



# Theory of Change

## Guiding Principles for Our Theory of Change

Our Theory of Change begins with a firm belief in equal access to renewable energy and energy-efficient homes and a world where all people can live a healthy and productive life no matter their income status—a world where no one lives in energy poverty. This belief drives us to creating a society of energy equity, which is defined as the accessibility and affordability of energy within a country or region.

RETI believes the pathway to achieving this visionary goal lies in strengthening systems for communities facing both a high burden of energy costs and unequal access to resources and energy-efficient products. Research has taught us that addressing energy burdens and creating strong systems at the community, regional, and national levels are essential to providing equitable quality of life for all.

Our efforts are always focused on sustainably addressing energy expenses for communities disproportionately burdened by its cost. We are continuously searching for opportunities to work with governments, communities, organizations, and corporate partners to develop sustainable solutions within existing structures and creating new structures along the way.

Innovation and agility fuels our unique combination of educational programs, research, advocacy, and knowledge translation to build dynamic and long-lasting pathways to change. These components propel our work and community forward.

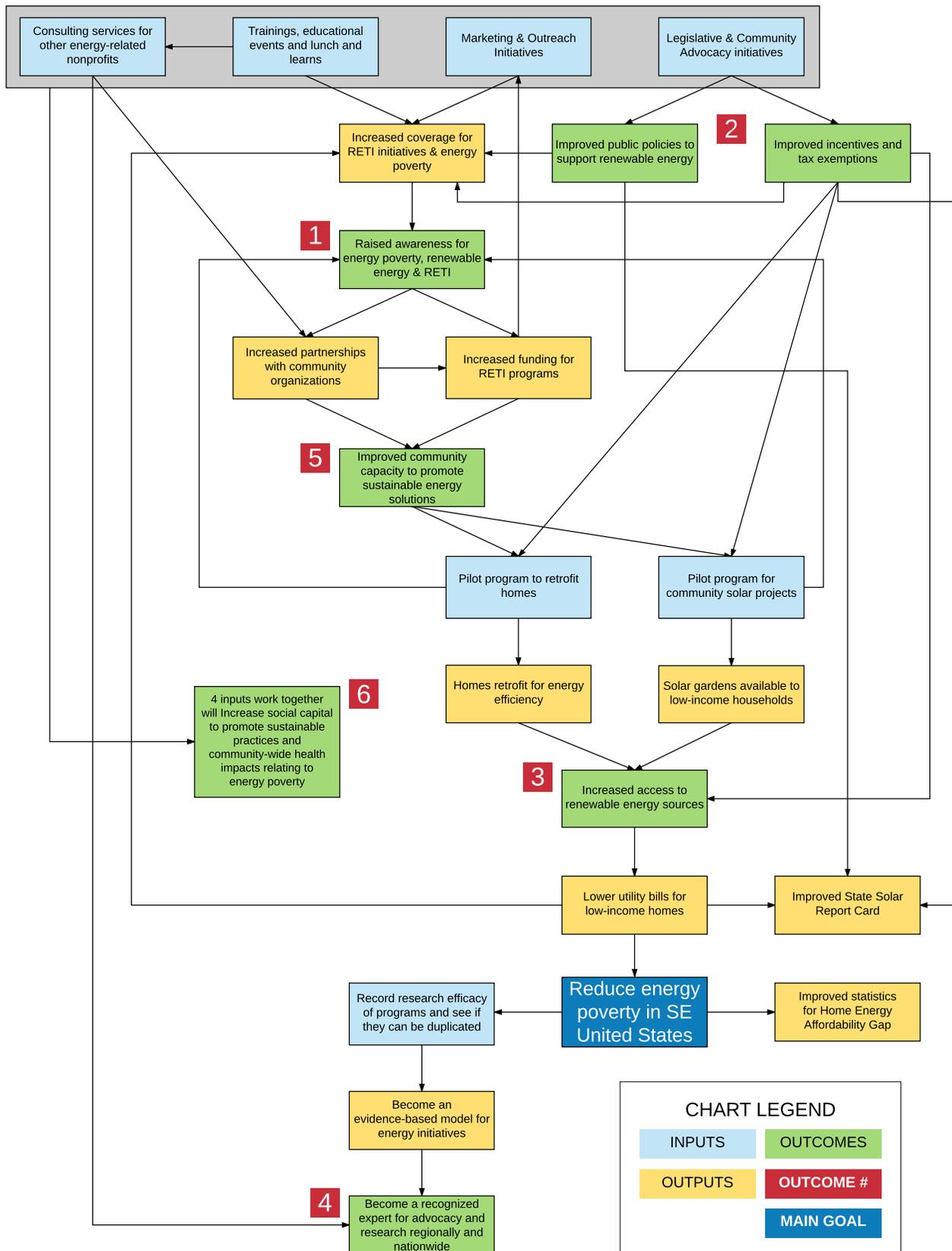
The evidence delivered from this interdependent approach leads us to develop collaborative solutions with stakeholders that strengthen existing energy systems by supporting:

- Increased social capital to catalyze community-wide sustainability, health, and economic prosperity
- Increased access to renewable energy sources in order to decrease energy burdens and create positive environmental externalities
- Equitable and evidence-based energy policies, to ensure regional and federal energy policies that are equitable, evidence-based, resourced, and implemented.

Our ultimate purpose is to improve how people consume energy and alleviate the potential burden that comes with it. We are confident that our approach will bring about sustainable, real, and lasting improvements to the health and well-being of those we serve, the communities where we operate, and eventually the Southeastern United States as a whole.

# Theory of Change Flow Chart

This chart shows the progression of how RETI can meet its long-term goals for reducing energy poverty in the Southeast.



# Outcomes

By following the steps in the Theory of Change, RETI stands the greatest chance of meeting the following outcomes, which support the overall goals of the organization.

## Outcome 1:

### Increase awareness of energy poverty and renewable energy options for low-income households.

#### Interventions

- Energy Calculator App
- Duke Energy Marketing Partnership Program
- Social media and blogging
- Media relations
- eNewsletters
- Sponsorships and events
- Industry consulting

#### Target Populations

- Low-income homeowners and families
- Students and community members
- Policy influencers
- Local and national advocacy organizations
- Local peer organizations serving low-income individuals and families
- Schools, colleges, libraries, environmental education organizations
- Companies that seek to gain transactional relationships with direct beneficiaries
- Companies that seek to improve public relations and raise general awareness
- Media

#### Assumptions

- Residents are open to change how they receive energy for their homes.
- There's an audience of companies and organizations that want to learn about energy poverty and have a vested interest in making change.
- Resources are available to implement the programs.

#### Metrics

- Press releases and media coverage
- Case studies and white papers
- Sign-in sheets and event evaluations from events and engagements
- Downloads of Energy Calculator App
- Followers for social media
- Readership for blogs and newsletters and click-throughs

## Outcome 2:

### Improve public policies that increase renewable energy usage and decrease energy poverty.

#### Interventions

- Advocacy initiatives and partnerships for solar and affordable housing preservation
- Education events: lunch and learns and RETI talks
- Speaking engagements

#### Target Populations

- Policy influencers
- Local and national advocacy organizations
- Local peer organizations serving low-income individuals and families
- Companies that seek to gain transactional relationships with direct beneficiaries
- Companies that seek to improve public relations and raise general awareness

#### Assumptions

- There is political will in the targeted areas and policy makers who are willing and able to create a more favorable environment for renewable energy solutions.
- There is funding available to support initiatives at all levels of government.

#### Metrics

- Press releases and media coverage
- Case studies and white papers
- Sign-in sheets and event evaluations from events and engagements
- Legislative record
- State Solar Report Card

# Outcomes

## Outcome 3:

### Increase access to renewable energy sources.

#### Interventions

- Solar gardens and community solar
- Retrofit homes for energy efficiency

#### Target Populations

- Low-income homeowners and families
- Local peer organizations serving low-income individuals and families
- Companies that seek to gain transactional relationships with direct beneficiaries
- Companies that seek to improve public relations and raise general awareness.

#### Assumptions

- Residents are open to change how they receive energy for their homes.
- Partnership organizations are willing to support access initiatives.
- Resources are available to implement the programs.

#### Metrics

- Pre- and post-implementation utility bills
- Media coverage

## Outcome 4:

### Become a recognized expert on renewable energy solutions and energy poverty.

#### Interventions

- Marketing initiatives, including:
  - Social media and blogging
  - Media relations
  - eNewsletters
- Industry consulting
- Research and metrics

#### Target Populations

- Students and community members
- Policy influencers
- Local and national advocacy organizations
- Local peer organizations serving low-income individuals and families
- Schools, colleges, libraries, environmental education organizations
- Companies that seek to gain transactional relationships with direct beneficiaries
- Companies that seek to improve public relations and raise general awareness

#### Assumptions

- Industry is looking for new expertise for research and advocacy efforts.
- RETI is able to effectively evaluate the efficacy of programs to create an evidence-based model.

#### Metrics

- Press releases and media coverage
- Case studies and white papers
- Followers for social media
- Readership for blogs and newsletters and click-throughs

# Outcomes

## Outcome 5:

### Improve community capacity to promote sustainable energy solutions.

#### Interventions

- Cultivate partnerships with community organizations to work toward sustainability
- Fundraising initiatives to bring in private donations and government and foundation grants

#### Target Populations

- Low-income homeowners and families
- Students and community members
- Policy influencers
- Local and national advocacy organizations
- Local peer organizations serving low-income individuals and families
- Companies that seek to gain transactional relationships with direct beneficiaries
- Companies that seek to improve public relations and raise general awareness

#### Assumptions

- There's an audience of companies and organizations that want to learn about energy poverty and have a vested interest in making change.
- Partnership organizations are willing to support access initiatives and have the resources to do so.

#### Metrics

- Memorandums of Agreement
- Funding reports to illustrate dollars raised

## Outcome 6:

### Increase social capital to promote sustainable practices and community-wide health impacts relating to energy poverty.

#### Interventions

- Marketing & outreach initiatives
- Consulting services
- Trainings & educational events
- Legislative advocacy

#### Target Populations

- Low-income homeowners and families
- Students and community members
- Policy influencers
- Local and national advocacy organizations
- Local peer organizations serving low-income individuals and families
- Schools, colleges, libraries, environmental education organizations
- Companies that seek to gain transactional relationships with direct beneficiaries
- Companies that seek to improve public relations and raise general awareness
- Media

#### Assumptions

- Residents are open to change how they receive energy for their homes.
- There's an audience of companies and organizations that want to learn about energy poverty and have a vested interest in making change.
- Partnership organizations are willing to support access initiatives and have the resources to do so.

#### Metrics

- Measures of community trust
- Volunteerism
- Index of Sustainable Economic Welfare (ISEW) and the Genuine Progress Indicator (GPI)

## About RETI

The mission of the Renewable Energy Transition Initiative (RETI) is to sustainably decrease energy costs for low-income families in North Carolina, South Carolina, and the Southeastern United States and to become the premier organization for energy poverty research and advocacy .

Since launching in 2014, RETI has engaged more than 1,500 individuals through outreach and educational programming about clean and renewable energy.

RETI has been recognized for its work in the Charlotte region as a semi-finalist in Social Venture Partners' 2014 Seed20 competition, and as the second-place winner in energy and social equity at Sustain Charlotte's 2016 Awards Celebration.

In 2016, RETI became a member of the U.S. Department of Energy's Clean Energy for Low Income Communities Accelerator. The two organizations work together to lower energy bills in low-income communities with the installation of energy efficient and renewable technologies.

RETI is also part of the American Association of Blacks in Energy and the Mecklenburg County Air Quality Commission

## About Energy Poverty

### Background

Energy is an increasingly important social and public health concern for more and more residents of the Carolinas and the Southeastern United States.

As costs for residential heating, cooling, and other household energy needs increase significantly, they account for a greater percentage of household budgets. This is referred to as energy poverty or energy insecurity.

Those impacted by energy insecurity allocate a higher share of their incomes to their utility expenses—partly because of rising energy costs and partly because of the energy inefficiencies of many lower income homes.

Low-income homes tend to be older homes with appliances that are not energy efficient and lack proper insulation to slow heat loss in colder months.

The energy poor may be homeowners who are unable to invest in energy-efficient upgrades because of high up-front costs or may be renters living in homes where landlords do not pay the utility bills and thus have little incentive to create more energy-efficient units.

### How Energy Poverty Impacts Targeted Populations

When families with limited financial means are faced with high-energy bills they can't afford, they have to make serious choices about the bills they pay each month. They may have to cut back on essentials like food, medicine, and transportation in order to keep the lights and heat on.

This heat or eat dilemma facing many residents of North Carolina, South Carolina, and the Southeastern United States.

Many low-income families in these area spend 20 percent or more each month on these costs. However, only about 1 in 10 of those households received the life-saving assistance they needed—and usually for only one month on average.\*

### About Renewable Energy

Using renewable energy sources like wind, solar, geothermal, hydroelectric, and biomass to generate more of the country's electricity can:

- Reduce global-warming CO2 emissions and related health issues, including breathing problems, neurological disorders, heart attacks, and cancer
- Improve the economy by creating jobs: On average, more jobs are created for each unit of electricity generated from renewable energy sources.
- Help stabilize energy prices in the future because of its renewability

### About Energy Efficiency

Energy efficiency means using less energy to perform the same function in homes and businesses.. For instance, appliances are energy efficient when they use less gas or electricity to accomplish the same task as a less energy-efficient model.

Increasing energy efficiency in lower income housing is a practical solution for reducing energy poverty because less energy-efficient homes and appliances use more energy to perform the same function as their more energy-efficient counterparts.

# Energy Poverty in the Southeast\*

## North Carolina Facts & Figures

Households Impacted	Poverty Level	Energy Burden
286,539	Below 50%	29%
371,583	50-100%	16%
207,464	100-125%	11%

Energy Bills Covered by Federal Home Energy Assistance: **90,528**

## South Carolina Facts & Figures

Households Impacted	Poverty Level	Energy Burden
146,516	Below 50%	31%
178,635	50-100%	17%
797,986	100-125%	11%

Energy Bills Covered by Federal Home Energy Assistance: **36,500**

## Florida Facts & Figures

Households Impacted	Poverty Level	Energy Burden
528,527	Below 50%	26%
669,808	50-100%	14%
399,610	100-125%	9%

Energy Bills Covered by Federal Home Energy Assistance: **89,723**

## Georgia Facts & Figures

Households Impacted	Poverty Level	Energy Burden
302,113	Below 50%	28%
361,070	50-100%	15%
187,058	100-125%	10%

Energy Bills Covered by Federal Home Energy Assistance: **61,094**

## Tennessee Facts & Figures

Households Impacted	Poverty Level	Energy Burden
191,505	Below 50%	27%
251,873	50-100%	15%
137,713	100-125%	10%

Energy Bills Covered by Federal Home Energy Assistance: **61,663**

\*Source: 2016 Home Energy Affordability Gap

# 2016 State Solar Report Cards

Each year, the website [www.solarpowerrocks.com](http://www.solarpowerrocks.com) grades each of the 50 states on how friendly they are to renewable energy sources, particularly solar power.

<b>North Carolina</b>	<b>Overall Grade: C</b>
<b>Policy</b> RPS Law: C Solar Carve-Out: C Electricity Cost: D Net Metering: C Interconnection: B	<b>Incentives</b> Tax Credits: F Rebates: F Performance Payments: D Property Tax Exemption: B Sales Tax Exemption: F

<b>South Carolina</b>	<b>Overall Grade: C</b>
<b>Policy</b> RPS Law: F Solar Carve-Out: F Electricity Cost: C Net Metering: B Interconnection: F	<b>Incentives</b> Tax Credits: B Rebates: A Performance Payments: D Property Tax Exemption: F Sales Tax Exemption: F

<b>Tennessee</b>	<b>Overall Grade: D</b>
<b>Policy</b> RPS Law: F Solar Carve-Out: F Electricity Cost: D Net Metering: D Interconnection: F	<b>Incentives</b> Tax Credits: C Rebates: F Performance Payments: F Property Tax Exemption: C Sales Tax Exemption: A

<b>Florida</b>	<b>Overall Grade: C</b>
<b>Policy</b> RPS Law: F Solar Carve-Out: F Electricity Cost: D Net Metering: B Interconnection: D	<b>Incentives</b> Tax Credits: C Rebates: D Performance Payments: D Property Tax Exemption: A Sales Tax Exemption: A

<b>Georgia</b>	<b>Overall Grade: D</b>
<b>Policy</b> RPS Law: F Solar Carve-Out: F Electricity Cost: B Net Metering: B Interconnection: B	<b>Incentives</b> Tax Credits: F Rebates: D Performance Payments: F Property Tax Exemption: F Sales Tax Exemption: F

The State Solar Report Card grades state policies and incentives, including:

**RPS Law**—Mandates a percentage of energy generation coming from renewable energy by a certain date.

**Solar Carve-Out**—How much power electric utilities are required to generate from the sun. Bigger carve-outs mean bigger incentive for homeowners.

**Electricity Cost**—The power solar panels produce reduces your electric bill—the higher the price of power, the more you save by generating your own.

**Net Metering**—Full-price credits for energy generated by solar panels.

**Interconnection Policies**—how solar system owners can plug in to the grid and send power to utility companies.

**Tax Credits**—1-to-1 dollar amount off taxes that erases a portion of the cost of installing solar panels

**Rebates**—Usually come from utility companies looking to avoid fees for not generating enough renewable energy as mandated by state RPS. Some rebates reduce up-front costs of going solar. Some are made as lump-sum payments to homeowners after installation.

**Performance Payments**—Reward homeowners for the electricity their panels produce on an ongoing basis.

**Property Tax Exemption**—Installing solar panels on a home increases its value up to 20 times the annual energy bill savings. Tax exemptions make it so homeowners aren't penalized for the increase in value.

**Sales Tax Exemption**—Sales tax break on solar, which can save you hundreds of dollars when buying solar.