).

Stephanie Kunkel of Clean Water Action said,

Clean water action is proud to join Floridians for Solar Choice a coalition of businesses, conservatives, and environmental organizations working to expand solar choice for Florida’s businesses and families...Unlike conventional power generation, solar power generates electricity without relying on water use...this ballot initiative will decrease water usage and prevent further water contamination from non-renewable energy production. (Floridians for Solar Choice, Jan. Press Conference, 2015)

Catherine Baird of the Tea Party Network said,

The Tea Party network is proud to join Floridians for Solar Choice and this broad coalition of organizations in support this ballot initiative which will advance the rights of property owners. TPN has always championed private property rights, responsible government and free market competition. This
amendment is responsible in that it does not raise taxes or mandate anything. (Floridians for Solar Choice, Jan. Press Conference, 2015)

Randy Miller, Executive Vice President of the Florida Retail Federation said,

We are here to celebrate the interest that has occurred with this wonderful coalition, the diverse groups that have come together for this common sense issue. We have been advocating this for a number of years and finally we have a group, who did the homework and we have a movement going...the Florida Retail Federation is proud to be a member of this coalition.


Reverend Andy Bell - Interfaith Power and Light Board member, and pastor of Lakewood Methodist church, St. Petersburg, Fla. said

We have a lot of work to do in this state to get truly get our communities to embrace creation care and stewardship and to get people to really look at the implications of what we are doing to the earth...people of faith need to educate themselves and use that education and change behaviors to a more positive way of living...every time they go to worship there needs to be some inclusion of our responsibility as children of God how to care for God creation. And people will do something about it much quicker if leaders of the church are at the forefront...I’m Reverend Andy Bell and I’m absolutely an advocate for Floridians for Solar Choice. (Bell, Friends of FSC Video, 2015)
This sampling of statements from different organizations in support of the FSC effort provides a substantial survey of the reasons why different organizations would band together in such a cross-ideological coalition. For each organization, the adoption of policies that would increase the amount of solar energy being deployed directly supports their organization's primary mission.

**Research Question #2: Coalition Management**

**How have Georgia’s Green Tea Coalition and Floridian’s for Solar Choice successfully managed their coalitions?**

While the prior question focused on ‘why’ organizations would join in a cross-ideological coalition to promote solar power in Georgia or Florida, it is also important to examine “how” the coalition’s operated and how they stayed together once constructed. Most coalitions that form in politics are populated with a membership of individuals, organizations, and political figures that generally reside on one side of the political divide, and spend their time in political conflict with networks generally made up of those from the other ideological side. That was not the makeup of these two pro-solar coalitions, which both contained members from different sides of the political, environmental, business and faith communities.

A period of intense political division has gripped the country over the last decade or more, and gallons of ink have been spilled attempting to diagnose why. A very partial list of divisive issues include anger at the unaddressed effects of the financial crisis, increased economic inequality, gerrymandering, health care, gun
control, race, and the revival of the culture wars. These are just some of the divisive issues that have been put forward as reasons for, and/or symptoms of, the division.

Into this divided political environment, at the height of the financial crisis that spawned the Tea Party, surprisingly arrived the issue of what to do about solar power in some of the more conservative areas of the country. And oddly enough, at a time of great political division, solar has shown the ability to unite everyday political adversaries behind a common cause.

Georgia: How the Green-Tea Coalition stayed together

What became the Green-Tea Coalition was largely based on the personal relationship that developed between Colleen Kiernan, who led Georgia’s Sierra Club, and Debbie Dooley, who led a faction of the Tea Party Patriots. This unlikely pair teamed up to promote pro-solar candidates and proposals in Georgia. They also teamed up to fight various other issues along the way, which played an important factor in the solidification of the partnership. However, the core of their partnership was centered on solar power issues.

The narrative presented in Chapter Four outlined ‘what’ they did together to promote solar in Georgia. The answer to research question #1 earlier in this chapter addressed "why" they were able to come together, given their significant difference in ideology. A remaining question of “how” they made this “odd couple/ strange bedfellows” partnership work needs to be addressed to increase understanding of the situation.
The main reason that explains how the partnership succeeded in staying together to reach shared goals came down to communication and messaging. Dooley and Kiernan were political professionals who knew when to speak, what to say, and when to stay quiet depending on which audience needed to be reached. They kept their eyes on the prize, and messaged accordingly. That is how the partnership came to be successful. This did not happen overnight, it developed over a period of about three years.

Kiernan saw the first glimpse of how this partnership could work when Dooley and the Tea Party “unexpectedly joined unions and various progressive organizations in opposing proposed legislation that would outlaw some forms of political and economic protest and turn others into felony offenses” (Graham and Hand, 2017, p. 6). Even after the bill’s sponsors tried to placate Tea Party opposition by changing the legislation’s language so it only applied to labor unions, Dooley’s Tea Party resisted Senate Bill 469 (Jamison, 2012). The Tea Party Patriots press release about SB469 stated,

This is not a right or left issue, it is a right or wrong issue. We may not agree with the all of the politics listed in the scenarios above, but we will defend their right to speak and protest, because this is America. If we destroy the First Amendment, we cease to be a free nation. (Jamison, 2012)

Having this faction of the Tea Party stand up for the First-Amendment rights of ideologically opposed groups provided an important opening. This action allowed Kiernan an opportunity to point out to skeptical traditional supporters of the Sierra Club that the Tea Party was a significantly decentralized organization,
that it was not monolithic, and that there was a growing division between parts of the grass-roots and big-corporate sponsors on certain issues (Bonanno & Cherson, 2015).

This instance of mutual defense, Dooley defending labor’s right to protest and Kiernan telling the left that all Tea Party factions cannot be painted with one brush, established a inkling of potential between the two leaders. This potential had a chance to grow during their initial meeting, initiated by Kiernan, when they realized they had more mutual interests than first known, which increased their unlikely pallet of political agreement.

According to some observers of the Green-Tea Coalition, it was their mutual mistrust of the “good-old-boy network” and “business as usual” that led them to look for areas of cooperation. Jim Galloway of the Atlanta Journal Constitution commented, "a suspicion of cronyism and back-room deals served as an effective, non-ideological glue for both sides... And by sticking together, the two groups have permitted right and left wings to communicate and coordinate in a way that otherwise would have been unlikely” (Turbush, 2013).

The pair united to give anti-solar Commissioner Stan Wise of the GPSC an election contest by supporting his primary and general election opponents, who both very publically pushed for solar power during their campaigns. The pair was also able to successfully help block the special-purpose local-option tax for transportation (T-SPLOST), but for different reasons. The Tea Party did not like the increase in taxes and the Sierra Club thought the dispersion of the money raised was too focused on new roads and not friendly enough to mass-transit (Hatfield, 2013).
Each group sent their tailored message to their constituencies, who united at the polls to defeat the measure. This smart “tailored” messaging was an example of how the coalition would stay together going forward.

Dooley and Kiernan strengthened the partnership by having political success in situations where they were not expected to win. The public credit they received in defeating the proposed T-SLOST transportation referendum, coupled with the clear message they sent to the Georgia Public Service Commission with their significant challenge to Commissioner Wise, placed the partnership in an influential position for the upcoming solar debate. After the T-SPLOST upset victory, Bob Grafstein, assistant dean of the University of Georgia’s school of public and international affairs said about the coalition, "This means they’re players. It reminds everybody they’re around and they can defeat your grand plans" (Schneider, 2012).

The next “grand plan” that the pair decided to fight was the Integrated Resource Plan (IRP) put forward by Georgia Power that did not include any significant commitment to incorporating solar power into the electricity generation mix of the utility for the next 20 years. The effort to get Georgia Power to reverse course and include 525MW of solar into the IRP required two things. The first was the leadership that Commissioner Bubba McDonald provided on the GPSC to secure the three needed votes-- his, and two others. The second was the “political cover” and public support that the Green-Tea Coalition provided to McDonald and the two vulnerable commissioners. The coalition provided cover by employing a messaging operation that quickly countered the political attacks and pressure being
orchestrated by pro-utility allies like Americans for Prosperity. These messaging actions helped keep the pro-solar votes of the vulnerable commissioners intact.

They were able to provide this political cover because they were smart political activists who had influence over their constituencies. Kiernan, in particular, understood that this phase of the debate was primarily an argument between conservatives who favored the incorporation of more solar in the IRP and those who sided with the utility position of “business as usual.” Therefore, she (Kiernan) allowed Dooley and her Tea Party to run political cover while keeping the Sierra Club and its allies quiet. Kiernan said, “It was not difficult getting environmentalists on board with the message. After all, this was Georgia” (Graham and Hand, 2017, p. 14). Sometimes the best political message is silence. Sometimes, that is “how” it is done.

**Florida: How the Floridians for Solar Choice Coalition (FSC) stayed together**

How was the FSC coalition able to keep a large number of diverse organizations together and moving towards their goal without fracturing over the significant ideological differences they held? Kiernan and Dooley drew up the blueprints needed to show how this could work during the smaller; more focused Green-Tea effort in Georgia. The lessons of that experience were taken to heart during the organization of the FSC, and helped inform how the effort could be successful.

Tory Perfetti, Chairman of FSC, addressed many of the questions about how FSC was constructed and maintained during a talk he delivered at the *frank 2017*
conference at the University of Florida, Gainesville on March 3, 2017. The frank conference is an annual gathering “for movement builders and change makers – the people who use communications to drive social change” (What is Frank? 2017).

During his talk, which took place after the bulk of the FSC effort was over, Perfetti put forward what he felt were important components of how the coalition was built to stay together. The first foundational component he noted was the importance of professional leadership. Perfetti (2017) said, “But something that we had going for us on the FSC side is that all the general leaders in the organizations, people who we work with, were all actually professionals, we’re professionals within marketing, or PR, or running campaigns.”

In addition to professional leadership, he went on to cite four important principles that the leaders of FSC employed in order to construct and sustain the coalition. Perfetti (2017), listed these as:

1) Do no harm
2) Understand the message, understand the fight, and move forward in a professional manner
3) Understand the people you are talking to – multi-partisanship
4) Importance of Reputation – protect your own and your partner’s

Given the emphasis that the FSC leadership placed upon these four principles as a means of uniting the coalition, it is beneficial to explore these principles in the context of how they contributed to coalition unity. It is important to note that they are all connected, and do not exist in silos. Therefore, there are no sharp lines of
demarcation between them, and the examination of one will include elements of another. However, they avail themselves as valuable rules through which the question of how the coalition was organized and operated can be explored.

**Rule 1: Do No Harm**

The first principle was “Do No Harm.” While many people have heard this as a cornerstone belief in the practice of medicine, how is this phrase important to the successful management of a cross-ideological pro-solar coalition? Perfetti (2017) said, “I have a very big rule and that rule is, ‘do no harm.’ And what that means is we never, ever, made any single organization, any single person, have to choose their ideological purity or belonging to FSC.” The reasoning behind this “do no harm” stance was that forcing your coalition members to publically shortchange their ideological viewpoint in service of the subject at hand amounted to asking them to undercut their own belief system. Perfetti expounded on this saying,

These aren’t things that you should have to necessarily turn in to find an issue that could potentially allow people to unite together to do something for a state or for a group of people. So, the rule originally created was we would do no harm. We would listen and communicate with each individual group that we were attempting to bring onboard and to include the citizens of Florida and figure out how is it that we are going to focus on the single issue. Build the messaging around it. (Perfetti, 2017)

The focus on the “single issue” they came to agree on was reflected in the text of the amendment they put forward, an amendment that could be supported by
everybody because of its careful creation. The amendment’s language provided for the ability to support solar without touching ideological “third-rails” like asking for mandates, subsidies, or taxes. By keeping the messaging carefully crafted to specifically support an individual’s right to produce their own power, sell that power to a neighbor or back into the electric grid, and to enter into a third-party ownership agreement, provided all invested groups with a significant policy upside, without a deal-breaking downside.

**Rule 2: Understand the Issue, understand the fight, and be professional**

The second rule that the leadership of FSC worked under in order to maintain coalition cohesiveness was, “Understand the issue, understand the fight, and move ahead in a professional manner” (Perfetti, 2017). When putting this rule into practice, Perfetti indicated that getting foundational buy-in from potential allies while the issue was still being framed, and the issue proposal structured, was an important consideration.

The ability for FSC to construct a cross-ideological coalition did not appear out of thin air. The momentum for FSC’s formation was, in many ways, a direct result of the success the GTC had in Georgia and the organizational connection between the two coalitions. The template and proof-of-concept was first created in Georgia, where it was legitimized by success, before moving south and scaling up in size for Florida.

Debbie Dooley was the bridge between the two efforts and she “understood the issue, understood the fight”, as outlined in Rule 2. She used this knowledge to
help drive the early construction of the FSC movement, before ceding the stage to the leadership team in Florida (Hand, 2014). During the early days of the FSC organizational construction, she was on the ground, goading potential conservative allies to get involved by tweaking Florida’s very identity. In an April 14th speech in Tallahassee, she introduced herself to the audience by saying, “I bid you greetings from the sunshine state of Georgia” (Hand, 2014).

Another interview during the initial FSC organization effort saw her echo this backhanded challenge for Floridians to reclaim their identity when she said, "I was shocked at the roadblocks and impediments to deploying solar in Florida. They should be leading the nation in the amount of solar...Solar creates jobs. We've created jobs here in Georgia...And it can be done in a very cost-effective way" (Hand, 2014). Her focus remained on getting Republicans to engage in this issue as it emerged in Florida by saying, “Republicans are leading the way on solar energy in Georgia. Republicans should be leading the way in Florida...But they are sitting on the sidelines. I think we can change their minds (Hand, 2104).”

And change minds they did. Of the ten organizations listed as “founding” organizations on the FSC website, six of them had traditional ties to the right side of the political spectrum (Floridians for Solar Choice, 2018). One was Conservatives for Energy Freedom, which was a direct offshoot of the Georgia effort, and as such, was already involved. However, the other five were Florida or nationally based conservative-leaning groups. These five organizations were: Christian Coalition of America, Florida Retail Federation, Libertarian Party of Florida, the Republican Liberty Caucus of Tampa Bay and the Republican Liberty Caucus of Florida.
(Floridians for Solar Choice, 2018). While some might balk at the listing of the Libertarian Party and the Florida Retail Federation into a list of more conservative organizations, their political magnetic field attracts interest from the traditional right side of the political spectrum, not from traditional environmental organizations identified with the left.

Having these conservative organizations listed beside the Southern Alliance for Clean Energy, the Florida Alliance for Renewable Energy, the Florida Solar Energy Industries Association, and WTEC Energy Innovation delivered the message that solar was good for personal and economic freedom, good for the environment, good for business, and good with God. It also indicated that that FSC was following Rule 2 and attempting to “understand the message and understand the fight”, and planned to proceed in a “professional manner” (Perfetti, 2017).

This preparation and organization paid dividends for FSC when the effort went public by allowing a high-profile presentation of cross-ideological unity at the introductory press conference of the Floridians for Solar Choice Ballot Initiative on January 14, 2015. The unified public presentation of coalition leaders from across the ideological spectrum made it politically safer for other interested organizations to join. The diverse leadership and public support by multiple organizations representing different ideologies contributed to a successful kickoff and strong campaign start. Perfetti stated,

So here we are an organization comprised of individuals on the right. Trump people like myself. Al Gore, Hillary Clinton, Bernie Sanders people on the left. And all of us were able to set a bar where we selected an issue, focused on
that issue, created messaging around that issue and came together to actually lead a fight which has done something in the state of Florida that everybody thought was impossible. And that was to actually open up first the discussion and then create meaningful change through actual policy voting. (Perfetti, 2017)

By having an ideologically diverse leadership on display from the beginning, the message was sent publically to all that there was plenty of room under the tent for anybody interested in joining the effort; and that there were like-minded people waiting for you to join.

In a confidential telephone interview, an important voice inside the coalition offered insight into the idea that you need to meet people where they are to lead this type of coalition. The respondent (2018) said,

I think the biggest problem in any solar initiative or any movement, is actually taking the time to explain, using people's own values why this is important to them. And I think that's what the solar coalition was able to do by reaching across so many different sectors...You know, let's tell people why this is important, using the things that are important to people. And I think that's the real key to success of bringing together these kinds of actions.

Providing this type of initial message to the larger public was intentional, and was designed to work with Perfetti’s Rule #3: “Understand the people you are talking to.”
Rule #3: Understand the people you are talking to

The first two rules of, “do no harm” to your partners by attempting to change their ideology, and to ”understand your message” are designed to make sure that the promoters of the message understand their roles. The third rule, ”understand the people you are taking to,” is designed to remind the messengers to first, respect the different viewpoints within the coalition and second, concentrate on the targeted audiences that would be receptive to their particular version of the pro-solar story.

The leadership of the FSC coalition determined that for this particular effort, which had one specific goal, but numerous different ideological pathways to that goal, partisanship could be a strength. When commenting on this idea Perfetti stated, “I like partisanship and I don’t like the word bipartisan. And I will tell you why, bipartisan means that I am going to ask you to give up some thing you really believe in... Our partisanship and our understanding of each other’s individual beliefs systems was our greatest asset” (Perfetti, 2017).

Instead of bipartisan, Perfetti referred to the FSC approach as “multi-partisan” because it allowed people to feel they were involved in a singular cause, for multiple reasons, which reinforced rather than compromised their closely held beliefs. He highlighted his belief in this “multi-partisan” approach by saying,

...you had libertarians and Republican Liberty Caucus members standing with hard core Sierra Club members, environmentalists and...Evangelical Environmental Network Christians all standing and speaking on the same issues. That partisanship was incredibly effective
because we understood how to utilize things that make people passionate.

I’m a believer that if you are going to find an issue...like we did, then you have to legitimately respect [your partners], not fake respect (Perfetti, 2017).

This idea of understanding who is being spoken to, and embracing a “multi-partisan” approach built on respect, really seemed to work for the FSC coalition which got out of the gate quickly. One month after their kickoff news conference on January 14, 2015, a second news conference was held on February 17, 2015 announcing the collection of the first 100,000 signatures and the addition of multiple groups who had joined the effort (Floridians for Solar Choice Press Conference – Feb. 2015).

**Rule #4: Reputation – Importance of protecting yours, and your partners**

The fourth rule that Perfetti and the leadership of FSC operated under concerned the importance of reputation. In his talk, he framed the importance of reputation in two ways, both revolving around trust. First, the trust that came from a good reputation was very important in allowing FSC leadership to recruit the initial membership of foundational organizations. He stated,

Everyone who initially went to lead this FSC fight and continued through, were putting our reputations on the line. That is also a very key prospect of actual change.... If I wasn't able to call up the Christian Coalition, I wasn't able to call up people on the right and I was unable to say to them, look you've known me a decade. I'm telling you this is an issue we need to do.
And I’m telling you - you need to trust me, and I’m telling you, I’m not going to put you in a bad position. And that happened on the left too, they had to trust. (Perfetti, 2017)

The second way that reputation was important, in Perfetti’s model, was how people who decided to commit their organizations to being involved in the FSC coalition were putting their own reputations on the line in order to help drive change. Perfetti (2017) said, “But every individual in these organizations had reputations, reputations of standing for those things that that organization believes in.”

The strong reputations and trustworthiness of the FSC leadership at the beginning of the effort, allowed for the successful recruitment of 10 foundational organizations. A wider belief in the cause, aided by the public reputations of the foundational organizations, allowed decision-making individuals who are charged with safeguarding the reputations of their own organizations, to come on board and become supporting organizations. The number of these supporting organizations listed on the FSC website eventually reached 60, and came from both sides of the ideological spectrum as well as from the business and faith communities (Floridians for Solar Choice, 2018). The full membership list is available as Appendix C.

Some of the higher profile organizations that came on board from the left were the Florida League of Women Voters, Greenpeace USA, and 350.org. Some higher profile groups on the right were the Florida Christian Coalition, Evangelical Environmental Network, and the Tea Party Network (not Dooley’s organization). All of these organizations, and many others put their reputations on the line to promote
solar in a multi-partisan way. During his remarks to the *frank 2017 conference*, Perfetti addressed how effective he felt FSC was at keeping FSC coalition together while operating under these rules. He stated, “Now this was roughly a two year process from FSC founding to just the end in November of 2016. And in that time FSC...has never lost any of our members” (Perfetti, 2017).

**Research Question #3: Coalition Effectiveness**

*Are these coalitions perceived to be effective by public policy players outside the coalition?*

The answers to the previous research questions and the timeline of events outlined in Chapter 4 have illustrated that the two pro-solar coalitions under study have had significant success in both states. While the coalitions may not have achieved all their goals, particularly in Florida, both efforts raised the profile of solar technology. The Green Tea Coalition and the Floridians for Solar Choice coalition were both successful in moving forward the issue of solar power consideration and adoption in their respective states.

While both cross-ideological pro-solar coalitions had success, it is important to remember that their efforts were different in strategy and scope. The Green-Tea effort in Georgia was a smaller policy undertaking and the actual policy process was generally contained within the parameters of a typical systematic political process. In Florida, the scope of the effort was a larger statewide constitutional ballot referendum, which brought every interested policy player into the debate. While the record shows political achievement in both venues for the pro-solar coalitions, it
is valuable to examine the extent of the coalitions’ effectiveness in ways other than just the legislative scoreboard.

This section contains responses from knowledgeable observers of the coalitions who were personally interviewed and quotations about coalition effectiveness from media coverage and other print sources. Interview comments that do not have attribution are from subjects who requested anonymity, while those with attribution granted permission to be identified. While the majority of the observations are from the viewpoints of those outside the coalition, there will be a limited number of quotes from members of the coalition to illustrate their views on some of the tangential impacts they feel the effort had in changing the debate.

A number of respondents had interesting answers concerning the role and effectiveness of the coalitions in directly influencing policy and changing the parameters of the debate surrounding the issue of solar power. The observers were consistent in their assessment that the efforts of the coalitions have been effective in moving the issue of solar power forward in both Georgia and Florida. In Florida, where the coalition fell short of their stated goal of getting third-party ownership arrangements legalized through a ballot proposal, all the observers thought that the effort was still effective because it clarified the issue in the mind of the public, and helped set the table for success in future public ballot amendments and legislative efforts connected to solar.

Observers indicated that the coalitions were particularly effective in changing the political and social landscape on which the issue was debated. In Georgia, observers said the Green-Tea coalition was effective in raising the profile of
the issue, and providing political cover for Republicans on the public service commission and within the legislature. Observers felt that the Floridians for Solar Choice effort also created a safer political environment for conservative politicians to support solar going forward.

Another area of coalition effectiveness in both states was related to the intense local and national media interest the cross-ideological or “strange political bedfellows” aspect generated. Observers noted that this national profile helped amplify the effectiveness of the coalitions when taken in concert with the concrete policy achievements.

**Effectiveness Observations for Georgia and Florida**

All of those who were willing to provide their opinions concerning the coalitions’ effectiveness provided valuable insight. However, one political consultant, who was not a member of either coalition, but who had a behind the scenes look at both Georgia and Florida, provided extensive and enlightening observations about the effectiveness of the coalitions in both states. This respondent’s observations also provide a valuable backdrop to the views of the other observers. When asked about coalition effectiveness, this confidential respondent replied:

I think when you - when you talk about their effectiveness, it helps to distinguish between what we call the outside game and the inside game sometimes to simplify it...the public messaging, the media coverage that [they] get for policy campaigns versus the chess pieces that you’re trying to
move for legislative efforts to get a bill passed, or to get something approved at a public service commission. They have been effective in the first of those two, which is the public messaging, and they've been effective in two ways I think. (2018)

The first way that was highlighted concerned the important role played by conservative voices inside the coalitions. These voices helped influence the direction of the public debate and shaped what the coalitions were able to do to change the contours of the political playing field. This respondent continued,

The first being, helping to neutralize other conservative voices that come out, you know, the usual suspects that come out as opponents of solar. Like the Koch driven groups, like Americans for Prosperity. But then, also, you'll just get some local politicians and consultants and lobbyists who are always derisive about solar in any red state...I've seen them be effective in both Georgia and Florida as being a counter to those usual suspects...[Georgia] Tea Party folks and Floridians for Solar Choice are at odds with groups like Americans for Prosperity that came out against solar in both Georgia and Florida...they've been effective in sort of neutralizing those attacks from the right by giving the media a different story to tell - that there's dissension in the ranks, that there's conservative infighting over whether to support solar and that groups like the Tea Party folks and Floridians for Solar Choice are at odds with groups like Americans for Prosperity that came out against solar in Georgia and Florida. That was a group that was specifically neutralized. (2018)
The second way the coalitions were able to be effective was by creating space for Republicans who were potentially supportive of some pro-solar policies but were hesitant due to the prevailing political environment. The existence of a conservative wing in these pro-solar coalitions provided necessary political breathing room for other sympathetic conservative advocates, citizens, and politicians. These officeholders would not have been able to support pro-solar policies without conservative political cover. This same confidential respondent spoke of this dynamic by saying,

The second way they have been effective...in neutralizing some of the criticism, they've created more space for more moderate Republicans...to say ‘well you know there is disagreement within our party. But I think if we do these things that are consistent with conservative principles like free market economics and small government, if we do solar without government mandates and subsidies that distort the market...I’m still being a good conservative...I can show that I can support solar and still get reelected in the South. (2018)

Another point stressed when concluding comments on effectiveness was that their direct advocacy at the legislative level was not as effective as their grassroots efforts, which were considered game changing.

From my observations at the legislature, I don't think their direct advocacy with government policy makers, either elected or appointed, has been very effective. But, the grassroots advocacy, and the public messaging, and the
sort of narrative they have helped to craft has definitely changed the game in
the South. (2018)

Another interviewee commented on the effectiveness of the coalitions by
discussing these points. A summation of those observations include:

• The involvement of the Tea Party getting together with the Sierra Club to
  support solar in Georgia was effective in helping to break open the
  market in Georgia

• They helped Bubba McDonald push his issue. The interviewee indicated
  that McDonald was not afraid of pushing the solar issue. McDonald
  supports solar – believes it is important to the point he will speak at
  conferences to support solar

• The whole left-right support is really helpful and solar seems to be one of
  the few issues that both sides can potentially agree on these days

• Once it worked in Georgia, people got going in other states in the South
  like Florida and South Carolina

• Just having conservatives being able to talk personal freedom, free
  markets, self-reliance, that sort of thing, gives conservatives something to
  get behind with solar. Combine that with the environmental groups and
  businesses, which have their own reasons to support solar – and that’s a
  lot of people pushing for solar
• This all makes it easier for other conservatives to come on board, especially the affordability and freedom aspect. So in that way it’s been effective (2018)

Effectiveness in Georgia

The “on the ground” effects of what transpired in Georgia concerning solar will likely have a lasting impact on the state going forward. According to the Solar Industry Association statistics, prior to the passage of the revived Integrated Resource Plan (IRP) in 2013, Georgia was ranked 22nd in the nation in 2012 (SEIA rankings). After the plan went into effect, Georgia spiked to 3rd in 2016 due to the implementation of Commissioner McDonald’s plan add 525MW of solar to Georgia Power’s IRP in 2015 and 2016 (Graham and Hand, 2017, p. 11). The state settled back into 9th in 2017, and is projected to be 8th in the country over the next 5 years (Georgia Solar, 2018). This type of change in a conservative state that had been resisting solar, demonstrates the impact that the Green-Tea Coalition had when it worked with other policy actors.

The effectiveness of the Green-Tea Coalition was addressed by the journal Environmental Sociology in a recent article by Hess and Brown entitled *Green tea: clean-energy conservatism as a countermovement.*

In Georgia, the Green Tea Coalition was successful, even when confronted with the opposing ‘Keep the Lights on in Georgia’ campaign led by Americans for Prosperity. In response to the pro-solar coalition, in 2013 the public utilities commission increased the role of solar production in Georgia
Power’s integrated resource plan to 525 MW by 2016. The coalition also supported successful legislation (HB 57) that authorized consumer access to third-party solar, although the final law limited consumer solar production to 10 kW. This case is arguably the clearest example to date of clean-energy conservatism having an effect on state policy outcomes, but even in this case, the crucial actor was the ‘Green Tea Coalition,’ which included the Sierra Club. (Hess and Brown, 2017)

The passage of HB 57, *The Solar Power Free Marketing Financing Act*, in the 2015 Georgia Legislature and its signing by the governor was a major legislative victory that approved third-party solar financing in the state such as PPA’s and leases. This victory was set up by the Green-Tea effort to help Commissioner McDonald get more solar in Georgia’s 2013 IRP. In commenting on the passage of HB57, the bill’s chief sponsor, Rep. Mike Dudgeon, gave much of the credit to the effectiveness of the Green-Tea Coalition’s grassroots activism. Rep. Dudgeon was quoted as saying,

The role of the Tea party and its coalition partners was important. They worked for years to create the necessary public support that raised awareness among politicians and put pressure on utilities. The 2015 legislation would likely not have happened without them. (Graham & Hand, 2017, p. 16)

When asked about the effectiveness of the Green-Tea coalition during a phone interview for this study, the respondent, an interested observer, reiterated
these points, saying, "Oh absolutely... One thing that was effective was just articulating this very compelling voice, the conservative voice for solar. It gave people a model that was really great and heartening to see."

**Effectiveness in Florida**

The “on the ground” effects of what transpired in Florida concerning solar will have lasting impact on the state going forward. According to 2013 Solar Energy Industry Association (SEIA) statistics, Florida was ranked 18th in the nation in solar installations (SEIA, 2014). As solar gained more attention with the high profile debate over the competing solar amendments, the situation for solar began to improve in the state. The defeat of Amendment 1, and the improving economic viability of solar PV, combined to help move Florida from 18th in 2013, to 3rd in the nation in 2017. Florida is projected to be 2nd in the country over the next 5 years (Florida Solar, 2018). While the progress is likely not as substantial as it would have been with a full adoption of third-party financing options like PPAs, for those involved in the Floridians for Solar Choice Coalition, these improved statistics reflect significant advances for solar power.

While the FSC coalition fell short of their stated goal of legalizing third-party financing, the referendum effort was effective in placing the issue of solar for consideration in front of the entire policy subsystem. This raised profile for solar is a lasting impact of the FSC effort and one that the FSC leadership credited with changing the political landscape in favor of solar. In a telephone interview, Alissa Schafer, Solar Communications and Policy Manager for the Southern Alliance for
Clean Energy addressed these tangential benefits of the FSC effort. Schafer (2018) said,

> It was a specific campaign but it ended up being a public education campaign just on the concept of solar, clean affordable solar energy, really, across the state. And I would also add that, you know, even though the petitions themselves, those didn’t get all the way to the finish line, it did create the opportunity and the opening for Amendment 4...which then was voted on in August 2016. That was like Chapter 2 of Floridians for Solar Choice and it was a big success. It was a win that would not have been possible without the initial kind of groundswell and shaking things up that going the ballot route in the previous years. So you know it didn’t - the ballots didn’t get to their final - the final goal like was first stated at that primary press conference. But it did create a different opportunity. (Schafer, 2018)

In another interview the respondent, who requested confidentiality, compared the effectiveness of the Green-Tea Coalition/Floridians for Solar Choice efforts to a military force that had successfully established a cross-ideological beachhead in Georgia, which allowed them to move into Florida. In his view, this beachhead proved the concept that these left-right coalitions could work together for solar and gave cover for other Republican politicians to support solar for their own reasons. This beachhead provided a launching pad for the Florida effort. This respondent said,
I think the beachhead that the more conservative flank helped us take in the South has created more space for those guys to operate. And so even if some of those more moderate Republicans from purple districts in Florida or whoever we’re talking about are coming to solar on their own and driving bills for their own reasons and doing it without associating with the Tea Party. I do think that original blazing of the trails by the Tea Party folks [in Georgia] and others from the Republican side, really created the path for those guys to move forward and made it more viable for them to push these things than it was five years ago, before we had the proof of concept fights over solar, you know back in 2013. (2018)

Many people in the solar industry were watching with great interest as the Floridians for Solar Choice Coalition first tried to open up Florida’s solar market through a ballot initiative. After that effort failed, the FSC coalition was forced to play defense in order to stop Amendment 1. This defensive effort was a galvanizing event for those who supported solar power in Florida.

One very interested observer was SolarCity CEO Lyndon Rive, who congratulated the people of Florida and the Floridians for Solar Choice Coalition for their rejection of Amendment 1 at the ballot box. Given the high stakes that were on the line for solar companies such as SolarCity, Sunrun, and hundreds of local companies, this congratulatory press release reflects the gratitude that the solar industry felt for the effectiveness of the coalition’s efforts to defeat Amendment 1. The election night press release read as follows:
SAN FRANCISCO, Nov. 8, 2016 /PRNewswire/ -- Tonight’s election results indicate that Florida voters have rejected Amendment 1, an anti-solar ballot initiative. The following is a statement by SolarCity Chief Executive Officer Lyndon Rive regarding the voting down of Amendment 1 in Florida:

Congratulations to the people of Florida for rejecting Amendment 1 and protecting the state’s solar future. For too long Florida has been the sleeping giant of the solar industry. Today, the public took historic action to choose a future powered by solar energy, as Floridians from all walks of life wisely saw through the utilities' $26 million deceptive campaign. By voting No on Amendment 1, Floridians have affirmed individuals' right to generate their own solar power, which is cleaner and will create local jobs that cannot be outsourced.

I want to express deep gratitude to the following that played a critical role in protecting Florida’s solar industry:

The grassroots coalition led by Floridians for Solar Choice:

Southern Alliance for Clean Energy, Florida Conservation Voters,
Conservatives for Energy Freedom and the Green Tea Coalition, FLA-SEIA,
League of Women Voters, Vote Solar, Sierra Club, Christian Coalition of America, SEIA, Climate Reality, Rethink Energy Florida, Space Coast
Progressive Alliance, Organize Now, Solutions Project, Progress Florida.

And to the tens of thousands of individuals who poured their hearts into defeating this anti-solar amendment. (Solar City, 2016)
Aside from the local impacts, an important and lasting effect of the Green Tea and Floridians for Solar Choice efforts is how it helped to raise the profile of solar nationwide. The cross-ideological nature of the coalitions, high-profile media status of Debbie Dooley, and the public fight over solar between pro-solar conservatives and the Koch Brother/Americans for Prosperity wing of the party proved compelling enough to generate national and even some international media attention. Feature articles concerning the debate appeared in the print and electronic editions New York Times, Rolling Stone, The Atlantic, Harper’s, New York Magazine, and even the U.K.-based Guardian newspaper.

The fact that two state-based, localized debates over solar energy policy garnered such national attention speaks to the effect that success by the pro-solar coalitions would have on the larger, nationwide debate over solar. While enacting pro-solar policies were the immediate goals of the coalitions, it is not an exaggeration to say that the potential future support of conservatives and/or Republicans who were sympathetic to solar, but who were reluctant to move off the policy fence, was also at stake.

The national attention that the cross-ideological coalitions received had the effect of emboldening conservatives on various local levels to engage in the solar debate in different parts of the country. Another respondent interviewed for this study commented on the nationwide attention the solar debate was getting and highlighted the effect this was having through an expansion of the opportunities for conservatives to safely support solar. This confidential respondent said,
I think as a public relations posture having folks like Debbie [Dooley] and Barry [Goldwater, Jr.] writing op-eds - this is early on in the National Solar fight - is very powerful because it gave some cover for conservatives to say, wait a second, maybe we shouldn't be out there defending the monopoly and buying the monopoly line on what is happening. Maybe we should dig a little deeper and since then, I think you see a lot more conservative voices you know writing op-eds and you know taking part in that public that public part of the game. So it's not just the same one or two people that are on the circuit. You know you have the local conservatives starting to get engaged in those conversations. That's been the difference in the last two years from when it first started in 2014 or 2013 to the last two years I think you know I've just seen a bit become more organic and homegrown. (2018)

The presence of Barry Goldwater Jr., the son of the conservative Republican icon, in this quote references a pro-solar conservative group that he chaired in Arizona that went by the name of T.U.S.K. (Tell Utilities Solar Won't be Killed). This is worthwhile to note because it further illustrates the nationwide aspect of this debate. While the central front of the debate was playing out in Georgia and Florida, there were also other efforts, like T.U.S.K. in Arizona, and many other lower profile solar adoption debates happening around the country.

However, given the natural political makeup of the American South, the important role coal has played in the region, and the significant influence of the utilities, the stakes for the debate in Georgia and Florida held the most significant
nationwide implications. The above quotes are representative of the observations of those who were interviewed. There was wide agreement among the participants and observers about how effective the cross-ideological Green-Tea and Floridians for Solar Choice coalitions were, and how that success helped change the political calculus of many conservative/Republican policy players. This change in calculus created a safer political space for many in the Republican Party to take another look at the potential integration of solar power.

Research Question #4: The Advocacy Coalition Framework

Do the Green Tea Coalition and the Floridian’s for Solar Choice coalition represent an Advocacy Coalition approach?

Advocacy Coalition Framework (ACF) – Foundational Premises

The ACF allows for coalitions to be studied in a methodical way and “has become a foundation for guiding theoretically driven inquiry into some of the questions that lie at the core of the policy research process” (Weible, Sabatier, Jenkins-Smith, et. al., 2011, p. 349). The Advocacy Coalition Framework (ACF) has five foundational premises that serve as the basis of the model. The five premises are:

1) A time perspective of 10 years is needed to understand policy change
2) Science and technology have a central role in the policy process
3) The set of policy subsystem actors is expanded beyond the traditional members of the “iron triangle” to include: officials from all levels of government, consultants, scientists, members of the media, citizens, etc.

4) Policies and programs can be viewed as translations of beliefs

5) The policy subsystem (defined by policy topic, geographic scope, and influencing actors) is the primary unit of analysis (Advocacy Coalition Framework Overview, 2018)

Each of these premises must be examined in order to gain an understanding of how the ACF attempts to explain coalitions in general, and how it can be applied to the pro-solar power coalitions in Georgia and Florida.

**Premise 1: A time perspective of 10 years or more is required to understand policy change**

When President Jimmy Carter ordered the installation of solar thermal panels on the roof of the White House to help heat the water used in the laundry and kitchen of the Executive Mansion, it arguably marked the beginning of the public portion of the solar power policy debate that is currently taking place in the country. During the June 20, 1979 unveiling ceremony of the solar array, President Carter addressed the potential he felt the system represented when he said, “Solar energy will not pollute our air or water. We will not run short of it. No one can ever embargo the Sun or interrupt its delivery to us. But we must work together to turn our vision and our dream into a solar reality” (Peters & Woolley, 2018).
When President Carter said, “No one can ever embargo the Sun or interrupt its delivery to us” he was referencing two seminal events that changed America’s relationship with energy. These two events were; 1) the constriction of the oil supply in 1979 that the country was experiencing at the time of Carter’s remarks, and 2) the more severe 1973-74 OPEC led oil embargo. The 1979 supply constriction was brought about by the unrest tied to the Iranian Revolution and the 1973-74 Arab Oil embargo was tied to the Yom Kippur War between Israel and a coalition of Arab States (Macalister, 2011). The volatile instability of the situation in the Middle East made its way to the streets of the United States, and caused Americans at all levels to question the country’s reliance on imported energy.

These back-to-back oil shocks brought supply shortages, gas rationing, and severe price increases into the lives of everyday Americans, and made the already troublesome economic situations of 1974 and 1979 worse (Macalister, 2011). The energy crisis brought the issue of energy instability to the center of American life. Prior to this, citizens of the United States had enjoyed inexpensive and plentiful gasoline that allowed them the freedom to go anywhere in the country, often by way of President Eisenhower’s Interstate Highway System. During the oil embargo, Americans were not on the road, they were waiting in line to buy gasoline.

Carter’s election in 1976 brought with it an important policy reaction to the 1973-74 oil crisis. The National Energy Act was passed in 1978 and contained five separate statutes designed to increase energy production and encourage conservation. One of these statutes was the Public Utilities Regulatory Policies Act (PURPA), which proved pivotal in the future policy consideration of renewable
energy sources. PURPA set the stage for the deregulation of the monopolistic electric markets and the development of renewable energy sources by allowing non-utility energy producers access to the electric grid (Yeazel, 2018).

PURPA’s implementation set into motion a development in the renewable energy sector that took place slowly over the years. However, this development has recently accelerated with advances in technology, significant cost reductions, and additional supportive public policies. The access to the electric grid that PURPA allowed was foundational to the development of important solar power policies such as net metering and third-party financing arrangements like power purchase agreements or leasing contracts. In concert with federal policies including a 30% solar investment tax credit (ITC), these state-based policies have been important to the increase in solar power deployment in the United States over the last decade.

After adoption, significant time had to pass before the impact of policies like PURPA in the 1970s, and the ITC in 2006 was felt. For PURPA, the technology had to catch up to the potential the legislation created for increasing renewable energy deployment. For the ITC, the economy needed to work its way through the shock of the Great Recession before it began to show significant impact in 2011, five years after implementation. Ten years after adoption in 2016, the ITC has helped fuel an annual growth in solar installations of 54% over the decade (Solar Industry Research Data, 2018).

These examples of the extended time frame required before the impacts of adopted solar policies took hold are representative of how long it will likely take before the full impact of newly adopted policies can be understood. While the effect
of the recently adopted state solar policies like third-party financing/Power Purchase Agreements may become apparent after a few years, it will likely take a decade or more before the full impact will be understood in the states where they have been adopted, including Georgia and Florida. This time frame comports well with the foundational ACF premises, which states, “A time perspective of 10 years or more is required to understand policy change” (Sabatier and Jenkins-Smith 1999).

**Premise 2: Science and Technology have a Central Role in the Policy Process**

Tuning sunlight into electricity is a scientific and technological process that supporters contend has the potential to transform the economic and environmental future of the country and the world. On May 3, 1978 in Golden, Colorado, a dedication ceremony was held for the selection of a permanent site for the Solar Energy Research Institute, which would later become the National Renewable Energy Laboratory. President Carter attended the dedication and stated that American ingenuity could once again change the world. Carter said,

American technological genius can bring the same blessings that the rural electrification program brought to me and millions of others when I lived as a small boy in Plains, Georgia. I’m confident that American science and industry will lead the way in this new market here and in the developing nations of the world, as they earlier did in the spread of American aerospace, electronic, and computer technology. (Peters & Woolley, 2018)

This belief in science and technology is an American trait that has paid dividends throughout the history of the country. American inventions like the
electric light, automobile, telephone, transistor, computer chip, nuclear power, and many others have transformed society. With each technological innovation come policy questions and debates that must be addressed in order for that innovation to be integrated into society. This is the basis of the debate surrounding solar policy in Georgia, Florida, and the rest of the country.

The power industry is a science and technology industry. After the development of electricity, its initial unregulated deployment created a dangerous and chaotic situation in the metropolitan areas of the country, which required the adoption of government policies to regulate the industry. These policies established regulated monopoly utilities that brought order to the situation in the cities, and helped bring electricity to rural areas like Plains, Georgia, that President Carter referenced in his remarks.

As the energy sector developed, policies had to be established concerning issues such as nuclear power, natural gas fracking, off-shore oil exploration, and pollution standards. While solar power has been a promising technology for 40 years, the last decade has seen solar power issues come to the forefront of policy agendas around the country.

As solar technology improved, it started to become more widely deployed around the world. With this widespread deployment came an eventual drop in price that made the technology even more appealing as an alternative energy source. As it became more affordable and appealing, the debate about how it could be incorporated into the energy mix moved into more conservative areas of the
country. As has been discussed, these improved economics made the technology a viable alternative for more conservative activists and politicians.

While improvements in technology and economics helped shift the view of some conservatives in favor of solar, it was the environmental science behind solar technology that appealed to the more progressive supporters of the technology. As the environmental movement gained momentum in the 1970s, solar energy was seen as an option that could help reduce the pollution created by burning fossil fuels. However, due to a change in national priorities brought about by the election of President Reagan, renewable energy research slowed, and symbolically, the solar thermal panels were removed from the White House in 1986 (Biello, 2010). Solar power went onto the backburner of policy priorities for the next 20 years.

As the 21st century dawned, the science behind climate change became more widely accepted. In 2005, The National Academy of Science wrote in a report entitled *Understanding and Responding to Climate Change* that, "the scientific understanding of climate change is now sufficiently clear to begin taking steps to prepare for climate change and to slow it." The report went on to state, “Electricity can be produced without significant carbon emissions using nuclear power and renewable energy technologies, such as solar, wind, hydropower, and biomass” (National Academy of Science, 2005, p.18).

This type of acknowledgement by one of the premier scientific agencies of the United States government was an example of the growing scientific consensus around the issue of climate change. It also foreshadowed the growing policy intersection between climate change as a problem and solar power technology as a
potential part of the solution. This intersection would play an important role in the policy debates and coalitions that surrounded solar power integration in Georgia and Florida. This importance of science and technology to policy formation is in keeping with this foundational ACF premise.

**Premise 3: The set of policy subsystem actors is expanded beyond the traditional members of the iron triangle to include officials from all levels of government, consultants, scientists, and members of the media, citizens, etc.**

The traditional “iron triangle” refers to a policy-making relationship between legislative bodies, governmental bureaucracy, and special interest groups. Often this represents a relatively sealed policy process. Those within the policy triangle are protected by the “iron” relationships between them and are resistant to outside influence (Weible, Sabatier & Flowers, 2008, p. 1).

The policy situations that the ACF helps explain are those that include actors from outside this triangle. By expanding the policy playing field in order to take into consideration the viewpoints and influences of those from outside the reinforcing echo chamber of “iron triangle” system, the ACF can frame policy debates that include input from citizens and other interested parties. Some of these policy participants may, or may not, be perpetually plugged into the political system, and may only engage when particular issues are being debated.

Those from outside the system often organize themselves into coalitions to increase their influence and break through the barriers that limit their access to the policy making process (Sabatier and Weible, 2007, p. 192). While it is true that the two coalitions under consideration, the Green-Tea Coalition and the Floridians for
Solar Choice Coalition, had experienced political players involved in their organizations and operation, much of the energy and public support came from ordinary citizens. In Georgia, the support came from citizens who supported the Tea Party and the Sierra Club; and in Florida, it was citizens of all different stripes, affiliated with an organization or not, that collected signatures, attended rallies, made phone calls, and eventually voted.

This foundational premise also mentions science and the media. Throughout the debate, the science of climate change was offered as fact or dismissed as unproven, depending on one’s policy viewpoint. The technological advantages and disadvantages of solar, wind and nuclear were offered as policy debating points. However it was used, the technological and scientific nature of the subject provided scientists with an opportunity to play a significant role in the policy debate surrounding solar.

In Georgia, the media was involved by reporting on the troubles surrounding Nuclear Plant Vogtle and by following the efforts of Commissioner McDonald to change the rate of solar inclusion in Georgia Power’s Integrated Resource Plan proposal. However, the media’s most intense interest was in highlighting the strange political bedfellows aspect of the Green Tea Coalition, which gained national attention with stories in national newspapers, magazines, and cable news shows.

The media closely followed the actions of the FSC in Florida by covering the ups and downs of the signature gathering efforts, and the public campaigns and controversies leading up to the referendum votes, particularly the utility-backed Amendment 1. The situation also received significant national attention when a
feature article in the February 11, 2016 issue of *Rolling Stone Magazine* reported on the competing solar ballot referendums and researched the influence of Koch Brother/Americans for Prosperity money in the campaign. However, the greatest impact the media had on the debate was when the editorial pages of many major Florida newspapers came to the conclusion that the utility-backed Amendment 1 was not what it purported to be, and urged readers to vote “No” in the weeks leading up to the final referendum vote (Who opposed Amendment1?, 2016).

**Premise 4: Policies and programs can be viewed as translations of beliefs**

“The ACF assumes that policy participants hold strong beliefs and are motivated to translate those beliefs into actual policy” (Sabatier and Weible, 2007, p. 192). This foundational aspect of the ACF seems applicable to the solar policy coalitions under study. Therefore, it is important to examine how well the beliefs of the coalition members involved in this policy situation fit within the ACF. The ACF conceptualizes beliefs into a three-tiered hierarchy that are labeled deep core beliefs, policy core beliefs, and secondary beliefs (Sabatier and Weible, 2007, p 194).

Deep core beliefs are deeply ingrained, often during childhood, and very resistant to change. Some examples of beliefs that operate at the deep core level are left/right political identification and normative beliefs about human nature. Others include the relative priority given fundamental values concerning “liberty and equality...welfare of different groups...proper role of government vs. markets...who should participate in governmental decision making” (Sabatier and Weible, 2007, p. 195).
Policy core beliefs are “applications of deep core beliefs that span an entire subsystem (e.g., California water policy)” (Sabatier and Weible, 2007, p. 194). Examples of these are “whose welfare counts, the relative authority of government and markets, the proper role of the general public, elected officials, civil servants, experts, and the relative seriousness of policy problems in the subsystem as a whole” (Sabatier and Weible, 2007, p. 194). Policy core beliefs are difficult to change, but not as difficult as deep core beliefs.

The example of water policy in California is an example of how a deep core belief can equate to a policy core belief and how, in some cases, they do not equate. Most conservatives are strong believers that the market is the best mechanism to address problems. However, many conservatives recognize that clean water does not always lend itself to a market solution and requires regulation. These conservatives still hold the deep core belief that the wisdom of the market is the best solution to most problems, but are willing to move on this specific policy question in order to get clean water (Sabatier and Weible, 2007, p. 195). For liberals, who deeply believe that most environmental issues require significant governmental regulation to solve them, they support the types of regulations needed to produce clean water. For those on the left, their deep core belief and policy core belief equate in this case.

Within the policy core belief construct there is a belief labeled policy core policy preferences. “Policy core policy preferences are normative beliefs that project an image of how the policy subsystem ought to be, provides the vision that guides coalition strategic behavior, and helps unite allies and divide opponents...Policy core
policy preferences might be the stickiest glue that binds coalitions together” (Sabatier and Weible, 2007, p. 195). This is a point that has real relevance to the solar policy situations in Georgia and Florida. Both of these states exhibit coalitions of a cross-ideological nature. Each side of these two cross-ideological solar policy coalitions has as their policy core policy preference the promotion of solar power, but for different reasons. Briefly, the right side supports solar for freedom and economic reasons and the left for environmental reasons. In this coalition, the policy core policy preference is support for solar. Solar power is the glue that binds the coalition together, despite their ideological differences on other issues.

The third level is secondary beliefs. Secondary beliefs are not subsystem wide and often deal with narrowly focused issues such as budgetary issues or public participation guidelines in specific areas. “Because secondary beliefs are narrower in scope than policy core beliefs, changing them requires less evidence and fewer agreements among subsystem actors and thus should be less difficult” (Sabatier and Weible, 2007, p. 196). These secondary beliefs have more applicability in traditional policy efforts, where coalitions have influence over the shape of legislative efforts, rather than the struggle of winning or losing on a major issue that plays out in public with many different players.

The foundational importance that the ACF places on “beliefs” plays an important role in understanding how these cross-ideological coalitions can unite to promote pro-solar policies. Usually, the beliefs that the ACF examines within coalitions are those that unite persons with similar world-views on a number of issues. The fact that the ACF can also help frame and explain how cross-ideological
coalitions can unite, function, and stay together to promote a shared goal helps to validate and expand its applicability as a policy framework.

**Premise 5: The policy subsystem (defined by policy topic, geographic scope, and influencing actors) is the primary unit of analysis**

When examining cross-ideological solar power coalitions in the American South through the lens of the Advocacy Coalition Framework (ACF), the primary unit of analysis is the policy subsystem. Subsystems are the various individual parts of the whole policy system, which coalitions need to interact with in order to be effective. These include governmental institutions, geographic places and characteristics, citizens, organizations, businesses, etc.

Coalitions are collaborative enterprises undertaken by individuals, groups, and organizations to address a particular policy question or promote an overarching political or social viewpoint. To understand coalitions, it is important to understand the issue or cause they are promoting or opposing, and then examine the motivations and beliefs of the persons and groups involved. Additionally, it is important to examine the social, legal, and environmental parameters in which the coalition will operate.

A rough analogy would be that you have to look at all the pieces (sub) that make up the jigsaw puzzle (system). In order to do this, one must examine the picture content of the pieces and the contours and edges of each individual piece to determine how they can fit together. As all puzzle lovers know, it is best to first
build the border or framework, and then work on the interior pieces to see how they fit together to reveal the whole picture.

When looking at coalitions through the ACF lens, this jigsaw puzzle analogy is a valuable model to follow. First, one must put together the frame of the Relatively Stable Parameters to help understand the borders. Then, one can examine the External Events, Coalition Opportunities, Resources of Subsystem Actors, and Coalition Makeups that fill the environment within which, and between which, the policy debate will take place.

The Advocacy Coalition Framework Diagram created by Sabatier and Weible in 2008, provides a guide to construct the puzzle that coalitions operate within while working for their preferred policy option. When reading the following explanation of the ACF model and coalition fit, it is helpful to have the Advocacy Coalition Framework Diagram on hand for reference. This chart is available as Appendix D. A small version is printed here.
Advocacy Coalition Framework Discussion

Relatively Stable Parameters

Basic Attributes of the problem area (or “good”)

Energy is needed in order to run a modern society. The most important issue or “problem area” concerning this debate is how solar power will be incorporated into the existing electricity generation and distribution systems in Georgia and Florida.

Georgia: Basic Attributes of the problem area (or “good”)

Under a 1973 Georgia law know as the “Territorial Act,” centralized utilities were given monopoly status to provide electricity to customers in their assigned areas, or territories (Graham and Hand, 2017). The monopoly utilities also held a great deal of influence over how the power was generated. The question or “problem area” is how to increase and incorporate more solar resources into the existing energy portfolio of Georgia over the objections of the monopoly utilities. Georgia is a top-10 energy consuming state in the nation because of significant heavy industry and a hot, humid climate that requires major use of air-conditioning (U.S. Energy Information Administration, Georgia, 2018).

Traditional Sources: Natural gas, coal, and nuclear power produce the vast majority of electricity in Georgia. "Natural gas accounted for 41% of Georgia’s net electricity generation in 2017, the state’s four operating nuclear reactors accounted
for 26%, coal accounted for 25%, and renewable energy, including hydroelectric power, contributed 8%” (U.S. Energy Information Administration, Georgia, 2018).

**Renewable energy:** Currently, “Renewable resources fuel almost one-tenth of Georgia’s net electricity generation; about half of that generation comes from biomass” (U.S. Energy Information Administration, Georgia, 2018). Georgia has excellent solar potential and while solar deployment is increasing, it is still a very small portion of electricity production, producing less than 2% of the state’s total energy in 2016 (Bruggers, 2018). From 2016 to 2017, there was a doubling in the amount of electricity generated by solar PV, and total utility-scale generation was more than nine times as large as smaller, distributed installations (U.S. Energy Information Administration, Georgia, 2018). This increase was a result of Commissioner McDonald’s amendment to the IRP, but is still remains a small amount of the states potential.

**Florida: Basic Attributes of the problem area (or “good”)**

The question or “problem area” remains how to increase and incorporate more solar resources into the existing energy portfolio of Florida. Four large, centralized monopoly utilities, and 34 municipal utilities, provide the vast majority of electricity in Florida (Florida Public Power, 2018).

**Traditional Sources:** In 2017, Florida’s transition to natural gas generation continued to change the state’s mix of fossil resources. “Florida is one of the largest producers of electricity in the United States, second only to Texas. Natural gas fuels more than two-thirds of Florida’s net electricity generation” (U.S. Energy
Information Administration, Florida, 2018). This transition has impacted the use of coal. “Less than one-sixth of Florida’s net electricity generation was coal-fired, down from more than one-third of state generation in 2001...Two nuclear power stations on Florida’s Atlantic Coast produce most of the state’s remaining net electricity generation” (U.S. Energy Information Administration, Florida, 2018).

Renewable Energy: Florida has some of the best solar potential East of the Mississippi. The “problem area” is why does “the Sunshine State” use so little of that potential energy resource? The actions of the monopoly utilities have indicated that increasing solar power is not in their business plan. The influence the utilities wield is often used to pressure politicians into protecting the utilities’ desire to maintain the profitable “status-quo,” and perpetuate the continued use of traditional sources of fossil and nuclear power.

Basic distributions of natural resources

Neither Georgia nor Florida contain a significant amount of fossil fuels within their boundaries and import what fuel is needed. Both have excellent solar potential and each has access to other renewables like wind, biomass, and hydropower.

Georgia: Basic distributions of natural resources

Fossil Resources: The vast majority of fossil-based natural resources used to produce electricity in Georgia are imported. Georgia once had a coal mining history, but no coal has been produced in Georgia since the mid-1980’s. Georgia
produces no natural gas, but there are exploration efforts taking place in the shale formations in the northern parts of the state. Georgia does not have any petroleum reserves (U.S. Energy Information Administration, Georgia, 2018).

**Renewable Resources:** Like all Southeastern states, Georgia has excellent solar resources. Georgia has very little onshore wind potential, but has some potential for offshore wind. In 2016, Georgia was number one in electricity generated from wood-pellet biofuel, and exports significant biofuel wood pellets to Europe. Georgia has good hydroelectric resources and is a top-10 state in hydroelectric power east of the Rocky Mountains (U.S. Energy Information Administration, Georgia, 2018).

**Florida: Basic distributions of natural resources**

**Fossil Resources:** “Florida has no significant [onshore] natural gas reserves and only a small amount of natural gas production” (U.S. Energy Information Administration, Florida, 2018). Geologists believe there are significant oil and gas reserves off of Florida’s coast; however, “Florida enacted a drilling ban for state waters in 1990. In 2006, Congress enacted a restriction on oil and gas leasing of federal offshore areas within 125 miles of Florida’s Gulf of Mexico coast until at least 2022” (U.S. Energy Information Administration, Florida, 2018).

**Renewable Resources:** Florida has exceptional solar potential. “The Sunshine State has the best solarity [solar generating potential] east of the Mississippi, and the third-best rooftop solar potential in America” (Dickenson, 2016). So far, Florida has not exploited this resource. “Renewable energy fuels less
than 3% of Florida’s electricity generation” (U.S. Energy Information
Administration, Florida, 2018). While the renewable potential from solar is
beginning to be deployed, it remains a small portion of the renewable energy in use.

“Most of the state’s renewable electricity generation comes from biomass,
with the remainder coming from several solar energy facilities scattered around
Florida and from two hydroelectricity generators in the Florida Panhandle...The
state has no significant [onshore] wind resources” (U.S. Energy Information
Administration, Florida, 2018). However, there is potential for development of
offshore wind power. Oceana, an organization founded to protect the world’s
oceans, conducted a study that concluded that Florida has significant offshore wind
potential that could provide 16% of Florida’s electricity demand if fully developed
(Oceana, 2015).

**Fundamental sociocultural values and social structure**

While Georgia and Florida are neighbors, they have more socio-demographic
differences in makeup than many states that border each other. Much of this is due
to Florida’s geography, which stretches south into the Caribbean. Also, the
appealing climate and beautiful beaches attract people from all over the world.

**Georgia: Fundamental sociocultural values and social structure**

**Cultural Values:** Historically, Georgia is considered a fairly conservative
state in both politics and culture. Georgia is traditionally a very religious state with
a significant Evangelical influence. By religious denomination, Georgians are 67%
Protestant, 9% Catholic and 2% Other Faiths, and 18% Unaffiliated or None (Religion in America, Georgia, 2015).

Georgians tend to be very welcoming of others, practicing "Southern Hospitality." Georgians have also developed a significant “pride of place” because of how well the state has progressed economically and socially. This progress has opened Georgia up to the world, and has allowed its culture to expand. Georgia is home to Atlanta-Hartsfield International Airport, the busiest airport in the world, which served 103.9 million passengers in 2017 (Statista, 2018). Atlanta has established itself as a major international city having hosted the 1996 Summer Olympic Games and is home to Delta Airlines, Coca-Cola, and Cable News Network (CNN).

Social Structure: The 2010 U.S. Census placed Georgia’s population at 9,687,653. Population growth has been between 18.3% and 26.4% every ten years since 1980. Racially, 59.7% identified as White, 30.5% African American, 8.8% Hispanic and the balance identified as other/mixed (American Fact Finder, 2010). Georgia ranks 7th in the country in income inequality (Martin, 2018).

The historical aftermath of Georgia’s role in the Confederacy still exists. Racial divisions have historically existed, but Georgia was also home to Reverend Dr. Martin Luther King Jr. Dr. King led the 1960s Civil Rights Movement from his home church in Atlanta. In many ways, Georgia is leading the South away from some of its historical struggles by looking forward towards a new era for the region. Georgia’s actions aimed at increasing solar power deployment fit into this regional leadership role.
Florida: Fundamental sociocultural values and social structure

**Cultural Values:** Florida’s culture is more diverse than the rest of the southern states in large part due to its geography. The northern part of state, particularly the panhandle, remains culturally tied to the traditional American South. The northern part of the peninsula shares much of the southern culture of its neighbors, while the southern part of the peninsula has significant Cuban, Latin, Caribbean, and European influences. Miami is often referred to as the “Capital of Latin America.” Florida’s climate and beaches attract significant transplants and retirees from all over the U.S. and the world.

All of these diverse influences are turning South Florida into a new melting pot. Of particular importance is the Cuban ex-pat/refugee experience brought on by the Cuban Revolution in 1959. This has had a profound effect on Florida’s culture and politics. Over the last 25+ years, Florida has been moving to the Right politically. Republicans have controlled the Florida Senate since 1992, the House since 1996, and the Governor’s mansion since 1999 (Party Control of Florida State Government, 2016).

**Social Structure:** Florida has seen amazing population growth in the last 60 years. According to the U.S. Census in 1960, the population of Florida was 4.95 million people and the 2010 U.S. Census placed Florida’s population at 18.8 million. Some estimates from the Florida Chamber of Commerce place Florida’s population at about 26 million by 2030 (State of Florida Metrics, 2018). This projected growth raises the question of how sufficient amounts of electrical power can be provided to Florida’s rapidly increasing population.
The 2018 racial/ethnic makeup was 55.6% White (European decent), 23.4% Hispanic (all ethnicity), 16.1% African-American, 2.6% Asian, with smaller groups of mixed or other rounding out the total (Race and Ethnicity in Florida, 2018). Many different languages accompany this ethnic makeup with over 26% having a language spoken at home other than English (Race and Ethnicity in Florida, 2018). Religious affiliation is 46% Protestant, 21% Catholic, 6% various non-Christian, 24% unaffiliated or none (Religion in America, 2015). Religion is part of a varied social structure in Florida, while in Georgia it is more of a unifying cultural identifier. In 2016, Florida ranked 5\textsuperscript{th} in the country in income inequality (Martin, 2017).

**Basic Constitutional Structures – Rules**

The basic constitutional structures of Florida and Georgia are similar and based in American Federalism. But there are some differences in detail that inform the solar debate.

**Georgia: Basic Constitutional Structures - Rules**

Georgia’s governmental structure is based on the federal model of three branches of government consisting of an executive branch, a bi-cameral Legislature of a House of Representatives and Senate, and a judicial branch. The Executive consists of a Governor who is limited to two four-year terms. The Lieutenant Governor is not a running mate and is not term limited. The Lieutenant Governor can be from a different party, serves as President of the Senate, and becomes Governor in the case of a vacancy (Stakes, 2018).
The legislative branch has 180 House Representatives and 56 Senators who all serve two-year terms. The Judicial Branch has a system of lower courts, with a Supreme Court that had seven justices until 2017, when the number increased to nine justices. The justices are elected in non-partisan statewide elections to six-year terms. The justices elect the Chief Justice (Stakes, 2018).

One particular government agency important to this solar policy debate within the state of Georgia is the Georgia Public Service Commission (GPSC), which is charged with regulating the utilities of telecom, gas, and electricity. “The five commissioners of the GPSC are elected statewide and serve staggered six-year terms. The chairman is elected by the Commission for a two-year term with the opportunity to be re-elected for an additional two year term” (Georgia Public Service Commission - Intro, 2018).

Florida: Basic Constitutional Structures – Rules

Florida’s governmental structure is also based on the federal model of three branches. The Governor is term-limited and can only serve two consecutive four-year terms. In Florida, unlike Georgia, the Lieutenant Governor is the Governor’s running mate. While many states elect their Attorney General, Florida is the only state that also elects other cabinet members like the Commissioner of Agriculture and Chief Financial Officer, who both hold power equal to the Governor in their areas of responsibility (Governor and the Cabinet, 2018).

The bi-cameral legislature has a House of Representatives with 120 members who serve two-year terms. The Senate has 40 members who serve four-year terms
with a staggered election schedule of 20 members every two years. Members of both chambers are term-limited to eight years. The Supreme Court of Florida has seven justices that are appointed by the Governor. After appointment, each justice must stand for election on the next scheduled ballot to be approved by the citizens to a six-year term which is not term limited. The Chief Justice is elected by the justices for two-year terms and can serve multiple terms (Supreme Court of Florida, 2018).

The most important aspect of Florida’s governmental structure that applies to this particular solar debate is the ability for the citizens to amend the state Constitution by ballot referendum. The referendum procedure is strictly governed and has requirements that include, but are not limited to, a signature count threshold for consideration, Attorney General review of signatures, and Supreme Court approval of ballot language. If a constitutional referendum reaches the ballot, it requires 60 percent of the vote for approval (Laws governing the initiative process in Florida, 2018).

**External System Events**

**Changes in Socio-Economic Conditions**

The major socio-economic condition that surrounded and informed this debate in both states was the major economic downturn known as the Great Recession. This recession swiftly accelerated in late 2008 and left a historic trail of economic devastation and job loss, the effects of which are still being felt a decade later. Approximately 8.7 million jobs were lost between December 2007 and the
beginning of 2010 (Center on Budget and Policy Priorities, 2018). This economic meltdown hit every part of the economy, in every part of the country.

Efforts by the federal government and Federal Reserve System to stem the economic damage and prevent it from turning into a full-blown depression created a public backlash. Many people felt that large banks and financial institutions were being “bailed out” while regular citizens were being left to fend for themselves. This anger at “bailouts” for major financial institutions that were deemed “too big to fail” was a major impetus for the formation of the populist “Tea Party” movement. The Tea Party played a central role in the solar power debate that occurred over the next few years, particularly in Georgia.

Two other major economic developments that brought the debate over solar power policy into the public arena were the success that pro-solar policies were having in other states, and the dramatically falling prices of installing solar, which “has dropped by more than 70% since 2010” (Solar Industry Research Data, 2018). This significant price drop in solar technologies helped create conditions that allowed solar power to begin competing directly with coal and natural gas while offering a carbon-free energy source alternative to controversial nuclear power plant expansion.

**Georgia: Changes in Socio-Economic Conditions**

Wesley Tharpe of the Georgia Policy and Budget Institute and author of the State of Working Georgia Report 2012 said, “The sobering reality is [that] the downturn knocked out about two decades of economic progress for low- and
middle-income Georgians, and though the economy is now improving, the effects of the crash will continue being felt for many years.” This report noted that Georgia lost 338,500 jobs during the recession, sixth most in the nation (GBPI Admin., 2012).

This type of economic damage, coupled with the populist anger unleashed by the bailouts of financial institutions, led Debbie Dooley to embrace the Tea Party movement and become one of its most vocal leaders in Georgia and across the country. In 2012, Georgians were still trying to regain their economic balance when Georgia Power decided to levy a surcharge on their bills in order to finance cost overruns attached to the Vogtle Nuclear Power Plant expansion. This action added economic insult to injury and provoked a negative reaction from Dooley’s faction of the Tea Party, who fought the surcharge and, over time, came to embrace solar as a viable alternative energy source that fit into their ideology.

**Florida: Changes in Socio-Economic Conditions**

Florida was one of the states hardest hit by the foreclosure crisis that was a major part of the Great Recession. The overheated housing market in Florida peaked in early 2006, and housing prices began to fall and foreclosure rates began to climb. Florida was an early indication of what was in store for the nation. From 2007 to 2010, there were 1,026,055 foreclosure filings in Florida (Office of Economic and Demographic Research, 2018). Florida’s unemployment rate was 4% in 2007, 6.3% in 2008, 10.4% in 2009, and peaked at 11.1% in 2009. From 2010 onward, the rate slowly began improving, but still remained above 7% in 2013 (Statista, 2018). The economic recession inflicted severe consequences on the
Sunshine State, consequences it is still recovering from. It also left Floridians looking for aspects of their lives they could control and that would benefit them economically. Solar power offered both of these possibilities.

**Changes in Public Opinion**

Since the time solar power entered the public consciousness in the late 1970s, it has polled well, which reflects the hope that the public has had in the technology. A Roper Organization poll conducted every year or two from 1977 to 1985 asked the public what “energy sources do you think are realistically possible for replacing foreign oil during the next 5 years? The results found that solar was seen as the most promising potential replacement. Starting in March 1977 through 1985, solar was cited as the best technology by rates of: 52%, 65%, 53%, 57%, 67%, 61%, 57%, 63%, and 59% (Farhar, 1994). In 1987 and 1993, the Roper Organization asked the question about “Which of these energy sources would you like to see developed so we can replace foreign oil? Solar was cited as the preferred energy source by 54% in 1987 and 59% in 1993 (Farhar, 1994).

Nationally, oil is no longer used to produce extensive amounts of electricity. Rather, it is used primarily for transportation. However, in the mind of the public, oil represents all fossil fuels, including coal, and is often used as a general label for fossil energy. It is important to consider that with the increasing popularity of electric vehicles, solar may develop into a significant transportation fuel.

These poll results reflect the position of promise solar power consistently occupied in the mind of the public. Over the last ten years, that promise has been
moving towards becoming reality. Technological improvements, coupled with a significant reduction in price, have combined to greatly improve the standing of solar power in the mind of the public.

Kelton Research conducted a series of polls from 2008 to 2013, which registered approval ratings for solar of 89% to 94% (Kelton, 2014). Pew Research showed this support continued into 2016 with a poll showing an 89% approval for solar (Kennedy, 2016). A Pew Research poll conducted in March/April of 2018 captured an important political development. This poll showed wide bi-partisan support for solar with approval rates of 80% from Conservative Republicans, 92% from Moderate Democrats, and 96% from Liberal Democrats (Hanley, 2018).

The support for solar in the mid-50% during the earlier days of the solar in the late 1970s through the 1990s, indicated the public's interest in the potential of the technology. The significant increase in support for solar to between 89% and 94% as the technology matured in the 2008-2013 timeframe, provided the type of public support that reordered the terms of the present solar debate. The 2018 Pew Research poll that showed significant bi-partisan support in the 80% to 96% range reflects the mainstreaming of the technology's cross-ideological appeal. The efforts in Georgia and Florida helped solidify, and capitalized on, the positive view of solar from both side of the ideological divide.

**Georgia: Changes in Public Opinion**

The 2008 Kelton Research poll that indicated an 89% national approval rating for solar was obtained during the early days of the economic collapse and the
birth of the Tea Party movement. The national 94% approval number for solar in
the 2013 Kelton poll coincided with the birth of the Green-Tea Coalition
partnership. These types of numbers provided Commissioner McDonald the type of
public support needed for his effort to have the GPSC amend Georgia Power’s 2013
IRP to included 525MW of solar power by 2016.

**Florida: Changes in Public Opinion**

The national polls mentioned above were also the environment in which the
pro-solar FSC amendment ballot effort took place. In 2014, shortly before the FSC
effort began, North Star Research test pollied the third-party financing/power
purchase agreements proposal for solar power the FSC effort intended to promote.
This poll found that 74% of the public indicated support for the proposal (North
Star Research, 2014). While the FSC effort unfolded, the numbers that approved of
solar stayed strong. However, the poll numbers fluctuated concerning support of
specific proposals. As was examined earlier, this fluctuation reflected the public’s
confusion and difficulty in understanding the specific details of the competing
proposals. An example of this fluctuation was that support for the utility-backed
Amendment 1 referendum went from 77.3% support in June 2016 to 59.8% support
in October 2016 (Orlando, 2016). The utility-backed referendum was supported by
50.8% of the voters on Election Day, over 9% short of the 60% needed to pass
(Florida Secretary of State, 2016).
Changes in Systemic Governing Coalitions

Changes in the ideological makeup of a government often have significant policy implications depending on the relative strength of the political advantage held by one side or the other. If the political advantage is slim, or an issue has significant support from both sides, cross-ideological political coalitions can form to move various policies forward. These coalitions can form at various levels of the government and include outside actors. Depending on the state, particular responsibilities are assigned to various branches or agencies. When independent agencies have significant decision-making authority, they can engineer significant policy outcomes. As such, they can become venues for public pressure and policy coalition attention.

Georgia: Changes in systemic governing coalitions

In Georgia, there was a change within a systemic governing coalition that impacted the terms and outcomes of the debate surrounding solar power. However, this important change within a governing coalition did not take place because of a change in the executive or legislature. Rather, it initially took place within the Georgia Public Service Commission, the 5-member board that regulates the electric utilities within the state. Historically, the GPSC has been a reliably cooperative regulator to the electric utilities, providing them most of the policy and rate decisions the utilities request. However, a change in attitude concerning the future of solar power in Georgia by Commissioner McDonald of the GPSC, temporarily upset that relationship. While this change of viewpoint may not have been totally
forced by outside public pressure generated by the Green-Tea Coalition, it was consolidated by their support.

The coalition that formed to force greater inclusion of solar power in Georgia Power’s IRP consisted of inside support from Commissioner Bubba McDonald, Commissioner Doug Everett, Commissioner Tim Echols, and outside support from the Green-Tea Coalition (Kraften, 2013). Commissioner McDonald introduced the amendment and secured the needed votes, while the Green-Tea Coalition provided the public support and political cover the commissioners needed to withstand the resistance to the idea from Georgia Power and their supporters like Americans for Prosperity.

The success of this effort on the GPSC changed the contours of the debate going forward. Republican lawmakers now had room to consider supporting pro-solar legislation on the floor of the House and Senate in 2015 without suffering crippling political blowback. This room to maneuver resulted in a more traditional political coalition consisting of newly emboldened pro-solar Republicans, Democrats, pro-solar operatives, and the Green-Tea Coalition who united to pass HB 57, the Solar Power Free-Marketing Financing Act, which legalized third-party financing / Power Purchase Agreements in the state of Georgia (Graham and Hand, 2017, p. 16). The degree to which the political winds had shifted was reflected in the unanimous votes for the legislation in both houses of the legislature and the fact that Republican Governor Nathan Deal signed the legislation on May 12, 2015 (HB57 Solar Power Free-Marketing Financing Act, 2015).
Florida: Changes in systemic governing coalitions

In Florida, there was not a systemic change in the governing coalition at the executive, legislative, or administrative level that allowed for a shift in solar policy. The very solid Republican control of both the Executive and Legislative branches of Government for over 20 years had manifested itself in a solid relationship between the utilities, lawmakers, and the regulators of the Public Utilities Commission (PUC).

Unlike Georgia, where the regulators are elected, and have some vulnerability to public pressure, the regulators in Florida are appointed by the Governor and, as such, are not as accountable to public pressure. This resulted in an anti-solar attitude in Florida, which was even more entrenched than it was in Georgia. This airtight grip on traditional governmental avenues motivated pro-solar forces to employ pressure from the outside. The lack of options available to citizens and groups promoting solar power motivated them to form the Floridians for Solar Choice Coalition and take the issue straight to the people in the form of a ballot referendum to amend the Florida Constitution to allow third-party financing/PPAs in the state.

Policy decisions and impacts from other sub-systems

The energy sector does not operate in a vacuum. Decisions made by other policy makers in nearby or distant venues can influence events and have significant policy impacts on local, statewide, and national situations and debates. One of the most consequential of these distant decisions was the series of OPEC led oil
embargos in the mid-1970s. The constriction on the supply of petroleum set off a series of policy decisions that ranged from the immediate to the long-term.

Short-term policy reactions designed to immediately address the shortage of gasoline included the rationing of gasoline purchases to odd and even days depending on the last digit of an automobile license plate (Myre, 2012). A long-term policy decision that had an immediate impact on citizens was lowering the maximum speed-limit to 55-mpg (Myre, 2012). An important long-term policy reaction, that did not immediately impact citizens, but set the stage for significant policy change, was the passage of the Public Utility Regulatory Policy Act (PURPA) in 1978. PURPA was designed to encourage conservation and promote the production and use of domestic sources of energy, both fossil and renewable (Hornstein and Stoermer, 2006).

In the solar power arena, there were a number of policies enacted in other states that impacted the public’s desire for solar to be embraced in Georgia and Florida. These included, but were not limited to, renewable portfolio standards, net-metering, and thirty-party financing/power purchase agreements.

**Georgia: Policy decisions and impacts from other sub-systems**

Georgia Power’s proposed Integrated Resource Plan in 2012 included no significant solar power. This prompted the GPSC to enact a mandate requiring Georgia Power to purchase a total of 525 MW of solar power by 2016 (Kaften, 2013). This included large amounts of utility-scale production along with a smaller set aside for localized rooftop production. It also set the stage for Georgia to
legislatively adopt HB57 Solar Power Free-Marketing Financing Act, that allowed Georgia to join 46 other states that allowed some form of third-party financing such as leasing or PPAs (Graham and Hand, 2017, p. 16).

**Florida: Policy decisions and impacts from other sub-systems**

The success in neighboring Georgia energized the desire of Floridians to embrace their “Sunshine State” label by embracing pro-solar policies and attempting to get them implemented. While much of this motivation may have been inspired by the pro-solar actions of Georgia and other states, it is worth noting that decisions made in more distant venues also had a direct impact on the timing and prospects of the FSC effort.

Briefly, decisions made in European countries, particularly Germany, to push for the development of significant amounts of solar power in the early 2000’s had the economic effect of driving down the price of solar panels. When European demand increased, production of solar panels by the Chinese increased. When economies of scale began to impact the production equation, the prices of the solar panels eventually began to markedly decrease (Morris, 2016). This decrease in price opened up a significant number of policy options to decision makers in Florida (and Georgia) because of the increasingly competitive economics of solar compared to traditional fossil sources such as coal and natural gas. Forbes magazine reported that, “With further price falls expected for these and other green energy options, [the International Renewable Energy Agency] says all renewable energy
technologies should be competitive on price with fossil fuels by 2020 (Dudley, 2018).

The importance of these German renewable energy policy decisions, and the impact they had on the economics of solar power, are difficult to overstate. Due to the importance of these policy decisions taken in policy subsystems outside Georgia and Florida, they will be examined and discussed in greater detail in Chapter 6. An understanding of this connection is critical to an understanding of the development of the solar debate in all regions of the United States, including the American South.

This newly competitive position of solar power in comparison to traditional fuels disarmed the economic argument against the adoption of renewable energy. Historically, this economic argument has been one of the more effective anti-solar arguments deployed by solar opponents, particularly in more conservative political venues like Florida. It is interesting to note that policy decisions taken half a world away impacted this anti-solar argument and helped set the stage for significant solar development in the United States by changing the economic equation.

**Long Term Coalition Opportunity Structures**

**Degree of Consensus needed for major policy change**

In each political subsystem, local, state, and national, different levels of consensus are needed to institute a major policy change depending on various circumstances. Generally, representative legislative or administrative institutions operate on the principle of majority rules. Usually, that requires 50% plus one vote and a signature from the executive branch. However, there are other occasions that
require a super-majority, such as veto overrides or constitutional change. When one side of the aisle, or a temporary coalition of bi-partisan members, can put together the required number of votes, ideas can move towards becoming adopted policy. These legislative efforts are often supported by outside groups.

If the venue for change is outside the legislative arena, in the form of a ballot referendum for example, degrees of consensus can also vary. A referendum victory may require a win by just one citizen vote, or in questions regarding constitutional amendments; super-majorities may be required for public adoption.

When addressing degrees of consensus, it is important understand that the process goes beyond legislative voting. Votes on policy changes are public processes. As such, the opinions and input of many policy players, other than those with votes, come into play. These can be lobbyists, public interest groups, businesses, faith leaders, and citizens. Often, political coalitions form among these players to advance a particular cause. These groups fight for their preferred consensus by engaging citizens in order to influence public opinion and secure votes. Coalitions do this by organizing demonstrations, writing editorials, engaging on social media, raising money, and contacting legislators in order to reach a degree of consensus that turns their preference into policy.

**Georgia: Degree of Consensus needed for major policy change**

The initial venue for policy change in the Georgia solar effort was the elected decision making agency of the Georgia Public Service Commission. The administrative degree of consensus required for policy change was a majority vote.
of the 5-member commission. However, other forms of consensus were required to engineer the 3-2 commission vote that adopted an amendment to include more solar power into Georgia’s IRP. This included the agreement that the Green-Tea Coalition would work to rally public opinion and act as political cover for the conservative commissioners who wanted to support the amendment, but feared the political consequences (Graham and Hand, 2017, p. 14).

Two years after the successful effort at the GPSC, the solar debate moved into the halls of the Georgia Legislature, where House Bill 57 proposed legalizing third-party financing/PPAs of solar power in Georgia was under consideration. This effort required degrees of consensus more typical of traditional legislative efforts, which included an outside effort of public support campaigns, coupled with an inside effort of lobbying efforts, committee votes, floor votes, and gaining the signature of the Governor (Graham and Hand, 2017, p. 14-17). This effort was a success.

**Florida: Degree of Consensus needed for major policy change**

Because the FSC constitutional ballot referendum effort was designed to go around the legislative process and straight to the people, it was an effort where the degree of consensus playing field was expanded more than a typical legislative effort. This referendum took the issue directly to the public in an effort that required coalition discipline in public messaging, signature gathering, ballot language examination by the courts, signature acceptance by multiple localities, use of traditional and social media, and engagement of editorial boards, etc.
When the effort to place the FSC amendment on the ballot failed to gather the required signatures, the FSC kept working to defeat the utility-backed amendment that did make it to the ballot. The FSC effort was first an offensive effort to facilitate a preferred pro-solar policy outcome. After the FSC effort failed to reach the ballot, it then became a defensive effort focused on preventing the adoption of Amendment 1, the utility backed amendment that was designed to enshrine the status-quo. This defensive effort was successful when Amendment 1 was only approved by 50.79% of the vote, well short of the 60% super majority needed for adoption of a constitutional amendment (Klas, 2016). The whole process was designed to reach a degree of consensus among the citizens who would render their decision at the ballot box.

**Openness of Political System**

Access is determinative in many political situations. The foundations of real political openness include freedom of speech, freedom of the press, the right to free assembly, and the right to petition one’s government. Many people around the world live in situations where they have no real access to the political system. Attempts to pry open these systems have resulted in some of the most heroic and tragic episodes in history. Both of these outcomes occurred in 1989 with the triumph of the Velvet Revolution in Czechoslovakia and the massacre of student-led demonstrators in Tiananmen Square in Beijing, China. These events help bring into sharp relief the importance and consequences tied to political openness in other parts of the world.
Other systems offer an appearance of access designed to produce a veneer of credibility to an authoritarian political infrastructure. These types of systems may hold elections and seat legislatures, but any real opportunity for citizens to truly impact the system is limited. Overt attempts to gain additional influence can be met with suspicion and hostility by the powers that be and result in various forms of citizen oppression such as harassment, censorship, detainment, or even death. One has to look no further than Russia in 2018 for an example of this type of system. However, when citizens and groups of citizens truly have access to those in power, and not just the appearance of access, they have the ability to petition their government and get their concerns addressed. This openness allows citizens the opportunity to change policy and influence the situation in their locality, state, or country.

In the United States, and many other democracies around the world, political systems are designed to be open to the citizenry. This openness takes various forms. A representative democracy and a parliamentary system have different mechanisms of access, but they are both open political systems that provide representation. The individual states within the U.S. have representative systems and some states have additional mechanisms for citizens to bypass the legislative process and attempt to institute political change through the direct democratic action of the ballot referendum. This process adds another degree of openness to the system, and has been used to great affect.
Georgia: Openness of Political System

The political openness of the situation in Georgia took place within a representative framework. The Georgia Public Service Commission considered the amendment of increasing solar power in the state, not Georgia’s legislature. Because the GPSC is an elected and not appointed agency, this gave citizens more access to commission decision makers through the ballot box. This access translated to influence that is not typically available when engaging politically-appointed commissions. The citizens were closer to the decision makers, so they had more access and influence.

Florida: Openness of Political System

Unlike Georgia where the utility commissioners were elected, in Florida they are appointed, and as such, answer primarily to the Governor. This foreclosed the type of access voters in Georgia used to influence their solar situation. Pro-solar policies were blocked in the legislature and not supported by the governor in Florida. However, Florida has a political mechanism in place that allows the citizens to amend the state constitution through direct ballot referendum. This allowed the citizens another avenue of access, and it was this avenue that proponents of solar power decided to use in order to attempt to advance solar power adoption in the state. This additional avenue of openness in the process resulted in a very public and contentious debate; a debate that drew attention to the issue of solar power, and that changed the fate of solar in the state, and across the region and country.
Advocacy Coalition Framework Fit

When taken as a whole, the situation surrounding these two cross-ideological solar power coalitions are a good fit for examination with the Advocacy Coalition Framework. The ACF has the foundations premises that are present in this policy debate. This debate has a time frame of over 10 years; has science and technology as a central factor; the policy players include those from outside traditional policy system; considers policy positions as a translation of beliefs; and uses the “policy subsystem” as a primary unit of analysis.

The ACF also provides the process and space to consider the “Stable Parameters” of each situation, the “External Events” that may impact the situation, and the “Long Term Coalition Opportunity Structures” which exist that the coalitions can engage with or exploit in order to move their issues forward. With an understanding of these three areas of influence in place, an examination of the coalitions can occur on a defined “playing field.” This is where they can use their resources, overcome their constraints, and engage the other players within the policy arena with an eye towards achieving their goals. In short, this situation fits into the ACF, and the ACF helps explain the situation. This is an effective pairing between policy arena and policy theory.
Chapter VI

Discussion and Reflections

Introduction

Given the divided nature of the country on so many political and social issues, it is important to highlight and examine political or policy areas that garner and promote cooperation rather than confrontation. The subject of this study, solar energy promotion and incorporation in the American South, is an example of one of those issues. One of the most important conclusions from this study is that groups and political entities that hold different ideologies and positions on most issues, can still find common ground on particular issues where their goals coincide.

At first glance, many could conclude that the incorporation of solar along bi-partisan or cross-ideological lines is just a different way for people to keep the lights on, and, as such, wonder why it would be important. However, it is important and beneficial for the public to consider the impact this issue is having on many different aspects of society and the economy. Many of these impacts are those that can generally unite people such as jobs, economic development, more affordable energy, and environmental stewardship and protection. Also, advocates argue that development of a decentralized, more resilient electric grid would be beneficial in times of natural disaster or national emergency. These benefits have helped bring people together in Georgia and Florida to increase solar development regardless of issue reasoning or ideological viewpoint.
The success of the Green Tea Coalition in Georgia and the Floridians for Solar Choice Coalition has had significant impacts in the American South as a region, and across the country as a whole. This concluding chapter will take a step back and consider some important aspects surrounding the coalitions, discussing and reflecting upon on a few salient aspects of the solar coalitions. These reflections are important to help promote greater understanding of what was accomplished, and how it happened, and where it positions the issue of solar power going forward. They include:

- A discussion concerning the disconnect between the perception and reality of solar deployment in the mind of the public
- A discussion of the worldviews or beliefs of coalition members and how those relate to solar power and why they deserve further study
- A discussion about how a particular instance of policy messaging, designed to increase the potential for policy teaching and learning, helped build a bridge between the solar advocacy coalitions in Georgia and Florida
- A discussion about how renewable energy policy decisions made in Germany, and the cross-ideological coalitions that promoted them, played a pivotal role in the viability of solar power in the United States

Each of these discussions will help fill in some of the contours of the solar power policy situation and all will be supported by quotes that will help clarify these important connected subjects. There are other areas that would benefit from
more examination and discussion. However, because this debate will continue to develop for years to come, these particular discussions will provide important related context to this study and provide important knowledge that will help the reader understand future developments in this policy arena.

Finally, given the divided nature of the nation’s politics in 2018, it is important to list and examine other issues where there is a measure of cross-ideological agreement or cooperation and consider if the policy contours and political dynamics surrounding these issues would make them good potential subjects for examination through the lens of the Advocacy Coalition Framework. Examples of these issues are Medicaid expansion through the Affordable Care Act, marihuana legalization, the opioid crisis, and criminal justice reform. All of these issues have some bipartisan or cross-ideological agreement and the Advocacy Coalition Framework may be a good tool to examine the depth and resilience of those cooperative inclinations.

**2018 Nationwide Solar Deployment: Perception and Reality**

**Solar Statistics**

The success of the Green-Tea and Floridians for Solar Choice coalitions in creating more favorable political and economic circumstances for solar energy to begin reaching its potential as an alternative energy source to traditional fossil fuels, is an important achievement for the supporters of solar power in both states. The improved statistics for solar power over the last few years are impressive.

Greentech Media Research, the Solar Foundation, and the Solar Energy Industry
Association compiled these nationwide statistics, which were accurate at the end of the second quarter of 2018. SEIA (Q2, 2018) reported that,

- Over the last decade, since the passage of the Solar Investment Tax Credit (ITC) in 2006, solar had an average annual growth rate of 59%
- In 2018, a new solar project was installed every 100 seconds
- At the end of 2016, there were 1 million solar installations in the United States. By the second quarter of 2018, that number increased to 1.8 million installations. By 2023, estimates project a total of 4 million installations
- Solar accounted for 29% of newly installed electricity generation capacity in the first half of 2018
- In 2017, solar represented a nationwide investment of $17 billion into the economy

In the last few years, the situation in Georgia and Florida is beginning to resemble the nationwide trends. According to the Solar Energy Industries Association (SEIA), during the first two quarters of 2018, Georgia ranked 10th nationally in solar development and is projected to be 8th over the next five years (Georgia Solar, 2018). Florida's national ranking in the first two quarters of 2018 was 8th, with a projected ranking of 2nd over the next five years (Florida Solar, 2018). Given the geographical location and large populations of Florida and Georgia, these projected numbers fall more in line with the solar potential of each state. In order to have a lot of solar development, a state needs sunshine, demand, and people. Georgia and Florida have ample amounts of all of these.
Solar Employment Statistics

With improving economic affordability and supportive government policies, solar has been creating jobs across the nation. According to the 2018 National Solar Jobs Census, conducted by the Solar Foundation, 250,271 people worked in the solar industry in 2017. This number represents an increase of 168%, or over 93,000 jobs, since 2010. Most of these jobs cannot be outsourced, and 79% of solar companies did not require a Bachelor’s degree for new hires, which makes these important jobs for a significant portion of the population. Solar workforce demographics include a cross-section of the population: 27% women, 17% Latino/Hispanic, 8% Asian, 7% African-American, and 9% are Veterans (Solar Foundation, 2018). Finally, in 2016, solar employed “twice as many workers as the coal industry, almost five times as many as nuclear power, and nearly as many as the natural gas industry” (Solar Foundation, 2018).

These are impressive numbers for an industry that analysts and public officials across the nation say is only getting started. Orlando Mayor Buddy Dyer said,

We believe the transition to a clean energy future is one of the greatest opportunities of the 21st century for cities to improve community health, quality of life, environmental sustainability, and a vibrant and robust economy. Our city is proud to be a part of growing solar jobs here in Florida and we remain committed to helping lead the transition to 100% renewable energy. (Solar Foundation, 2018)
Within the 2018 Solar Foundation’s National Solar Job Census report, other public officials, from across the country, expressed similar views to those of Orlando Mayor Dyer. These officials include:

- **Minnesota Governor Mark Dayton**: “Thanks to Minnesota’s strong commitment to clean energy, our solar workforce grew by 48 percent last year. We will continue doing everything we can to protect our environment and our health, while building an even stronger clean energy economy in Minnesota.”

- **Utah Governor Gary Herbert**: “Solar deployment complements Utah’s ongoing commitment to delivering clean, innovative, sustainable energy development across its many resources and providing economic opportunities and jobs across the state.”

- **Pennsylvania Governor Tom Wolf**: “We’re proud of our work to support the development of solar energy in Pennsylvania, and our commitment to building a diverse and robust clean energy sector, which helps stimulate the economy and creates jobs. We will continue to advance Pennsylvania’s role as a leader in renewable and clean energy innovation.”

- **Philadelphia Mayor Jim Kenney**: “We are very excited to see so much solar job growth in Philadelphia... We are committed to reducing citywide carbon emissions 80 percent by 2050 and transitioning to a 100 percent clean energy future. A solid solar workforce is key to achieving those goals.”
Solar Power Public Opinion Statistics

These quotes reflect the fact that solar power is being developed across the nation. Public opinion polls show widespread support for the development of renewable energy, regardless of party ideology. A 2016 Pew Research Center poll showed that 83% of Conservative Republicans and 97% of Liberal Democrats supported the expansion of solar power deployment (Funk and Kennedy, 2016). The numbers for moderates from both political parties, fall between those two numbers at around 90 to 95% according to information provided by the Pew Research Center (Funk and Kennedy, 2016).

A 2017 Pew poll found that 65% of U.S. adults prioritize the development of alternative energy sources over the 27% who prioritize expansion of fossil fuel production (Kennedy, 2017). These types of numbers, coupled with the improved affordability of the technology, are moving more people to consider installing solar power. The Pew poll reported that 41% of U.S adults nationally have given serious consideration to installing solar on their homes. In the West, 53% were seriously considering solar. That number registered 36% in the South, 38% in the Northeast, and 40% in the Midwest (Funk and Kennedy, 2016).

Solar power has become an established, mainstream issue in the minds of the American public. National policies like the 30% Federal Solar Investment Tax Credit, favorable state policies like net-metering and power purchase agreements, an improved political landscape with cross-ideological support, and public approval for solar across the board, have combined to make renewables in general, and solar in particular, ascendant in the mind of the public.
Public Perceptions vs. Reality

The widespread support for solar power has produced interesting public perceptions. The Energy Information Agency reported that in 2017, renewables of all types (wind, solar, hydro, biomass, etc.) accounted for 17.1% of the energy generated in the country. Solar power’s portion of the total amount of energy was 1.3%. Fossil fuels accounted for 62.7% and nuclear power for 20% (U.S. Energy Information Administration – EIA - Sources, 2018)

A 2016 poll conducted by Makovsky Integrated Communications asked 1,103 Americans to rank proportionally where they think the nations’ energy (not electricity) comes from. The results exposed significant disconnects between perception and reality. Survey respondents believed that 11% of the nations' energy came from solar power. The U.S Energy Information Agency (EIA) placed the actual number at 1.3%. In 5 years, the respondents believe that 20% of energy will be provided by solar, while the EIA reports that the number will remain at around 1% (Makovsky, 2016). The percentage likely stays at about 1% because while solar deployment will be increasing, so will demand for energy, which will keep the percentage static.

David Roberts, a well-respected, long-time renewable energy writer and observer, cites a couple of reasons for the misperception. Roberts wrote,

First, a lot of people – including lamentably, many journalists and policymakers – do not grasp the difference between electricity and energy. (The former is a subset of the latter.) They hear about the success of wind
and solar and they think "fossil fuels" are being displaced. When they think fossil fuels, they think oil. (2016)

It is important to remember that the question asked was about where the public thought the energy of the country came from, not just the electricity. Oil is mainly used for transportation, while coal, natural gas, and nuclear are used for electricity. This misperception has been a major part of the energy conversation for decades. The mindset of many is that solar can replace oil, and that is not the case, and will not be the case, unless the transportation sector is electrified. While the public currently does not widely appreciate the differences about the major uses of energy types, it is an important aspect of the energy debate that should be clarified to the public whenever possible, in order to help increase understanding.

Regardless of the confusion between energy and electricity, the poll numbers cited represent a significant over-estimation by the public concerning the pace at which renewable energy is coming online. This over-estimation is likely because of the heightened attention that renewable energy has been receiving in the last few years, which is the second point that David Roberts addressed. Roberts wrote,

Second, I think this reflects a real communications victory on the part of clean energy industries and climate advocates. For years and years now, they’ve been pounding on the message that renewable energy works, that it's ready, that it’s getting cheap, that it’s growing like crazy. Repeat that stuff often enough and people will get the idea that fossil fuels are hanging on for dear life — that solar power’s total triumph is nigh. (2016)
Given these national numbers, it would seem likely that the citizens of Georgia and Florida would also dramatically over-estimate the amount of solar being used in their states. While SEIA statistics say that Georgia and Florida are estimated to be 8th and 2nd respectively in solar deployment over the next five years, the amount of electricity that solar is currently producing in those states during the first half of 2018 is very small. In Georgia, solar provided 0.75% of the states electricity (Georgia Solar, 2018). In Florida, solar provided 0.65% of the states electricity (Florida Solar, 2018). These small amounts leave plenty of room for the public to over-estimate the amounts actually deployed, but also reflect how much potential remains for solar in these states, and by extension, the country.

Dave Roberts considered how this over-estimation could impact the public’s impression on renewable energy deployment from the perspective of those who promote renewables. Roberts wrote,

The question is whether it’s a good thing, on balance, for Americans to overestimate wind and solar. On one hand, nothing succeeds like success. The more people believe renewable energy is real and viable today; the more they’ll be inclined to support and invest in it. The perception of momentum is arguably key to creating momentum. On the other hand, an overly triumphalist narrative obscures the difficulty and sheer quantity of decarbonization work ahead. It could dampen the sense of urgency that is still very much needed. (2016)
The questions surrounding the public’s understanding about the amount and rate of renewable energy adoption is an important area of potential further study. The foundations of what the public believes, or comes to believe, is central to the efforts of most political campaigns in general, and issue-centered coalitions in particular, including the Green-Tea and Floridians for Solar Choice coalitions. Given the wide disparity between what is actually deployed and what the public thinks is deployed, more state-based polls should be undertaken to obtain and track these numbers in individual states. Gaining a better understanding of public perception vs. statistical facts, and exploring the reasons behind them, would be helpful to issue advocates and policy makers as they continue to address these issues.

**Beliefs and the ACF**

An important aspect of the Advocacy Coalition Framework (ACF) that has been addressed within the narrative and the ACF research question portion of this study is the importance that the ACF places on beliefs (deep-core beliefs, policy-core beliefs, and secondary beliefs). The ACF places considerable weight on belief systems for two reasons. The first is that “the ACF presumes that policies and programs are best conceived as translations of belief systems,” and second, “is that belief systems are essential for understanding the formation, maintenance, and structure of coalitions” (Weible, Sabatier, & Flowers, 2008, p. 2).

Within the structure of the Green-Tea Coalition and the Floridians for Solar Choice Coalition, there are individuals and organizations that come from different sides of the political/ideological spectrum. As such, these persons, in the verbiage of
the ACF, have different beliefs at the “deep-core” and “policy-core” belief levels. There are also persons and groups within the coalition whose main concern is business, but depending on the nature of their business, they could come to the coalition from either ideological side.

Beliefs and Sensitizing Concepts

Patton (2015) wrote, “Qualitative inquiry using sensitizing concepts leaves terms purposefully undefined to find out what they mean to people in a setting. *Sensitizing concepts are windows into a group’s worldview*” (p. 360). Because this study looked at solar power advocacy in a coalition that contains two different sides of the political spectrum, the idea of a group’s “worldview” or “beliefs” is very applicable. Each side of this coalition contains individuals or organizations that have different worldviews concerning many issues.

The “deep-core beliefs” defined by the ACF are those beliefs that are very resistant to change. Examples of “deep-core” beliefs that exist on the more conservative side of the ideological spectrum include beliefs tied to Evangelical Christianity and a fidelity to conservative ideology throughout the generations, including free-markets. On the more progressive side of the ideological spectrum, there are “deep-core” beliefs tied to environmental protection and the belief that markets often need regulation.

Generally, but not universally, these deep-core beliefs line up with the ideological side of the coalition that one would expect, and, as such, help identify the general worldview of the coalition members. Just outside the “deep-core beliefs”
are “policy-core beliefs.” These beliefs are still resistant to change, but can be areas where policy agreement or compromise is possible. Concerning this, Sabatier and Weible wrote,

> For example, while conservatives generally have a strong preference for market solutions, some of them recognize significant market failure (e.g. externalities) in water pollution problems and thus are willing to support much more governmental intervention in this policy area compared with other policy areas. (2007, p. 195)

The debate over solar power falls into this policy-core area for those in the coalitions. They all want an increase in solar power deployment, often for different reasons, that are reflected by their “policy-core beliefs” (ex. good for the environment or good for personal freedom). As such, solar power serves as the “policy-core policy-preference” glue that helps bind the coalitions together (Sabatier and Weible, 2007, p. 195). Solar power gives the progressives something that is good for the environment and solar power gives the conservatives something that is good for personal freedom. Therefore, solar acts as the “glue” that gets both sides working together for the same “policy-preference,” but for different "policy-core" beliefs.

How these groups promote the subject at hand, solar power, within the context of their wider worldview can be explored through an examination of the applicable sensitizing concepts. During the course of the research, a number of sensitizing concepts that illuminated the worldview of the individuals and groups
involved were revealed within the print, audio, video, and interview sources. Initially, a few of the concepts such as sustainability on the left and unregulated free-markets on the right appear to be particularly applicable to one side of the coalition or another. Others, such as energy freedom/choice and environmental stewardship/protection, seem to have degrees of applicability or appeal to both sides.

However, during the course of researching both coalitions, a larger number of the worldviews or beliefs that at first consideration would seem to be confined to one side or the other, became more a matter of degree, with each side holding some measure of shared beliefs. These degrees of belief were foundational to the members of the coalition, but also became an ingredient of the policy-core policy preference glue that held the coalitions together.

**Sensitizing Concepts and worldview quotations**

The following discussion of sensitizing concepts and worldviews contain examples where these degrees of belief are present. The issue of solar power and the related personal, economic, and environmental benefits of the technology, are reflected in the beliefs of those who support greater deployment of the technology. The spectrum of beliefs and worldviews related to the subject of solar are more integrated than this researcher understood at the beginning of the process. Individuals and groups from different sides of the coalition have a much more complex relationship with their worldviews on the various issues related to solar power; they are not all or nothing propositions.
An example of these complex cross-ideological relationships was on display at a September 2015, Climate Conference in Miami where former Vice President Al Gore invoked some of the important worldviews that coalition members sometimes share. Ryan Ray of Florida Politics reported on the event. Ray wrote,

Gore also intervened directly in Florida’s ongoing solar energy debate, saying opponents of Floridians for Solar Choice’s ballot initiative – which would liberalize Florida’s laws regarding the sale of residential solar panels – were motivated by a drive to protect state-sanctioned energy “monopolies.” Gore also briefly singled out conservative Republican activist Debbie Dooley founder of the so-called “Green Tea Party” movement, out for praise, saying climate change is an issue that ought to unite good-faith political opposites.

(2015)

How these beliefs and worldviews coalesce or diverge over time will have an impact on the specific debate concerning solar power, and the wider environmental and economic debates to which it is related, including climate change. While much of the messaging designed to increase support for solar power in conservative circles is centered on ideals such as energy freedom and personal choice, there is a serious effort underway to convince those on the right, who are skeptical about environmental and climate concerns, to reevaluate their positions on these larger issues. This struggle for hearts and minds on the right is centered on a particular section of the Evangelical community. This population within the Evangelical movement holds views on the environment that are centered on environmental stewardship and care, rather than dominion and control.
One of the more important figures in this effort is the Reverend Mitchell C. Hescox, President and C.E.O of the Evangelical Environmental Network, which is a member of the Floridians for Solar Choice Coalition. Upon invitation of the Vatican, Rev. Hescox, provided an issue paper to the Vatican’s 2017 Conference on Climate Change entitled *Caring for Creation – The Evangelical’s Guide To Climate Change and a Healthy Environment*. His paper provides significant insight into the worldviews of many from the conservative wing of the Georgia and Florida solar coalitions, for whom Evangelical Christianity is a deep core-belief in their lives.

While Reverend Hescox is a conservative, there is also a population within the Evangelical movement, which holds progressive beliefs (ex. anti-war) that were more in vogue in the late 1970s. Former President Jimmy Carter is a well-known example of a progressive Evangelical. Green-Tea Coalition leader Debbie Dooley on the right and former President Jimmy Carter on the left are both Evangelical Christians whose worldviews are consistent with the positions laid out in Rev. Hescox’s position paper. As such, a number of his observations are helpful in explaining the worldviews of those who find compatibility between their Evangelical beliefs and environmental stewardship, which includes support for solar power.

The following paragraph begins an examination of a series of quotations from coalition members that help convey some of the beliefs or worldviews that motivate people from different ideological positions to support solar for various reasons. The viewpoints in these quotes are not exhaustive, that would require a significant stand-alone research effort. However, they are illustrative, and help
highlight the fact that among various coalition partners, there are positions that do not always comport with widely believed stereotypes. This is particularly true in the space occupied by Evangelical environmentalists, like Reverend Hescox, whose comments from his *Caring for Creation* paper will address a number of the topics.

**Sensitizing concepts (worldviews and beliefs) revealed by research**

Within the following quotations, the applicable portions related to the sensitizing concepts have been italicized so they can be more easily identified. These were not italicized in the original documents.

### Climate Change

**Conservative**

Reverend Hescox wrote, “*Climate change is the greatest moral challenge of our generation, as each of God’s children worldwide is impacted. However, properly addressing climate solutions provides the greatest opportunity for hope* (2017, p. 12).

**Progressive**

Green–Tea Coalition Sierra Club leader Colleen Kiernan addressed how climate change was a serious threat to Georgia, but also could be an opportunity. Kiernan wrote,

*Climate disruption* is already impacting Georgia, threatening our economy and communities. The good news is that cutting carbon pollution through common-sense steps will bring real benefits to Georgians, including cleaner air, more secure water resources and thousands of good jobs...There’s never
been a better time to move Georgia beyond coal to clean energy. (Kiernan and Benfield, 2014)

**Environmental Protection**

**Conservative**

When addressing the issue of environmental protection, Reverend Hescox wrote,

Humanity has been given a precious gift, a planet that can provide for all our needs if we only follow God and use it wisely. Just as we are called to love our neighbor, not subjugate him or her, the same applies to creation. *Never does the Bible support the earth being trashed or misused. Genesis states just the opposite.* (2017, p. 9)

Green-Tea Coalition leader Debbie Dooley took a more blunt approach when she made the case for environmental protection. Dooley said, “*If you think fossil fuel is not damaging the environment, pull your car in a garage, start up your engine, inhale the exhaust fumes for a few minutes and see what happens*” (Mokalla, 2017).

**Progressive:**

Stephanie Kunkel of Clean Water Action addressed the environmental protection benefits of solar by pointing out that switching to renewables like solar, have benefits for other environmental protection concerns like water. Kunkel (2015) said,

For over forty years Clean Water Action has advocated for clean, safe, and affordable water and prevention of health-threatening pollution, that is why we are proud to support this solar ballot initiative, which will decrease water
usage, and prevent further water contamination from non-renewable energy production. (Floridians for Solar Choice Press Conference, February, 2015)

Energy Freedom and Energy Choice

Conservative:

Green-Tea Coalition leader Debbie Dooley is on the record as believing that man is damaging the environment, as well as changing the climate. However, there are many conservatives who do not share her view on climate change. While it is important to understand the worldviews of the coalition members, it is also important to understand and consider the beliefs of those the coalition is attempting to reach. One interview subject who spoke under confidentiality indicated that to be effective you must “explain what is important, in terms of what is important to them.”

Dooley sees it as her mission to teach people how to speak to conservatives about solar power. She is often quoted saying,

My dad is a retired Baptist minister and he told me that in order to get people to hear your message, you have to get them in the church...a mistake a lot of environmentalists make when talking to conservatives and Republicans about solar, about clean energy, is they lead off with climate change, that is the wrong message. If you deliver the message of energy freedom, energy choice, competition, national security, and innovation, all of a sudden you will have a receptive audience and they will listen to you. (2017, April 18)
Progressive:

Kim Ross, of ReThink Energy Florida, indicated that her organization believes that solar should be opened up to the free-market for people to make their own choices and that voters were telling them the same thing as they collected signatures for the FSC referendum. Ross said,

Out in the field we're collecting petitions and the voters we've talked to want to see solar compete fairly on the market against other forms of energy. They want to take action towards real energy independence and a cleaner, more sustainable environment. (Payne, 2105)

Sustainability

Conservative:

When addressing the issue of Sustainability, a concept usually identified with progressives, Reverend Hescox wrote,

As we address the threats posed by a changing climate, the potential exists to turn energy poverty into energy prosperity and to replace resource scarcity with sustainable economies. Clean energy is the foundation for a sustainable world, and the energy transition is well underway. (2017, p. 12)

Progressive:

The Conservancy of Southwest Florida is a supporting member organization of Floridians for Solar Choice. As an organization, the Conservancy is concerned with all of the interrelated issues that impact Florida’s environmental sustainability, particularly the Everglades. Jennifer Heckler, the Conservancy’s director of Natural Resource Policy said,
Expanding access to solar provides consumers *more environmentally sustainable choices* for meeting their energy needs. With the expansion of oil and gas proposals that can involve immense amounts of freshwater, and the need for additional freshwater flows to restore natural systems all over Florida including the Everglades, *promoting less water intensive energy alternatives, such as solar, will be vital to the success of restoration efforts.* (Perry, 2015)

**Anti-Monopoly**

**Conservative:**
At the February 17, 2015 Floridians for Solar Choice press conference,

Catherine Baer of the Tea Party Network said,

> The Tea Party Network is proud to Join Floridians for Solar Choice in this broad coalition of organizations in this ballot initiative, which will advance the *rights of property owners.* The Tea Party Network and conservatives have always championed private property rights, responsible government and *free-market competition*...Bills to allow solar choice have been filed with the Florida legislature for the last three years and unfortunately due to the *undue influence of monopoly power companies,* they didn’t make it out of legislative committees, the bills were never even granted a hearing. (2015)

**Progressive:**
At the same February 2015 Floridians for Solar Choice press conference,

Dave Cullen of the Florida Chapter of the Sierra Club (2015) said,
It is a very nice bonus that transitioning to solar will lower homeowner’s monthly bills and create good paying jobs. People get it, some may think this is an unusual group of people to be working together, but what we share is common sense. *People should be able to choose not to be locked into a monopoly for their power.* (2017)

**Business Beliefs**

It is important to remember that some individuals, groups, and organizations that are involved in this debate are primarily interested in how the issue of solar power could help the bottom line or their business interests. For some organizations this is their primary concern or worldview. At the February 17, 2015 Floridians for Solar Choice press conference, Randy Miller, President of the Florida Retail Association said,

Utility costs to a retailer, is the second highest cost driver they have past their personnel payroll cost, *the next big item of expense is always their power costs...so you can see, it is a very important issue to our membership ...so we have long thought there should be energy choices in this state, we have fought for that in the legislature and been rebuffed.* (2017)

Richard Turner, Vice-President of Governmental Relations for the Florida Restaurant and Lodging Association said,

We strongly support the Floridians for Solar Choice ballot initiative because it will allow our members – whose 1.1 million employees are the backbone of Florida’s tourism industry – *to lock in long-term savings on electricity bills*
without having to assume the risks of owning and maintaining a solar power system. (Ammann, 2015)

**Evangelical Stewardship of God’s Creation**

One of the most interesting relationships between worldviews is that which addresses the idea of environmental protection and evangelical environmental stewardship. Both groups are interested in protecting the environment, and their methods run from standard regulatory implementation to the fulfillment of God’s wishes. In addition to the agreement between environmentalists from both secular and evangelical backgrounds, there is also agreement on the environment from both the conservative and progressive sides of the evangelical community. This agreement between evangelicals can be seen in the comments of Reverend Mitchell Hescox and Former President Jimmy Carter.

**Conservative:**

Reverend Hescox wrote,

It’s a return, quite honestly, to the beginning, to the Garden of Eden in which we were called to live in *harmonious relationship with the rest of creation, not to manipulate it for our own selfish ends...*The earth supplies the necessities for biological life; God designed creation for exactly this purpose. God created and was the first gardener. For life to prosper, *humans are to empower the garden to flourish.* We have been clearly given the responsibility, as created in God’s image, to reflect his image, God’s presence, by *caring for creation.*

(2017, p. 9)
Progressive:

In his 2005 book, Our Endangered Values, former President Carter addressed how environmental stewardship was deeply ingrained in his upbringing and community. Carter wrote,

I was born into a Christian family, nurtured as a Southern Baptist, and have been in weekly Bible lessons all my life. At least one Sunday each year was devoted to protection of the environment, or stewardship of the earth. My father and the other farmers in the congregation would pay close attention to the pastors' sermons, based on such texts as "The earth is the Lord's, and the fullness thereof." When humans were given domination over the land, water, fish, animals, and all of nature, the emphasis was on careful management and enhancement, not waste or degradation. (2005)

Disagreement on the Environment among Evangelicals

Even though Reverend Hescox and President Carter are on different sides of the political spectrum, they are in agreement on the evangelical environmental stewardship question. However, there is a considerable amount of controversy and debate among Evangelicals concerning how the environment should be treated within the context of the movements' biblical understanding and interpretation of dominion (man in charge of environment) vs. stewardship (man must care for environment). Given the significant influence the Evangelical movement has within the American South as a region, and within the politics of the country as a whole, this theological debate within the Evangelical community will likely have a significant impact on the shape of the country's environmental policy, including
solar power, going forward. As such, the roots of this debate should be understood in the context of sensitizing concepts, worldviews, and beliefs.

Much of this debate surrounds the bible verse of Genesis 1:28, which reads, “And God blessed them. And God said to them, Be fruitful and multiply and fill the earth and subdue it, and have dominion over the fish of the sea and over the birds of the heavens and over every living thing that moves on the earth.” About this verse, Reverend Hescox (2017) wrote, “One of the most widely misunderstood verses in the Bible comes in Genesis 1:28. Whether we use subdue, dominate, rule, or any of a host of English words, it conjures mental images of the right to do as we please without regard” (p. 10).

Rep. Tim Walberg (R-Mich.), a graduate of evangelical schools Taylor University and Wheaton College reflected the other side of this debate. During a May 2017 town hall in Coldwater, Michigan, Rep. Walberg said, “As a Christian, I believe that there is a creator in God who is much bigger than us...And I’m confident that, if there’s a real problem, he can take care of it” (Bailey, 2017). Al Mohler, President of the Southern Baptist Theological Seminary, echoed this view. Bailey (2017) wrote, “Mohler said the secular-dominated environmental movement sees human beings as the problems to climate change. This worldview, he said, denies the purpose of creation, which was for humans to take dominion over it.”

Given the profound influence Evangelical Christianity has on many parts of the culture in the American South, if the Evangelical Environmental movement can gain greater influence, it could change the parameters of the environmental/climate change debate in the region, and across the country.
Sensitizing Concepts summary

This brief examination of the beliefs and worldviews of the coalition members is a valuable data point that can help fill in the motivational drivers of the coalition’s members. However, it would benefit from a more extensive examination and larger discussion than is possible within the scope of this study. As such, these “belief-based” aspects of the situation, particularly the Evangelical environmental debate, offers potentially interesting areas for further study and a more in depth discussion.

To properly examine these aspects in greater detail would take a dedicated effort, geographical access, and significant trust from study subjects. To conduct that type of examination, the process would best be undertaken over time with participant and/or non-participant observation techniques. This would allow for a degree of openness in which the issues of belief could be explored in detail and to greater affect. This portion of the study would benefit from being physically present in Georgia and Florida as the events unfolded. This would have allowed for a deeper discovery of the driving beliefs, but also an examination of the shifting positions and intensity surrounding the deep policy-core aspect of the beliefs levels.

Policy Messaging

“Meet Them Where They Are”

Sometimes, sensitizing concepts like personal freedom can be used as a teaching opportunity to bring a policy message to a place where people can engage
with the idea. During the time-period between the Green-Tea effort in Georgia and the Floridians for Solar Choice effort in Florida, there was a public event specifically designed to greet the people where they gathered with a policy message.

On March 1, 2018, Debbie Dooley participated in a panel discussion with Christine Pelosi, daughter of U.S. Representative Nancy Pelosi, at a conference in San Francisco, sponsored by Climate One. During this appearance, Debbie Dooley, referenced this public event as she told about how she became involved at the very beginning of the Floridians for Solar Choice Coalition effort. Dooley said,

> Well, when I first got involved in the fight in Florida it was in January 2014. Mark Ruffalo had invited me to come see his Solutions Project, he invited me to come, they were sponsoring a car at one of the pre-Daytona 500 races -- Leilani Munter had the car... And so I started talking to the activists and I said, well, Florida must be doing good, you’re “The Sunshine State.” And they said, uh no, Georgia’s still better. And I said; well let’s work together. And it was folks from Southern Alliance for Clean Energy and we were very active, we put together a coalition in Florida to push for energy choice and freedom. (Dooley & Pelosi, 2018)

The invitation for Dooley to come down to Daytona occurred eight months after the Georgia Public Service Commission vote in Georgia and exactly a year before the launch of the Floridians for Solar Choice effort. When one reflects on the situation, holding a meeting about renewable energy at one of the two temples of American motor sports (Indianapolis Motor Speedway being the other) would seem strange. However, the reason that meeting was happening at Daytona, was because
one of the racecars participating that weekend was emblazoned with the message: “ENERGY FREEDOM – Your Family, Your Choice” (Solutions Project, 2015).

The car was sponsored by the Solutions Project, which wants to move the world towards 100% clean energy, and was being driven by Leilani Munter, a woman who is not your typical NASCAR driver. The self-described “vegan hippie chick with a race car” is a biologist who uses her significant talents as a NASCAR driver to promote eco-friendly messages, often focused on endangered species. When asked about the red, white, and blue ENERGY FREEDOM paint job on her car, Munter had a number of comments that directly relate to the idea of sensitizing concepts and worldviews being used as teaching tools to promote policy learning.

Munter said,

As Americans, we should have the right to choose where we get our energy. Utilities are getting a little nervous about people choosing renewable energy, and this car is meant to bring that topic up. I have solar panels on my roof and I can drive off of sunshine every day (in her personal Tesla). There are a lot of places where it's difficult to get solar panels and where the utility is basically a monopoly. This country was founded on us having freedoms and we shouldn't have these utilities telling us 'we're not going to let you do that.' Part of it is letting people know that this battle is happening. The other part is that it makes financial sense. It's just a smart economic move. 100-percent renewable energy is, I think, a totally possible solution. (Blanco, 2014)
She continued to echo the idea that it is important to meet people where they are with your message and she was convinced that, in 2014, the citizens of the American South were ready for that message. Munter continued,

That’s exactly why I go to the racetrack. I can reach so many people that I couldn’t reach if I was a biologist and running around San Diego. Because I have a racecar, it gives me a voice to get these technologies out there and accepted by the mainstream. They’re not going to come to a renewable energy conference in Aspen, but they are going to be at Daytona...As someone who is versed in both worlds, I can tell you that they’re ready. (Blanco, 2014)

As the Floridians for Solar Choice campaign eventually showed, Munter was correct, they were ready. Putting the message of “ENERGY FREEDOM – Your Family, Your Choice” on a NASCAR race team, in front of an audience that was largely a conservative crowd, foreshadowed the campaign that solar was about to experience in Florida. Usually, oil companies, beer companies, soft drink companies, or fast food franchises sponsor NASCAR race teams. Rarely, if ever, has a NASCAR team been sponsored by an idea such as “Energy Freedom – Your Family – Your Choice.” This public relations campaign was a forward-leaning effort to deliver a message to those who may never have considered what solar could do for them.

The logistics of delivering the “Energy Freedom” message at Daytona exemplified the cross-ideological workings of the pro-solar effort. Typically, any NASCAR driver could drive for any sponsor. They just have to wear the uniform, put on the hat, and say “Drink Pepsi,” or “Use Mobil One” motor oil. However, “Energy
Freedom” is an idea, and ideas are best sold by people who believe in them, and in this case, the Solutions Project found their messenger. As evidenced by the quotes above and her eco-friendly attitude going back years, Munter was uniquely suited to carry the message on the car, in print, and on television.

In addition to the car sponsorship, there was also an “Energy Freedom” television commercial that ran in conjunction with the race. This television spot featured Munter and a military veteran explaining how the solar technology that was being used in the garage and pit area for the “Energy Freedom” race car had been developed by the military for use on the battlefield. This connection was tailor-made to present solar energy as a technology that could be integrated into a traditionally conservative worldview. The television commercial ends with Leilani Munter, decked out in red, white, and blue, saying, "When it comes to energy, get in the driver’s seat America" (Solutions Project, 2015).

This marketing effort showed how the two sides of the coalition could combine talents, learn what worked from one another, and incorporate what worked into their strategy. One would be hard-pressed to find a more succinct example of cross-ideological, single-issue messaging. Here was a conservative, family-friendly message, emblazoned on a red, white, and blue NASCAR, sponsored by a clean-energy advocacy organization, being driven by an eco-friendly “vegan hippy chick,” in front of a largely conservative in-person and nationwide television audience. This is indeed an example of meeting your target audience where they are. This is an interesting, specific example of the teaching and learning about policy that takes place within coalitions; and between coalitions and the citizens
they hope to influence. The ACF considers policy learning an important aspect of the Advocacy Coalition Framework.

**Policy Learning**

In most cases, when the ACF examines the idea of “policy learning” it is examining the concept within the context of outside shocks or perturbations that reshuffle the policy deck. “Significant perturbations include changes in socioeconomic conditions, regime change, outputs from other subsystems, or disaster...These external shocks can shift agendas, focus public attention, and attract the attention of key decision making sovereigns” (Sabatier and Weible, 2007, p.198).

Within the example of Florida and Georgia, “changes in socioeconomic conditions” and “outputs from other subsystems” were involved in helping the more conservative side of the coalition embrace solar power. Briefly, the increasing affordability of solar technology represented a change in the socioeconomic conditions that allowed for policy learning and change to take place. Also, the insistence of Georgia Power to pre-bill their customers for the cost overruns at Nuclear Plant Vogtle, represented an example of an “output from other subsystems” which created a negative reaction to those bills from ratepayers. This negative reaction to the “output of other subsystems” caused Debbie Dooley and other conservatives to explore other energy options, upon which they learned about the affordability of solar.

Exploring other examples of policy teaching and learning surrounding the efforts of the coalitions that promote solar, offer various areas of study into how
coalitions choose to engage their supporters and promote their message. One area of potential investigation is the policy teaching and learning that takes place “within” coalitions. Usually, the catalyst for policy learning comes from “outside” the coalitions, but given that the two sides of the Green-Tea and Floridians for Solar Choice coalitions are from different ideologies, it would be interesting to see how much policy learning takes place “within” cross-ideological coalitions.

For example, there has been a clear impact on “public messaging” when both sides of the coalition speak about energy freedom and energy choice. In this case, the left side adopted the messaging of the right side of the coalition. An interesting question would be, how much of that is “message adoption,” and how much of it is actual “policy learning” that has been internalized by those on the left.

Usually, coalitions are not as cross-ideological as the Green-Tea and Floridians for Solar Choice coalitions. However, these cross-ideological coalitions do exist on certain issues. Therefore, it would be an interesting potential topic of study to examine how much “policy learning” takes place “within” the coalitions based on the members being in contact with each other, rather than the policy learning being a reaction to outside influences. This example is a possible gap in the framework that could be explored.

The policy-learning that has taken place by the solar coalitions has been in reaction to improved socioeconomic conditions surrounding solar in both Georgia and Florida, and a reaction to the Nuclear Plant Vogtle pre-payment law in Georgia. In the following discussion on the development of solar power policy in Germany, the policy learning catalysts of regime change (government control) and disaster,
both played significant roles in the development of Germany’s renewable energy economy. As we will see, the development of renewable energy in Germany, particularly solar, has had a critical impact on how solar technology has been able to develop in the American South as a region, and in the United States as a whole, due to the improved economics of solar that Germany’s policy decisions created.

**German Influence on Solar: The “Energy Transition”**

The shift towards renewable energy, including solar, has been happening in fits and starts in the United States since the 1970s. Over the course of the last 15 years, depending on the geographical and political situation, renewable energy sources have become reasonably accessible and affordable in this country. While early-adopters, such as California, had the right mix of politics and sunshine to get a solar economy going earlier than most, the Golden State has recently received company as more progressive states have adopted policies such as net-metering, renewable portfolio standards, and power purchase agreements to help encourage renewable energy deployment. These policies, coupled with the Federal Government’s 30% solar investment tax-credit (ITC), has resulted in a “59% compound annual solar growth since the ITC was enacted” in 2005 (Solar Investment Tax Credit, 2017).

However, these policies and incentives may have been irrelevant or ineffective without the significant impact that a series of policy decisions taken in Germany had on the worldwide solar industry. While individual states have been developing, or resisting, different policies that would help shape the integration of
solar into the nation’s energy mix, some of the most consequential decisions over the future of solar, a technology that was invented in America, were being made 3,000 miles away in Germany. The decisions made in Germany had a profound effect on the development of the solar industry worldwide, including in the United States. Therefore, it is important to examine briefly what happened in Germany and to understand the significance of its policy decisions.

The most important factor in making solar energy more appealing in the United States, particularly the American South, has been the improved economics of the technology. The price of the technology has dropped dramatically and “almost all of the falling costs of solar—from the mid 1990’s up to the present—were due to technology and manufacturing improvements (in addition to government support) as more international conglomerates started to mass produce silicon-based solar panels” (Fehrenbacher, 2016).

These international conglomerates are mostly based in Asia, and the first country in Asia to begin manufacturing solar panels on a large scale was China. China began to produce solar panels in the late 1990s in response to a series of major policy decisions that were taken in Germany to increase the development and deployment of renewable energy. Germany’s decision was the catalyst that jumpstarted the widespread production and deployment of solar technologies around the world (Fialka, 2016).

Germany’s primary goal of their “energy transition” was to significantly cut greenhouse gas emissions, and reduce their reliance on fossil fuels and nuclear power (Ball, 2017). Germany’s energy transition has been an expensive and rocky
process that created a tremendous demand for solar panels. For example, in 2010, 44% of the solar panels produced in the world were installed in Germany (Ball, 2017). That huge demand launched China’s solar panel production industry. After China’s solar panel industry began to reach economies of scale, the prices at which they were producing solar panels began to drop significantly. “Between 2008 and 2013, China’s fledgling solar-electric panel industry dropped world prices by 80 percent, a stunning achievement in a fiercely competitive high-tech market” (Fialka, 2016).

Without Germany’s decision to embark on their energy transition, the development of the solar industry in the United States would likely lag much further behind where it stands today. Without the drop in prices created by massive solar panel production in China, the economics of solar panels would not be affordable enough to allow the technology to compete with fossil fuels. This price competition between energy sources is a major driving force allowing solar power to take a place at the policy table in the United States.

Given the significant impact of their policy decisions around the world, it is worthwhile to address the events surrounding Germany’s energy transition. These events hold some similarities to the process in Georgia and Florida because of the involvement of cross-ideological political coalitions and a significant anger at the development of one particular nuclear power plant. In Germany, this anger was exacerbated by disasters at two other nuclear power plants, and a fear of the nuclear arms race.
**Energiewende - “Energy Transition” Timeline**

The roots of the *Energiewende* can be found in the European environmental movements of the 1970s and the pro-environment policy options promoted by Germany’s Green Party in the early 1980s and beyond. One of the most important events at the beginning of Germany’s environmental movement was the anti-nuclear protest movement in the 1970s. The anti-nuclear movement gained national attention and momentum in 1975 when “28,000 protesters occupied the construction site of a nuclear power plant in Wyhl, West Germany (in the southwestern state of Baden-Wurttemberg) and managed to stop construction” (Appunn, 2018).

This was followed a few years later, when in reaction to the 1979 nuclear accident at Three Mile Island, “200,000 people took to the streets in Hannover and Bonn, demonstrating against the use of nuclear power” (Appunn, 2018). Shortly thereafter, the German Green Party was formed in 1980 with a platform of ecological wisdom, social justice, grassroots democracy, and non-violence (Gipe, 2010).

Two additional jolts of momentum hit the anti-nuclear and Green movements in Europe and Germany during the mid-1980s. These came in the form of massive protests against the deployment of U.S. medium-range ballistic missiles in Europe in 1984/85, and from the 1986 nuclear accident at the Chernobyl Nuclear Power Plant in Ukraine, Soviet Union (Lauber and Mez, 2004). “Chernobyl was a news story in the U.S. It was a generationally defining event in Germany, where radiation from the accident was detected over cities and farms” (Ball, 2017). These events, particularly
the Chernobyl disaster, helped galvanize and energize the environmental, labor, civil rights, and peace movements that had all emerged in Germany and across Europe during this period.

**German Political Parties: Coalition Partners**

Germany’s parliamentary system can make the organization of a governing coalition a fairly complex and fluid proposition. Aside from the Green Party, which is a small, but often influential party in German politics, it is important to understand the basic political landscape of Germany. Germany has a large number of political parties, which span the spectrum from far-left to far-right. However, two main political parties or partnerships occupy the center-right and center-left positions, making them the key players in Germany’s parliamentary system. Depending on election results, the other smaller parties of the far-right and far-left, can sometimes play influential roles in the formation of Germany’s governing coalitions.

The center-left party is the Social Democratic Party (SPD) which is a socialist political party which promotes social justice, a strong welfare system, and environmentally sustainable policies (Deutsche Welle, 2018). The center-right position is a bit more complicated. This position is occupied by an arrangement known as “the Union,” which is a partnership between the Christian Democratic Union of Germany (CDU) and its sister party, the Christian Social Union of Bavaria (CSU). Generally, the CDU and the CSU hold similar conservative ideological positions, but the CSU in Bavaria tends to be a little more conservative. Each party
operates in a different part of the country and they do not compete against each other in elections. The smaller CSU operates in Bavaria, an important region in southern Germany, which includes the city of Munich, while the larger CDU operates in the rest of the country (Deutsche Welle, 2018).

Because the CDU/CSU partnership occupies the center-right position in German politics, it can be generally compared to the Republican Party in the United States. However, because the overall political landscape of Europe is situated more to the left than the United States, the CDU/CSU Union supports many policies and aspects of the welfare state, positions that would be unwelcome in the current version of the Republican Party.

In many respects, “the Union” may be more akin to the “Rockefeller Republicans” of the late 1960s and early 1970s, when the administration of Richard Nixon supported policies such as the expansion of welfare and the establishment of the Environmental Protection Agency. Regardless of any shifts in ideological orthodoxy, the CDU/CSU Union center-right analogy with the Republicans holds some merit given their pro-business positions.

**German Energy Coalitions**

The debate about the pace and scale of the *Energiewende* has been taking place between two opposing coalitions known in English as the Conventional Energy Coalition (CEC) and the Sustainable Energy Coalition (SEC) (Kemfert, 2013, p. 5-7). As the names suggest, the CEC is interested in maintaining Germany’s
traditional use of fossil fuels, while the SEC promotes the transition to renewable energy.

The Conventional Energy Coalition (CEC) is composed of minority parts of the CDU/CSU “Union” party (center-right), smaller parts of the SDP party (center-left/socialist), and the Free Democratic Party. Other major members of the Conventional Energy Coalition include the four major energy producers in Germany (E.ON, RWE, Vattenfall and ENBW) and the Federation of German Industry (Kemfert, 2013, p. 5).

The Sustainable Energy Coalition (SEC) is made up of the Green Party, large parts of the CDU/CSU (center-right), most of the SDP party (center-left/socialist), and other smaller left-leaning parties. The SEC also includes groups like the German Renewable Energy Association, the German Engineering Association, Greenpeace, the World Wildlife Fund, and a number of other sympathetic associations (Kemfert, 2013, p. 7).

These two opposing coalitions in Germany have some similarities to the solar coalitions in Georgia and in Florida. The first is the fact that the center-right parties are divided on the issue of solar power, much like the right is divided in the United States between Dooley’s faction of the Green-Tea movement and the Koch Brother’s support of more traditional energy sources. The second is that the energy companies and environmental groups are on opposite sides of the argument. These are not surprising similarities, however, they do reflect a consistency in debate participants in different political venues.
Given the influence of Germany on the economics of solar and the importance of pro-solar German coalitions, a closer examination of these efforts would be valuable to gain a greater understanding about the issues surrounding the German situation and the effect it has on other political venues like Georgia and Florida. The ACF would be a very good lens through which to carry out such a study.

**German Solar Policy Development**

One of the Green Party’s continually proposed ideas since its founding was to use renewable energy technologies to help phase out nuclear power and fossil fuels, which they opposed on environmental and social justice grounds (Kemfert, 2013, p. 11). Their proposal was not technologically feasible at the time it was initially put forward, but as the technologies improved, the possibilities became more interesting to mainstream political parties.

The first policy breakthrough for the *Energiewende* took place in 1990/91, and in many respects, foreshadowed the cross-ideological Green-Tea and Floridians for Solar Choice coalitions that would form over 20 years later in Georgia and Florida. The breakthrough happened when an unlikely coalition of the conservative CSU and the Green Party united in support of electricity feed-in-laws, which provided access to the electrical grid for renewables somewhat like the Public Utility Regulatory Policy Act (PURPA) did in the United States, but with some very significant differences. The text of the 1991 Electricity Feed-in-Law ensured access to the electrical grid for renewable energy sources and “… obliged utilities operating the public grid to pay premium prices (feed-in tariffs) for the electricity supplied
from these renewable energy power plants” (Electricity Feed-In Law, 2013). PURPA placed no such obligation on utilities to purchase power at a premium price in the United States.

This interesting conservative/green coalition formed when members of the CSU, the conservative party based in Bavaria, proposed the electricity feed-in laws “in response to demands by party members in rural southern Germany with access to small disused hydropower plants” (Gipe, 2010). The CSU proposal was quickly endorsed by the Green Party, which saw a chance to promote all renewable energy sources.

Within the proposal, both parties saw an opportunity to come together and meet the interests of their constituents. The conservatives pushed the interests of the hydro-plant owners, who were looking for access to the electricity market in order to make money, and the Green Party was looking to promote renewable energy in any way possible. This coalition was successful in getting the 1990 Feed-in-Law passed, which addressed a local issue, but “which created powerful incentives to investors in renewables and encouraged the rise of an advocacy coalition capable of influencing the institutional framework” (Lauber and Mez, 2004, p.18).

Nine years later, in 2000, a different governing coalition made up of the Social Democratic Party (left-center/socialist) and the Green Party (environmental left) passed the Renewable Energy Act (EEG). The goal of this legislation was to scale up the deployment of renewable energy technologies as quickly as possible and this was to be accomplished by an arrangement known as a Feed-in-Tariff or
FIT. This version of the law was significantly more far-reaching than its 1990 predecessor. The law not only guaranteed access to the grid for renewable energy systems, it required grid operators to pay a guaranteed price for that renewable energy for a set period of time, usually 20 years. The design of the FIT policy allowed any individual or business that wants to invest in renewable or solar power to be protected from the uncertainty of being denied a market for their produced electricity by the guaranteed prices set by the law (Feed In Tariffs, 2013). The certainty provided by the FIT program gave the German public a mechanism, and an economic motive, to begin deploying renewable energy in vast quantities.

This certainty marked the real beginning of the Energiewende and it eventually unleashed the production engine of China to fill the demand. A 2014 article in the New York Times entitled Sun and Wind Alter Global Landscape, Leaving Utilities Behind addressed this economic development. Gillis wrote,

The program has expanded the renewables market and created huge economies of scale, with worldwide sales of solar panels doubling about every 21 months over the past decade, and prices falling roughly 20 percent with each doubling. ‘The Germans were not really buying power — they were buying price decline,’ said Hal Harvey, who heads an energy think tank in San Francisco.’ (2014)

As it turns out, the Germans understood what they were doing and the implications it had for the world. Markus Steigenberger, an analyst at the European think tank Agora, was quoted in Gillis’ New York times article saying
“Indeed, the German people are paying significant money. But in Germany, we can afford this — we are a rich country. It’s a gift to the world” (Gillis, 2014).

Gerard Reid, an Irish financier working on energy transition projects in Germany was also quoted as saying, “It’s pretty amazing what’s happening, really... The Germans call it a transformation, but to me it’s a revolution”(Gillis, 2014).

These declines in price set off the widespread worldwide deployment of solar power, and brought solar power into markets where prices must be competitive in order to be considered, such as the American South. This price decline has been critical to the economic competitiveness of solar power vs. fossil fuels.

One of the most important lessons from the German experience is that it indicated there is a precedent for those who are primarily interested in the economic impact of renewable energy to partner with those who are primarily interested in its environmental benefits. By putting these two interests together, supporters of renewable energy have provided interesting opportunities for issue advocates and political figures to work across the legislative aisle or around standard ideological divides, regardless if that aisle, or those divides, are in Georgia, Florida, Germany, or any other political venue.

Wherever these venues are, the Advocacy Coalition Framework stands as an effective public policy lens through which researchers can examine the social/governmental parameters, external events, and coalition opportunities within which these coalitions operate, regardless of social/political venue. With clear precedent and a proven theoretical lens in hand, there are likely other
renewable energy coalitions in the nation and around the world that could be examined using the lens of the ACF in order to glean other similarities and/or differences in the organization, goals, and effectiveness of other similar coalitions.

**Other issues with cross-ideological cooperation**

While the expansion of solar power is an excellent example of how support for an issue can come from advocates and politicians on both sides of the political spectrum, it is not the only one. Even during times when the United States experiences periods of significant division, issues exist that can come to the forefront of the public agenda and gain some measure of bi-partisan or cross-ideological agreement. Despite the current political division in the country, a handful of issues other than renewable energy/solar power have found measured agreement in the last few years at the federal and state levels. Some of these are Medicaid expansion in red states, marijuana legalization, the opioid crisis, and criminal-justice/prison reform.

**Medicaid expansion in Red States**

Medicaid is a program that is jointly funded by the states and the federal government that is designed to provide health-care to lower income citizens. One of the more interesting cases of potential cross-ideological agreement that has the opportunity to become law in additional states is the issue of Medicaid expansion as a component of the Patient Protection and Affordable Care Act. The Affordable Care Act (ACA), often referred to as Obamacare, has been a deeply partisan issue before
and after it became law on March 23, 2010 (History of the Affordable Care Act, 2018). Since its passage into law, the repeal of the ACA has been a major policy goal of the national Republican Party. This effort has included over 70 votes to appeal the law, an unsuccessful Supreme Court Case challenge to the law, and significant resistance to the implementation of the law in states controlled by Republican legislatures (History of the Affordable Care Act, 2018).

One of the ways that Republican-held state legislatures and governors have resisted the implementation of the law has been to reject the expansion of Medicaid within their states. As of the summer of 2018, thirty-two states have accepted the expansion of Medicaid under the ACA. That number expand by three states after the 2018 mid-term elections due to the presence of three ballot-referendums in Nebraska, Utah, and Idaho, which all passed (Goodnough, 2018). By getting these referendums on the ballot in these traditionally red states, the citizens successfully circumvented the preferences of their legislators. Election Day 2018 results put Utah residents’ support for expansion at 53.8% percent (New York Times –Election Results Utah, 2018). In Idaho, 60.6% percent of the vote supported expansion (New York Times –Election Results Idaho, 2018).

Regardless of how the vote on Medicaid expansion had gone in these states, the process of collecting enough signatures to get the proposal on the ballot is very reminiscent of the Floridians for Solar Choice Coalition effort. Going around the legislature on a controversial issue allows the people to have the final say. In red states like Utah and Idaho, results of 53% and 60% respectively, represent significant cross-ideological support. The Advocacy Coalition Framework would be
a useful lens through which to examine these efforts and gain a better understanding of these cross-ideological situations.

**Marijuana Reform**

When the citizens of Colorado (53% in favor) and the state of Washington (55% in favor) voted to legalize the sale and recreational use of marijuana on November 6, 2012, they instigated a significant shift in the country’s relationship with the controversial drug (Coffman, 2012). Their decision also represented the beginning of a movement towards legalization in other states. As of October 2018, nine states and the District of Columbia had legalized marijuana for recreational purposes and thirty-one states, the District of Columbia, Puerto Rico, and Guam had legalized it for medical purposes (Hartig and Geiger, 2018). As the legalization process continued to take place in these states, the support for legalization in other venues began to become more bipartisan.

A 2018 Pew Research poll reported that 62% of Americans supported the legalization of marijuana; this represents a 31% increase in legalization support since 2000 (Hartig and Geiger, 2018). Democrats approve of legalization by a count of seven in ten. Republican support in 2018 for legalization stands at 45%, which is an increase of 6% since 2015. Independents who lean Republican support legalization by a percentage of 59% (Hartig and Geiger, 2018).

As these numbers move in the direction of legalization, particularly among Republicans, more states are beginning to consider recreational and medical legalization. During the November 2018 mid-term elections, ballot referendums to
consider recreational legalization passed in Michigan (56% approve) and failed in North Dakota (59.5% disapprove). Medical legalization passed in both Missouri (65% approve) and Utah (53% approve). The fact that red states like North Dakota and Utah both considered significant relaxation of their marijuana laws indicates the significant change in attitude, particularly among Republicans (Hauser, 2018).

This change in attitude among Republicans and leaning-Republicans has shifted the debate in ways that are similar to the solar debate in Georgia and Florida. Once a number of Republicans came out to support the proposal, for legal or financial reasons, it provided cover for more to change positions, particularly in the red states.

While there have been major policy adjustments concerning the status of marijuana across the country, those efforts have been met with mixed signals from the federal government. The Obama Administration took a laissez-faire attitude and left the states alone to develop their policies. The Trump Administration, led by Attorney General Sessions, sent indications that there was going to be a federal crackdown because marijuana was still illegal under federal law. CBS News (2018) reported that, "He said that U.S. attorneys should understand that the attorney general believes marijuana is against federal law, and should there be prosecutions that need to be brought in order to enforce that law, ‘then they should’ bring those cases" (Burnham and He, 2018). However, a large federal crackdown did not occur, although there were instances of federal harassment (Halper, 2018).

The bipartisan effort concerning marijuana legalization reached Congress with the introduction of S.3032, the Strengthening the Tenth Amendment Through
Entrusting States (STATES) Act. This legislation, introduced by Republican Senator Cory Gardner of Colorado and Democratic Senator Elizabeth Warren of Massachusetts, would protect states from federal interference in their marijuana laws and would allow the marijuana industry access to the banking system (S.3032 - 115th Congress (2017-2018): STATES Act, 2018).

While introducing the legislation, Senator Warren said, "States like Massachusetts have put a lot of work into implementing common sense marijuana regulations - and they have the right to enforce their own marijuana policies. The federal government needs to get out of the business of outlawing marijuana" (Burns, 2018). Senator Gardner said, “The bipartisan STATES Act fixes this problem once and for all by taking a states’ rights approach to the legal marijuana question. The bipartisan, commonsense bill ensures the federal government will respect the will of the voters” (Burns, 2018).

While this legislation only reached the Judiciary Committee during in the 2018 session of Congress, the fact that it was introduced, and had 10 bipartisan co-sponsors in the Senate, signaled a significant shift in the political landscape surrounding this issue. This change could be an indication of action in a future session of Congress. Researchers who are interested in following the development of marijuana legalization in the various political venues of the country, would find the ACF a useful vehicle for organizing, analyzing, and comparing the actions taking place in different states and at the federal level.
Medicaid and Marijuana on the ballot

The issues of Medicaid expansion and marijuana legalization are both issues that fit into the general policy action pattern that the solar effort in Georgia and Florida followed, particularly Florida. All of these issues, solar, Medicaid expansion, and marijuana legalization were not finding enough support in the legislatures of the states in which these issues were under consideration. Coalitions of issue supporters responded to the inaction by activating the ballot-referendum process, much like the supporters of the Floridians for Solar Choice coalition attempted to do in Florida. In some instances, these ballot efforts also helped bring aspects of the issues to the attention of the legislative bodies at various levels and venues of government for potential further consideration.

While supporters of these two issues, Medicaid and marijuana legalization, are using the ballot referendum route to spur policy action, other bipartisan issues are being considered, or have been considered, by more traditional legislative methods. Because these actions are going through traditional legislative process, it actually indicates that the issue has entered a less controversial position, and therefore can obtain actual legislative bipartisan support.

The Opioid Crisis

The statistics connected to the opioid crisis are staggering and have gotten the attention of the nations representatives at the local, state, and national levels. Data compiled by the Department of Health and Human Services (HHS) for the years
2016 and 2017 reported that an estimated 130 people died daily and 42,249 died annually of opioid-related overdoses across the country. HHS also reported that an estimated 11.4 million people misused prescription opioids and 886,000 people used heroin in these years (What is the Opioid Epidemic?, 2018). Faced with these statistics, HHS declared the Opioid Crisis a Nationwide Public Heath Emergency on October 26, 2017 (Department of Health and Human Services, 2017).

The nationwide Declaration of Emergency helped focus the attention of the decision-makers across the country. A critical factor concerning governmental reaction to the opioid crisis is the impact it has had on every Congressional district in the country. The rich, the poor, the young, the old, and people from all ethnicities are vulnerable to the crisis. Every constituent likely knows somebody who has been directly or indirectly impacted. With this kind of widespread impact, Congress was compelled to act.

The legislation designed to address the crisis was introduced in the House as H.R.6 SUPPORT for Patients and Communities Act and had 16 bipartisan co-sponsors. A brief summary of the bill reads “H.R. 6 includes Medicaid, Medicare, and public health reforms to combat the opioid crisis by advancing treatment and recovery initiatives, improving prevention, protecting communities, and bolstering efforts to combat illicit synthetic drugs like fentanyl (H.R. 6: SUPPORT for Patients and Communities Act, 2018). The legislation passed the House of Representatives by a vote of 396-14, and passed the Senate 98-1. President Trump signed the legislation into law on October 24, 2018 (H.R.6 - SUPPORT for Patients and Communities Act).
The stakes surrounding the opioid crisis are very high. While the everyday impact of the opioid crisis are more critical than those that surround the solar debate, there are some structural similarities that could make the ACF an effective research lens through which to examine the opioid issue. These include the fact that the ACF has the ability to address the economic and cultural influences of different parts of the country that need to be taken into consideration when addressing such a problem. Also, there is a major industry, the pharmaceutical industry, which must be persuaded to become part of the solution, rather than part of the problem, much like the utilities in the solar debate.

Criminal Justice / Prison Reform

The issue of criminal justice and prison reform has been gaining momentum as a bipartisan issue over the last few years. Much of this momentum has come as the longer-term impacts of mandatory minimum sentences and “three strikes you’re out laws” have become apparent. The states have taken the lead in this area, and advocates, from both sides of the aisle, point to the increased prison population as the major reason for reform.

Lucia Bragg of the National Conference of State Legislatures (NCSL) reported in 2018 that, “The United States’ prison population has reached 2.2 million people, and has increased 500 percent over the past 40 years without a corresponding increase in crime.” The NCSL said that state efforts were focused on saving space for the most dangerous offenders by reducing mandatory minimum sentences, and referring non-violent offenders to community diversion/supervision and treatment
programs. States are also reported to be increasing job training and educational services in an attempt to reduce recidivism (Bragg, 2018).

Oklahoma is one of the more conservative states in the nation, and influential voices in that state are advocating for a reform of the criminal justice sentencing guidelines. The Oklahoman Editorial Board (2015) wrote, “54 state prison inmates are serving sentences of life without parole for drug violations. They were sentenced under the three-strikes law... Of the 54 men and women serving this sentence, only three were convicted of a violent crime.”

In response to the issue, Democratic state Rep. Corey Williams and Republican Sen. A.J. Griffin proposed, HB1574, a reform of the “three strikes” sentencing guidelines that would allow sentences of 20 years, rather than life in prison. The Oklahoma District Attorney’s Council supported this change, and the Oklahoman Editorial Board reported that the group’s president District Attorney Chris Ross noted, “that his colleagues have seen juries refuse to convict repeat drug offenders because the only punishment is life without parole. Ross makes the point that having one punishment to cover a wide range of crimes and criminal histories isn’t ideal” (Oklahoman Editorial Board, 2015).

The lack of flexibility in sentencing has combined with a realization that all sides could gain something from sentencing reform. Many conservative states are following the lead of Texas and Georgia who are switching the conservative message from “tough on crime” to “smart on crime.” Lawmakers are realizing that everybody could benefit from sentencing reform in different ways. The Oklahoman Editorial Board (2015) wrote, “Lawmakers in these states have come to realize that they can
save money in the long run, and provide offenders a better chance to make something of their lives, by not locking men and women away...for so long.”

While many states are pursuing criminal justice and sentencing reform like Oklahoma, there are bipartisan efforts being made at the federal level as well. Rep. Bobby Scott, a Democrat from Virginia and Jason Lewis, a Republican from Minnesota, introduced HR 4261, the Safe, Accountable, Fair and Effective Justice Act (SAFE Justice Act, 2017). The Safe Justice Act, “takes a broad-based approach to improving the federal sentencing and corrections system, from front-end sentencing reform to back-end release policies...ensuring that probation does a better job stopping the revolving door at federal prisons” (SAFE Justice Act, 2017). Currently, this legislation, which has 15 bipartisan co-sponsors, has been referred to Committee.

Another bipartisan effort, HR5682, titled the “Formerly Incarcerated Reenter Society Transformed Safely Transitioning Every Person Act” or FIRST STEP Act passed in the House of Representatives by a vote of 360-59. However, H.R.5682 did not get a vote in the Senate during the 115th Congress (2017-2018). The summary of the FIRST STEP Act reads,

This bill amends the federal criminal code to direct the Department of Justice to establish a risk and needs assessment system to assess and classify the recidivism risk of prisoners; to guide housing, grouping, and program assignments; and to incentivize and reward participation in and completion of recidivism reduction programs and productive activities. (2018)
These efforts on the opioid crisis and criminal justice reform are examples of bipartisan legislation that have advanced despite the serious division between the political parties. These pieces of legislation did not use a ballot amendment process, they have been considered as standard pieces of legislation. The fact that the SUPPORT bill concerning the opioid problem became law, and that the FIRST STEP Act has passed the House and is awaiting Senate action, indicates that the process can occasionally work on a bipartisan basis.

Both of these issues would be interesting ACF studies given the fact that they have motivated constituencies from many parts of society pressuring their government to act. Using the ACF to catalog and examine the motivations and resources of the advocate groups would be informative. Given the fact that the opioid problem and the criminal justice problem are intertwined, it would also be interesting to use the ACF to determine the areas in which the issues and potential solutions overlap. This information could be of use to legislators as they further consider legislation concerning these types of issues.

Whether the issue is Medicaid expansion in partnership with the Federal Government, prison-sentencing reform, or solar power, the 50 laboratories of democracy in the United States produce ideas, make them law, and test them within the boundaries of the originating state. If the policy succeeds in its initial state-based test run, these ideas tend to begin their spread into other states.

While obtaining approval for a policy idea through the traditional legislative progress, rather than direct decision-making, is for many a preferable method in keeping with the founding fathers design, legislative gridlock is often impossible to
overcome. In these cases, if getting an important idea to the public requires a direct appeal to the people, then that will be the origin of that particular democratic experiment. Either way, ideas must be introduced, considered, and decided upon in order for progress to be made. Given the number of pressing issues facing our divided country, all interested parties need to grab a white coat, get some safety goggles, get into the laboratory of democracy, and start looking for solutions.

Conclusion

Solar power, a renewable energy source, is being rapidly deployed around the world. As this technology develops further, it will disrupt, even more significantly, the economic, political, environmental, and social status-quo surrounding all forms of energy production. Because this disruption will impact so many different areas of society, it is important to examine these effects as they develop. Gaining a better understanding of why these changes are happening, how, where, and when they are occurring, who is driving or resisting them, and what impacts these changes will have on society, is an important public policy objective. This project has been an effort to establish a vantage point and apply a “theoretical lens,” the Advocacy Coalition Framework (ACF), to observe the process that solar power is undergoing as the political, social, technical, and economic conditions surrounding the solar debate mature.

The Advocacy Coalition Framework (ACF) provided the academic lens and structural framework with which to examine the subject of Cross-ideological Solar Power Coalitions in the American South. In this study, the value of the ACF was
confirmed as an investigative tool for examining research questions posed about the cross-ideological solar coalitions in Georgia and Florida. These questions were:

1. Why did supporters of solar power organize themselves into the particular coalition structures represented by Georgia’s Green Tea Coalition and the Floridians for Solar Choice Coalition?

2. How have the Green Tea Coalition and the Floridians for Solar Choice successfully managed their policy coalitions?

3. How effective are these coalitions perceived to be by public policy players outside the coalition?

4. Do the Green Tea Coalition and the Floridians for Solar Choice coalitions represent an Advocacy Coalition approach?

Researching these four questions proved to be an illuminating process. The personalities, organizations, and events involved in both pro-solar coalitions have combined to create a policy story that is more surprising and interesting than most public policy narratives. The cross-ideological makeup of these coalitions, and the success they achieved, can be instructive to others as the country attempts to navigate this particularly difficult and divided time in our history.

The efforts of these coalitions were instructive because they demonstrated that cross-ideological/bi-partisan progress is still possible if the policy proposal has good public support and the advocates of the policy are willing and able to keep their eyes on the prize. The advocates from both the Green-Tea Coalition and the
Floridians for Solar Choice Coalition were successful in keeping their shared goal at the “front and center.” A very brief review will serve to emphasize how the motivations and processes used by both coalitions proved to be so effective.

**Research Question One**

The first research question asked “why” the supporters of solar power organized themselves into cross-ideological coalitions to advocate for an increase in solar power. As detailed in Chapter 5, those on the right and those on the left were interested in solar power for fundamentally different reasons. Advocates on the left such as the Sierra Club and Southern Alliance for Clean Energy were motivated by the environmental benefits that greater deployment of solar power would bring. Those on the right, such as the Tea-Party Patriots and Conservatives for Energy Freedom came to view solar power adoption as an expression of free-market values and personal freedom. While their fundamental starting points were different, the outcome (goal) that they were fighting for, unfettered implementation of solar power, was the same.

As they worked towards their goal, the two ideological wings of both the Green-Tea Coalition in Georgia, and the Floridians for Solar Choice in Florida, realized that the impact of their partnership seemed greater than the sum of two parts. The cross-ideological makeup of both coalitions, serving a popular policy proposal such as solar power, garnered immense goodwill and positive publicity. Both coalitions were able to use this to their advantage and make significant progress towards their policy goals.
Research Question Two

Question Two asked “how” the coalitions were able to successfully manage themselves given the significant ideological divisions that were present within the membership. The answer in Georgia was largely based on the unlikely political partnership between Georgia’s Sierra Club President Colleen Kiernan and a founding member of the Tea Party, Debbie Dooley. A series of issues revealed shared interests between the two leaders. These included opposition to a law that would put restrictions on certain types of public demonstrations, opposition to a tax increase to fund transportation projects around Georgia, and opposition to various aspects of Nuclear Power Plant Vogtle Reactors 3 and 4.

These partnership experiences led them to join forces to promote solar power in Georgia. Throughout the course of these political battles, the two leaders came to “trust” one another, which allowed them to be increasingly effective partners working towards shared policy goals. The solid foundation of the Green-Tea Coalition also allowed it to work in concert with parties inside the traditional policy process, like Commissioner “Bubba” McDonald of the Georgia Public Service Commission, to support his efforts promoting more solar power in the state of Georgia. It also helped the Georgia State Legislature to pass HB57, which legalized third-party financing options in the state.

The partnership at the leadership level of the Green-Tea Coalition provided a blueprint for the larger cross-ideological cooperative effort that was set up as the Floridians for Solar Choice (FSC) Coalition. While Dooley had a hand in getting the FSC coalition off the ground, the leadership of the FSC effort was comprised of Dr.
Stephen Smith of the “Southern Alliance for Clean Energy” and Tory Perfetti of “Conservatives for Energy Freedom.” This coalition set out four clear rules that would help it stay together and be effective. Honoring these rules played a large part in the coalition’s success in the face of adversity. It is helpful to review these rules here:

1. No one would be asked to compromise their personal ideology in order to join Floridians for Solar Choice. This would not be needed because they were only talking about the promotion of solar power and that issue could adhere to everybody’s ideology.

2. Everybody needs to understand the message from their own point of view, be able to effectively promote that view, and respect the validity and power of the view of your coalition partners. Advocates need to understand the fight is only about solar power. Always be professional.

3. Understand and respect the power of what they called “multi-partisanship”. Multi-partisanship is when people from different ideologies unite for one cause. Because they are from different partisan backgrounds, as a united group, they become more difficult to dismiss or ignore, and therefore can be more effective.

4. Understand that everybody is putting their reputation on the line to work for the Floridians for Solar Choice cause. Therefore, be very respectful of those
reputations and that respect will be returned. This respect for reputation helped keep the coalition members focused on the issue at hand.

The key to how they stayed together and functioning as a coalition was based on trust and respect. All the coalition members joined with the understanding they were dealing with advocates from differing ideologies, and they understood clearly that as long as they focused on the issue at hand and were professional about it, their coalition would be effective in achieving the desired outcome.

**Research Question Three**

Question Three explored the effectiveness of the two coalitions, from the viewpoint of policy observers who were not directly involved as coalition members. The coalitions were described as effective by all observers. Given the results in Georgia and Florida, these observations are consistent with the outcomes of the pro-solar efforts. Briefly revisiting the results of the coalitions efforts is will remind us why the observers felt the coalitions were effective.

When the Green-Tea Coalition became fully involved in the pro-solar effort in Georgia, they first concentrated on getting the attention of members of the Georgia Public Service Commission by backing candidates who were publically pro-solar. While these candidates did not win, they ran strong races, which alerted the members of the GPSC that they would be facing a formidable interest group.

Shortly afterward, they partnered with the most pro-solar member of the GPSC to promote the inclusion of solar into Georgia Power’s 2013 Integrated Resource Plan (IRP). When Georgia Power ignored these requests, Commissioner
“Bubba” McDonald and the Green-Tea Coalition acted in concert to force the issue. Their efforts paid off when their partnership with Commissioner McDonald helped engineer a 3-2 GPSC vote requiring Georgia Power to increase the allotment of solar power included in Georgia Power’s 2013 IRP from very little solar power to 525MW during the 2015-2016 timeframe. The Green-Tea Coalition was instrumental in providing the necessary political cover for the two vulnerable conservative GPSC commissioners. This high profile, cross-ideological support, particularly from Dooley’s Tea-Party wing, helped inoculate the vulnerable GPSC conservatives from utility-allied political attacks from groups like Americans for Prosperity. With this public political support in place, the two vulnerable commissioners voted with Commissioner McDonald to change the trajectory of solar power in Georgia, and by extension, the region.

Two years after the 2013 GPSC vote, the Green-Tea Coalition was able to provide helpful public political cover and support to conservative Georgia legislators when they voted to pass HB57, the Solar Power-Free Market Financing Act in 2015. This legislation legalized third-party financing options, such as power-purchase agreements, in Georgia. The fact that this legislation came through the legislative branch and was signed by Republican Governor Nathan Deal, signaled a fundamental shift in Georgia’s relationship with solar power. This new relationship was further solidified when Georgia Power, in the 2016 IRP included an additional 525 MW of solar power into the energy plan without any public pressure to do so. These political actions indicated that the traditional political establishment in Georgia had received the message concerning solar power. They also demonstrate
how successful the Green-Tea Coalition has been in helping to change the way Georgia’s established interests react to solar power policy questions and proposals, which are no longer rejected out of hand.

The Floridians for Solar Choice Coalition was also seen as effective by outside policy observers. The true effectiveness of the coalition came from how they bounced back from a major defeat, and continued to work for their cause. The initial FSC ballot amendment was designed to allow third-party financing options such as power-purchase agreements, which historically have been one of the most effective policy measures to promote the deployment of solar power. For context, this is the same type of policy that Georgia made law as H.B.57 Solar Power-Free Market Financing Act in 2015.

This FSC campaign to bring third-party solar power financing to Florida was derailed by a utility-led effort designed to confuse the electorate through the proposal and promotion of a competing amendment entitled “Consumer’s for Smart Solar” (CSS), which actually promoted the interests of the utilities in Florida. Both proposals sounded good to the average person on the street, but their impacts would be very different. The utility-sponsored CSS effort was able to deny the FSC coalition any hope of collecting the needed signatures by flooding the streets with well-paid signature gathering operations that promoted the CSS ballot amendment. As a result, the FSC pro-solar effort fell apart, and the CSS-utility effort went on to make the November 2016 ballot, as Amendment 1.

Faced with this major setback, the FSC coalition regrouped and put their efforts into passing pro-solar Amendment 4, which lowered taxes on solar
equipment. After that success, they were able to launch a major public service campaign designed to defeat the CSS-utility Amendment 1. This amendment sounded good, but in fact, would have only codified the status-quo into the Florida Constitution. It would have been a major defeat for solar advocates. However, the FSC coalition was successful in getting the word out about the deceptive wording of the ballot amendment. The FSC education effort, along with errors by the CSS-utility side, led every major Florida newspaper, and Florida icon Jimmy Buffet, to publically announce their opposition to Amendment 1.

This defensive campaign proved very effective and resulted in voters rejecting passage of Amendment 1 at the polls. The final vote was 50.8% for passage vs. 49.2% against passage (New York Times – Amendment 1 - Results). A super majority of 60% is needed for a ballot referendum to pass. However, the magnitude of the FSC public education effort comes into relief when you consider where they were in September 2016, less than two months before the election. In September of 2016, Amendment 1 was polling at 84% in favor, enough to pass by 24%. The FSC coalition used their contacts to mount a major public education campaign which changed public support for Amendment 1 by 34% points in less than two months (Orlando, 2016). That is a remarkable change in public opinion in a short timeframe. This was a major victory while playing defense, and represented a very effective effort for the FSC coalition.
The fourth, and final research question, concerned the applicability of the Advocacy Coalition Framework model to the situation in Georgia and Florida. The ACF has proven to be a very useful academic framework for examining the pro-solar coalitions in Georgia and Florida. It provided a useful and enlightening guide to help unpack the different aspects of the subject. This allowed the spaces and relationships between the people, organizations, and events surrounding both pro-solar coalitions to be investigated within an academically accepted approach and served the study well.

Examining the relationships between supporters of solar power from the left and the right sides of the political and social spectrum was essential in order to gain an understanding of why, how, and to what affect these coalitions formed and acted. The ACF model also helped explain the political and social landscape upon which the solar power debate in Georgia and Florida occurred. The ACF provided guidance about how to explore and explain the importance of beliefs in the structure of the coalitions. These beliefs, from either side of the ideological divide, converged around the issue solar power generation, which helped keep the coalitions together.

The ACF was very applicable and useful in this study of pro-solar coalitions. It provided a framework for important connections to be identified and explored. This researcher’s understanding of the Green-Tea Coalition and Floridians for Solar Choice Coalition has been greatly enhanced by the application of the Advocacy Coalition Framework. In addition, the success of the ACF in this case suggests the potential for the ACF to apply to other areas of policy study, within and outside the
fields connected to renewable energy. These include, but are not limited to Medicaid expansion in Red States, the opioid crisis, and criminal justice sentencing reform.

This nation is currently very divided along multiple fault lines. These lines include financial, cultural, generational, ethnic, racial, and geographic. Any issue that can be agreed upon in a bi-partisan/cross-ideological manner, and moved forward into accepted policy, is a victory for the American system and the citizens of the United States. Solar power is an interesting and powerful example of an issue that can unite rather than divide. Hopefully, more issues like solar will emerge to help unite an increasingly divided nation.

**Epilogue**

In June 1979, President Jimmy Carter installed 32 solar thermal panels on the White House to highlight symbolically, the potential that solar technology represented. In 1986, the Reagan Administration had the panels removed as a gesture to symbolize their energy policy preferences, which were fossil fuels. In early February of 2017, President Carter, and his wife Rosalynn, cut the ribbon to open the operation of a 3,852 panel solar photovoltaic farm located a half-mile from his house in Plains, Georgia (Blinder, 2017). Shortly before the signing ceremony, Carter said, “This site will be as symbolically important as the 32 panels we put on the White House...People can come here and see what can be done” (Vejnoska, 2017).
The solar farm sits on 10-acres of President Carter’s land, which he leased to SolAmerica, to build the 1.3 Megawatt solar-farm. The installation is estimated to provide Plains, Georgia, which has an estimated population of 683, half of its annual electricity demand. Georgia Power approved the solar lease as part of its Advanced Solar Initiative project, designed to help meet the 2013 Integrated Resource Plan targets of 525 MW that the Georgia Public Service Commission required Georgia Power to deploy (Vejnoska, 2017).

This solar farm also creates an interesting cross-ideological intersection. At the end of the day, the Green-Tea Coalition, with its very conservative Tea-Party wing and Republican Commissioner McDonald at the GPSC, provided President Carter an opportunity to continue publicly his promotion of renewable energy, 31 years after the solar thermal panels he ordered installed on the White House were removed. This series of events, and the people involved, help show how far solar power has progressed politically in the American South. In many ways, President Carter viewed the installation of the solar farm in Plains as an affirmation of his decision to put the solar thermal panels on the White House in 1979. Carter said, “I won’t use the word ‘vindicated’…but I feel pleased… that’s the more ‘political’ word to use!” (Vejnoska, 2017).

The installation of this solar farm on the Carter’s land sits very well with the former first-lady. Rosalynn Carter (2017) said “It’s very special to me because I was so disappointed when the panels came off of the White House, and now to see them in Plains is just terrific” (Blinder, 2017).
Given the role President Carter played in symbolically launching the use of solar power in the nation, and his status as a Georgia resident, it seems fitting to give him the closing comments. Steve Hanley of Cleantechnica, reported on the official statement from the Carter’s about the solar installation. Carter (2017) said,

Distributed, clean energy generation is critical to meeting growing energy needs around the world while fighting the effects of climate change. I am encouraged by the tremendous progress that solar and other clean energy solutions have made in recent years and expect those trends to continue. (2017)

On a more personal note, former-President Carter told the Sierra Club in a August 22, 2017 interview that he wants Georgia Power to do more to encourage homeowners to put solar panels on their homes, but that he is happy with the solar installation on the farm. Carter said, “I've been very proud of the project in Plains. I hope that my example as a former president will encourage others to pursue the same route. And I hope that the major power companies will adopt this as a commitment” (Rauber, 2017). This research has shown that power companies in two southern states resisted Carter’s hope for the future, until they were forced to change their position by two seemingly unlikely coalitions of politically active people from different sides of the political spectrum.
References


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.

washington-first-states-to-legalize-recreational-pot-

idUSBRE8A602D20121107


Cook, J. (2013). "Quantifying the consensus on anthropogenic global warming in the scientific literature" Environmental Research Letters Vol. 8 No. 2;
DOI:10.1088/1748-9326/8/2/024024


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS


Florida Department of State Division of Elections. (2016, November 8). Retrieved July 2, 2018, from

298


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.

https://ballotpedia.org/Florida_Solar_Energy_Subsidies_and_Personal_Solar_Use_Amendment_1_(2016)#cite_note-22


300


Georgia General Assembly. (2009, April 21). SB 31 2009-2010 Regular Session - Georgia Nuclear Energy Financing Act; procedure for changing any rate,


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


Governor and the Cabinet. (2018). Retrieved November 1, 2018, from
http://www.myflorida.com/myflorida/cabinet/structurehistory.html


http://www.epa.gov/greenpower/buygp/solarpower.htm

http://www.epa.gov/greenpower/buygp/solarpower.htm


http://solaroutreach.org/2013/04/04/solar-ppa-virginia/#.VhVuWPiViko


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


307


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


CROS IDEOLOGICAL SOLAR POWER COALITIONS Toibin, B.T.


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


New State Ice Co. v. Liebmann, 285 U.S. 262 (Supreme Court Case)

CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.

Retrieved August 1, 2018, from


Retrieved November 7, 2018 from


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


javier-palomarez-julio-fuentes-yes-on-amendment-1-small-business-supports-solar-fair-policies


Perry, M. (2015, November 06). The Everglades Coalition comes out in support of


ny-has-five-times-as-much-solar-power-as-the-u-s-despite-alaska-levels-of-sun/


https://www.huffingtonpost.com/entry/florida-solar-amendment_us_58220bdde4b0e80b02ccfdbb


Sierra Club Strategic Plan. (2015, May). Retrieved October 1, 2018, from


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


Toibin, B.T.


CROSS-IDEOLOGICAL SOLAR POWER COALITIONS

Toibin, B.T.


https://creatveloafing.com/content-215885-Pam-Davidson-launches-bid-to-unseat-PSC-Commissioner-Stan-Wise


https://www.solarpowerworldonline.com/2016/08/berkeley-lab-finds-
utility-solar-prices-fell-12-last-year/
Appendix A:

Coalition Concept Map / Family Tree
Appendix B:

Laws Governing the Ballot Referendum Process in Florida

1) The proposed amendment must only address one subject.
2) The proposed amendment must not exceed 75 words in length.
3) “Florida law does not establish procedures for adjudicating conflicting measures.”
4) Before gathering signatures, “Potential sponsors must register as a political action committee for campaign finance reasons...Group must submit the text of their proposed amendment and a proof copy of their petition form to the secretary of state.”
5) “The ballot title and summary are submitted by sponsors along with the text and petition form. These are initially reviewed by the secretary of state.”
6) The Supervisors of Elections in each county are charged with preliminary signature counting. “Proposed measures are only reviewed after proponents collect 10% of required signatures across the state...After preliminary signatures have been collected...the secretary of state will submit the proposal to the Florida attorney general...who is required to petition the Florida Supreme Court for an advisory opinion on measures compliance with the single-subject rule and the appropriateness of title and the summary”
7) “…the secretary of state must submit the proposal to the Financial Impact Estimating Conference...after allowing public input must draft a concise statement of the effect of the proposed measure on revenue and expenditures.
8) “To place a constitutional amendment on the ballot, proponents must collect signatures equal to 8 percent of the total number of votes cast in the last presidential election.”
9) “Proponents must obtain signatures equaling at least 8 percent of the district-wide vote (in the most recent presidential election) in at least half (14) of the state's 27 congressional districts.”
10) In Florida there are no laws regarding whether circulators are permitted to sign the petition that they are circulating.
11) Florida law does not prohibit pay-per-signature methods or restrict the pay of petition circulators.
12) Florida does not require petition circulators to be residents of the state.
13) Florida law does not require that paid and volunteer circulators be identified as such during circulation.
14) “…the legality of e-signatures in states without bans is largely untested. Florida law does not address electronic petition signatures.”
15) In Florida, signatures are valid for two years after the date they were signed. Signatures must be verified by February 1 of the year they are to appear on the ballot.
16) "Initiative petitions are verified by the Supervisor of Elections in the county where the voter who signed the petition is registered."

17) Prior to verification, the ballot title and ballot summary are proposed by the initiative sponsors and approved by the secretary of state and Florida Supreme Court. Certified measures are also assigned a number depending on the order in which they are certified or referred by the legislature. (Amendment 1, Amendment 2, etc...)

(Laws governing the initiative process in Florida - Ballotpedia, 2018)
Appendix C:

Floridians for Solar Choice – Member Organizations

Floridians for Solar Choice – Founding Organizations

Christian Coalition of America
Conservatives for Energy Freedom
Florida Alliance for Renewable Energy
Florida Retail Federation
Florida Solar Energy Industries Association
Libertarian Party of Florida
Republican Liberty Caucus of Florida
Republican Liberty Caucus of Tampa Bay
Southern Alliance for Clean Energy
WTEC

Floridians for Solar Choice – Supporting Organizations

350.org
All Women Rising
Audubon Society of the Everglades
Central Florida Solar Advocates
Clean Water Action
The Cleo Institute
The Climate Reality Project
Collier Citizens for Sustainability
Conservancy of Southwest Florida
Conservatives for Responsible Stewardship
Democratic Environmental Caucus of Florida
Earth Ethics, Inc.
Earthjustice
Ecology Party of Florida
Environmental Coalition of Miami & the Beaches (ECOMB)
Environmental Defense Fund
Environment Florida
Evangelical Environmental Network
Everglades Coalition
Florida Alliance for Retired Americans
Florida Green Chamber of Commerce
Florida Renewable Energy Association (FREA)
Florida Restaurant and Lodging Association
Florida Wildlife Federation
Friends of the Everglades
Green Party of Florida
Greenpeace USA
H & H Design and Construction Inc.
Hands Across the Sand
Appendix C Continued:

Floridians for Solar Choice – Member Organizations Continued

Hernando County Democratic Club
IDEAS for Us
Interfaith Justice League
League of Women Voters of Florida
Libertarian Party of Seminole County
Mosaic
National Equal Rights Amendment Alliance, Inc.
Oceana
Organize Now
Physicians for Social Responsibility, Florida
Progress Florida
ReThink Energy Florida
Sanibel-Captiva Conservation Foundation
SEIA
Sierra Club Florida
Solar Education Association of Florida Keys
South Florida Audubon Society
South Florida Wildlands Association
Space Coast Climate Change Initiative
Space Coast Progressive Alliance
Stewards Of Sustainability (SoS)
Sunshine State Interfaith Power and Light
Surfrider Foundation
The Tea Party Network
Tropical Audubon Society
Union of Concerned Scientists
Unitarian Universalist Justice Florida
U.S. Green Building Council North Florida Chapter
Venice Area Audubon Society
Women4Solar
WISE – Women in Solar Energy
Appendix D: ACF Flow Chart Diagram

![Diagram of the Advocacy Coalition Framework](image)

**Fig. 1** Advocacy coalition framework flow diagram.
Appendix E: ACF Flow Chart Diagram - Georgia

Stable Parameters
1. Society needs energy
2. Historical use of coal, natural gas, and some nuclear in Georgia has excellent solar potential
3. Fundamentally operating within free market capitalist economy / Politically Georgia is a conservative state and currently has a conservative government.
4. Government structure is stable. Legal System is stable.

External Events
1. Socio-economic conditions stabilizing. Economy is recovering from Great Recession. Lingering damage. Traditional energy sources available and fairly stable.
2. Public opinion is up for grabs – generally a Red State, but solar polls well.

Advocacy Coalition Framework In Georgia

Long-term Coalition Opportunities
1. Need support from Executive and Legislature for pro-solar change. Not happening with current makeup of Government.

Policy subsystem

Pro-solar
Green-Tea Coalition
Policy Brokers
a. Pro-solar
b. Cross-ideology Coalition – passion
Some money

Strategy – Passion,
-Cross-ideology,
-Appeal to multiple groups – all ideologies
-Sensitizing Concepts,
-Major social media

More solar now becomes a new external factor going forward.

Executive and Legislature
Have been anti-solar while in Republican Control:
- Pro-solar legislation DOA

Public Utility Commission elected
Tough fight – but solar wins

Solar wins at GPSC – Comm. McDonald / Green Tea Partnership provides political cover
HB 57 passes 2 year later – PPA Legal

a. Anti-solar
b. Existing Gov. Utility Money

Strategy – Money for politicians at Exec/Leg Branches
-Utility friendly at GPSC
-Major Lobby effort

a. Anti-solar

Elected Public Service Comm. Partner w/ McDonald.
2. Laws of Georgia mandate this structure – open to public pressure on office other than legislature. However it is difficult.

Short-term constraints and resources of subsystem actors
1. Pro-solar coalition has a lot of passion and some money. Constrained by actions of utilities influencing legislators and Public Service Commission w/donations.
2. Anti-solar has a lot of money and very connected to the existing political power structure.
Appendix F: ACF Flowchart Florida

**Stable Parameters**
1. Society needs energy
2. Historical use of coal, natural gas, and some nuclear / Florida has best solar potential east of Mississippi
3. Fundamentally operating within free market capitalist economy / Politically Florida is a swing state but currently has a right of center government.
4. Government structure is stable. Legal system is stable.

**External Events**
1. Socio-economic conditions stabilizing. Economy is recovering from Great Recession. Lingering damage. Traditional energy sources available and fairly stable.
2. Public opinion is up for grabs – pro-environment less solid than before recession.

**Advocacy Coalition Framework In Florida**

**Long-term Coalition Opportunities**
1. Need support from Executive and Legislature for pro-solar change. Not happening with current makeup of Government. This opened the door to an attempt for a Constitutional amendment referendum.
2. Laws of Florida allow for this option – open to public movements to amend Constitution. However bar is high.

**POLICY SUBSYSTEM**

**Pro-solar Community**
- Floridians for Solar Choice
- Policy Brokers
  - a. Pro-solar
  - b. Cross-ideology Coalition – passion
  - Some money

**Anti-Solar Community**
- Anti-Solar Consumers for Smart Solar
- Anti-solar
  - a. Anti-solar
  - b. Existing Gov. Utility Money

**Strategy**
- Passion,
  - Cross-ideology,
  - Appeal to multiple
  - Sensitizing Concepts,
  - Major social media

- Money for politicians
  - Pack Utility Commission
  - Confuse issue
  - Pay for signatures
  - Anti-solar amendment to voters

**Executive and Legislature**
- Have been anti-solar while in Republican Control:
  - Pro-solar legislation DOA
- Public Utility Commission is appointed
  - No Action there - Republican
- Anti-Solar Amendment Fails
  - Public Utility Commission resists until relenting on new rules on solar leases – kind of PPA

More solar now becomes a new external factor going forward.
Appendix G: IRB Approval Letter

TO:  Darrien Pitt
     Darrien Pitt
CC:  Brian Toibin

FROM: VCU IRB Panel A

RE:  Darrien Pitt; IRB HM20012228  A Study of Solar Energy Coalitions in the American South

On 1/11/2018 the referenced research study qualified for exemption according to 45 CFR 46.101(b), category 2.

The information found in the electronic version of this study's smart form and uploaded documents now represents the currently approved study, documents, and HIPAA pathway (if applicable). You may access this information by clicking the Study Number above.

If you have any questions, please contact the Office of Research Subjects Protection (ORSP) or the IRB reviewer(s) assigned to this study.

The reviewer(s) assigned to your study will be listed in the History tab and on the study workspace. Click on their name to see their contact information.

Attachment - Conditions of Exempt Approval

Conditions of Exempt Approval:

In order to comply with federal regulations, industry standards, and the terms of this approval, the investigator must (as applicable):

1. Conduct the research as described in and required by the Protocol.

2. Provide non-English speaking patients with a translation of the approved Consent Form in the research participant's first language. The Panel must approve the translation.

3. The following changes to the protocol must be submitted to the IRB panel for review and approval before the changes are instituted. Changes that do not meet these criteria do not have to be submitted to the IRB. If there is a question about whether a change must be sent to the IRB please call the ORSP for clarification.

THESE CHANGES MUST BE SUBMITTED:
- Change in principal investigator
- Any change that increases the risk to the participant

https://mail.google.com/mail/u/0?ui=2&ik=fe31860971&jwv=ciwiG7wiCBwiPU.wn.&view=pt&search=inbox&th=160e71c36589ae17&simh=160e71c3658... 1/2
Appendix H: IRB Approved Recruitment e-mail

Stakeholder Interview Recruitment Email

Brian Toibin, L. Douglas Wilder School of Gov’t and Public Affairs (PI)

Note: This subject recruitment letter will be sent via direct e-mail to individuals representing each of the stakeholder groups identified in this project – members of the solar coalitions under study and policy players who have had the opportunity to observe the actions and effectiveness of the coalitions’ efforts.

Targeted follow-up e-mails will be sent to each individual who has not responded roughly two weeks after the initial e-mail, then again two weeks later. Brian Toibin (PI) will send all e-mails from his VCU e-mail address (toibinbt@vcu.edu).

Initial E-Mail

Hello _____,

My name is Brian Toibin, and I am a PhD candidate in the L. Douglas Wilder School of Gov’t and Public Affairs at Virginia Commonwealth University in Richmond, Virginia.

I am writing to ask if you would be willing to participate in a brief telephone interview for a research study on the bi-partisan/cross-ideological public policy coalitions that have formed to support solar energy in the American South. The specific coalitions under study are the Green Tea Coalition and Floridians for Solar Choice. I am looking for persons who have been deeply involved in these pro-solar coalitions and persons who have had the opportunity to observe the effectiveness of the coalitions’ efforts in Georgia or Florida. I found your information via [insert brief description of how the interview subject was identified, either via internet research or snowball sampling].

This telephone interview would be part of a research project to explore how these coalitions formed, the public policy actions they have undertaken, the motivations of their members, and the effectiveness of their efforts. Gaining the first-hand perspectives of involved stakeholders concerning the efforts of these coalitions is very important to the success of this study. The interview would be a semi-structured interview organized around ten to fifteen primary questions, and would take approximately 30 minutes to complete.

The telephone interview would be recorded. Your identity and responses will remain anonymous if that is your wish. If you desire to remain anonymous, neither your name nor your organizational affiliation would be published in the final project report or any other publicly available materials. Any publications resulting from this research will use anonymous identifiers to describe the participating institutions and organizations. Your participation would be entirely voluntary, you may skip any questions that you prefer not to answer, and you could stop at any time without penalty.

If you have any questions about the interview, or how the results will be used, please contact me at the e-mail address or phone number below. I will send one follow-up email in approximately two weeks to remind you of this survey request. If you wish to opt-out of further survey requests, please send me a brief email to that effect.
In closing, your participation in this study would add significant value to this academic public policy effort to gain a better understanding of the significant events taking place surrounding these coalitions.

Thank you,

Brian Toibin

L. Douglas Wilder School of Gov’t and Public Affairs
Virginia Commonwealth University
(804) 212-5800
toibinbt@vcu.edu

Follow-Up E-Mail

Hello ____,

I am writing to follow up on my request for a brief telephone interview on solar coalitions in the American South and related issues around solar energy policy.

This telephone interview would be part of a research project to explore how these coalitions formed, the public policy actions they have undertaken, the motivations of their members, and the effectiveness of their efforts. Gaining the first-hand perspectives of involved stakeholders concerning the efforts of these coalitions is very important to the success of this study. The interview would be a semi-structured interview organized around ten to fifteen primary questions, and would take approximately 30 minutes to complete.

The telephone interview would be recorded. Your identity and responses will remain anonymous if that is your wish. If you desire to remain anonymous, neither your name nor your organizational affiliation would be published in the final project report or any other publicly available materials. Any publications resulting from this research will use anonymous identifiers to describe the participating institutions and organizations of those who choose anonymity. Your participation would be entirely voluntary, you may skip any questions that you prefer not to answer, and you could stop at any time without penalty.

In closing, your participation in this study would add significant value to this academic public policy effort to gain a better understanding of the significant events taking place surrounding these coalitions.

Thank you,

Brian Toibin

L. Douglas Wilder School of Gov’t and Public Affairs
Virginia Commonwealth University
(804) 212-5800
toibinbt@vcu.edu
Appendix I: Interview Questions

Interview Questions – Pro-Solar Coalitions in the American South

Brian Toibin, L Douglas Wilder School of Government and Public Affairs (PI)

Research Questions under study:

1. Why did supporters of solar power organize themselves into the particular coalition structures represented by Georgia's Green Tea Coalition or the Floridians for Solar Choice (FSC) Coalition?

2. How have Georgia’s Green Tea Coalition and the Floridians for Solar Choice Coalition successfully managed their policy coalitions?

3. How effective are these coalitions perceived to be by public policy players outside the coalitions?

4. Do the Green Tea Coalition and the Floridians for Solar Choice Coalition represent an Advocacy Coalition approach?

Interview questions for members of the solar coalitions under study:

Before beginning, please identify and describe the organization you represent or are a part of? ______________

1. How long have you or your organization been involved in the coalition? (Research Question 1)

2. Please tell me how and why you or your organization got involved in the efforts of the Green Tea or Floridians for Solar Choice coalition? (Research Question 1)

3. Did you have ties to another member who recruited your involvement or did you hear about it independently? (Research Question 1 and 3)

4. What motivated you to become involved? (Research Question 1)

5. Tell me what its like being part of this type of coalition? What has your role been? (Research Question 2)

6. How much guidance does the leadership of the coalition impart to the coalition members and how do you keep your eye of the main goal of solar power promotion? (Research Question 2)

7. Are there talking points provided by the leadership or is everyone expected to know the coalition line? (Research Question 2)

8. Do you as a member organization or individual supporter find yourself referring questions to the Green Tea or Floridians for Solar Choice leadership? (Research Question 2)
9. How has the leadership of the coalition handled the scientific information concerning both climate change science and how it relates to solar? (Research Question 3)

10. How has (or have) the coalition used the improvements in solar technology/price as a selling point to their argument? (Research Question 3)

11. How do or what are the most important aspects of your organizations central beliefs that mesh with the goals of the Green Tea or Floridians for Solar Choice coalition?

12. What about solar supports your organizations mission and vice versa? (Research Question 3)

13. Are there particular lessons that you have learned from the members of your coalition partners on the opposite side? (Left learning from Right? Right learning from Left?) (Research Question 3)

14. How effective do you feel that the coalition has been in promoting pro-solar policies? (Research Question 4)

15. Are there any examples of your particular organization being effective? What are your successes within the coalition? (Research Question 4)

16. What lessons have you learned or mistakes have you made that may be instructive to other individuals or organizations from other states or localities who might be interested in following the model put forward by the Green Tea and Floridians for Solar Choice effort? (Discussion)

17. Do you have any final thoughts to share related to any of the topics we have discussed today? (Discussion)

Interview question for public policy players who are not members of the coalition:

1. Do you have experience observing the efforts of the Green Tea Coalition, Floridians for Solar Choice or both?

2. How long have you or your organization been aware of the coalition? (Research Question 1) (Are you media, legislator, academic etc.?)

3. Please tell me how and why you or your organization came to deal with the efforts of the Green Tea or Floridians for Solar Choice coalition? (Research Question 1)

4. From your point of view have the Green Tea and/or Floridians for Solar Choice been effective advocates for their cause? Do you have any examples? (Research Question 4)
5. How disciplined have you found the coalition to be in speaking with one voice? Does the coalition practice good messaging practices or talking points? Examples? (Research Question 2)

6. How effective has the coalition been in dealing with other public policy players from outside the coalition? Examples? (Research Question 3 and 4)

7. Have you seen examples of the coalition's arguments persuade members of the public policy community who are not members of the coalition? Examples? (Research Question 4)

8. To the extent they have been effective, which of their policy arguments have you seen be most effective? (Research Question 4)

9. If you believe it has been effective, do you think their coalition model can work in other venues? (Discussion)

10. Do you have any final thoughts to share related to any of the topics we have discussed today? (Discussion)
VITA

Brian Thomas Toibin
4604 Forest Hill Ave Richmond, Va. 23225

EDUCATION

Virginia Commonwealth University – Richmond, VA, 2009-present
    Ph.D in Public Policy and Administration, December 2018
    L. Douglas Wilder School of Government and Public Affairs
    Virginia Commonwealth University
    Dissertation Title: Cross-ideological Solar Power Coalitions in the American South: An Advocacy Coalition Approach

University of South Carolina – Columbia, SC, 2003-2006
    • Master of Library and Information Science, concentration in Special/Academic Libraries

Virginia Commonwealth University – Richmond, VA, 1994-1996
    • School Library Media teaching endorsement

James Madison University – Harrisonburg, VA, 1984-1989
    • Bachelor of Science: Major – Social Science and Minor – Secondary Education

PREVIOUS PROFESSIONAL EXPERIENCE

Graduate Teaching Assistant/Assistant Instructor, L. Douglas Wilder School of Government and Public Affairs, 2009 – 2015

    • PhD Candidate – Research Area: Solar policy in the Southeast United States and beyond.
    • Graduate Teaching Assistant, 2012-2015
        o Wilder School Criminal Justice partnership with the New College Institute.
        o Facilitated the distance education video and academic communication link between VCU and NCI.
    • Graduate Teaching Assistant, 2009-2012
        o Wilder School Political Science classes – International Relations
        o Duties included research, exam administration, blackboard administration, student communication
        o Planned and co-hosted the Annual L. Douglas Wilder Student Research Conference, 2010-2012
Panel Chair – Environmental Issues. 5th Annual L. Douglas Wilder Student Research Conference

Research Partner, Environic Foundation International, 2010 – present
- Conducted research on sustainability issues connected with the development of course curriculum for VCU/Environic Foundation Sustainability Education Partnership
- Authored content for Environic Foundation’s web site
- Assistant Instructor for Sustainable Societies Course at VCU
- Assisted in the organization of the Sustainable RVA Conference in September 2014

VCU Honor Council, Executive Board Member, 2010 – 2013
- Participated in the development of the policies concerning the VCU Honor Council
- Served as an impartial, non-voting Chairperson during VCU Honor Council hearings and appeals

- Managed the daily operations of two middle school libraries in Henrico County Public Schools
- Supervised students and staff members in the library
- Taught research, library and computer skills to students and staff-members

- Responsible for Virginia’s Reimbursement Program for Commonwealth Attorneys
- Tracked office payrolls and expenses for 131 localities and 500+ employees
- Assisted field offices in the implementation of on-line reimbursement system

Senate Postmaster – General Assembly - Commonwealth of Virginia, 1991
- Responsible for handling all mail for the Virginia Senate
- Supervised post office staff members

Ballot Proofer – State Board of Elections - Commonwealth of Virginia, 1989-90
- Participated in the 1990 gubernatorial election recount
- Examined election ballots for layout and accuracy, traced location of voting booths, etc.

Assistant Pool Manager and Swim Team Coach, 1983-1988
- Maintained pool facilities, supervised lifeguards, and coached summer league swim team
• Implemented and taught Red Cross programs for lifeguard training and swimming lessons

SKILLS
• Strong knowledge and interest in public policy research and international renewable energy policies
• Experienced teacher, trainer, and curriculum writer
• Experienced researcher, emphasis on academic and special libraries
• Excellent oral and written communication skills
• Strong computer and technology skills

MISCELLANEOUS
• Scholarship Swimmer – James Madison University, 1984 – 1988
• Colonial Athletic Association Scholar Athlete, 1987
• Other interests include travel, emerging technologies, writing, politics, current events, reading, sports, and outdoor activities