Agenda

ENERGY OFFICE

- Welcome and Introductions
- South Carolina's competitive EECBG Program Overview
- Panelists Roundtable of Project Ideas
  - City of Spartanburg
    - Electric Vehicles (EV) infrastructure
  - City of Rock Hill
    - Uplifting HID streetlights to LED
  - Richland County
    - Building energy efficiency measures and renewable energy back-up in retrofitted Emergency Response Center
- Questions and Answers (Q&A) with Participants and Panelists
- Closing

Scan here for more information about South Carolina's Competitive EECBG

October 24, 2023

ENERGY OFFICE

South Carolina's
Energy Efficiency and Conservation Block Grant (SC EECBG)
Project Think Tank Webinar
Part 1

October 24, 2023

SC EECBG – Project Think Tank Webinar

Welcome and Overview

– Webinar is being recorded

Recording will be available on the SC Energy Office website

– Please use "the chat"

To interact with each other and our panelists

We want to hear from you!

Share comments, ideas, and questions
about your potential projects for SC EECBG.

The SC Energy Office Energy Efficiency and Conservation Block Grant (SC EECBG) Team

Energy Program Manager

Richelle Tolton

Sr. Energy Specialist

Sam Christmus

Energy Specialist

Kayla Nelums

Mentimeter Instructions

Scan the QR code to access our menti polls

or

Join at menti.com

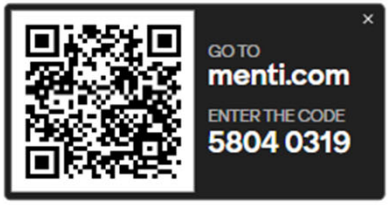
Use code: 5804 0319

Join at menti.com use code 5804 0319

Mentimeter

What type of organization do you represent?

Waiting for responses ...

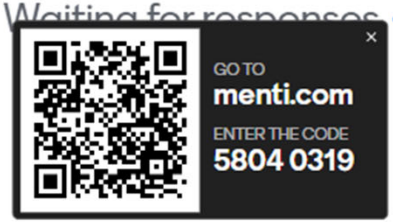


Join at menti.com use code 5804 0319

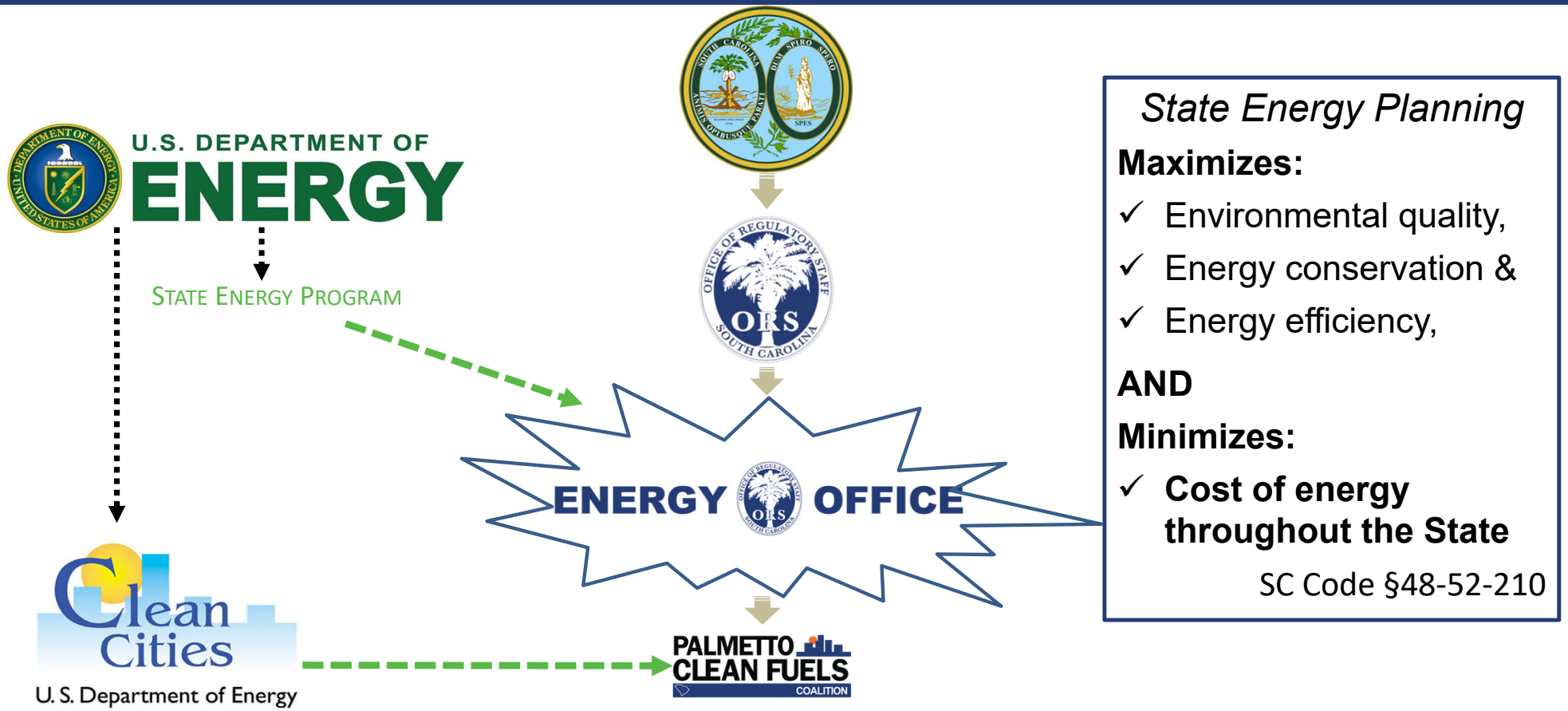
Mentimeter

What project ideas do you currently have in mind?

Waiting for responses...



Our Structure



State Energy Planning

Maximizes:

- ✓ Environmental quality,
- ✓ Energy conservation &
- ✓ Energy efficiency,

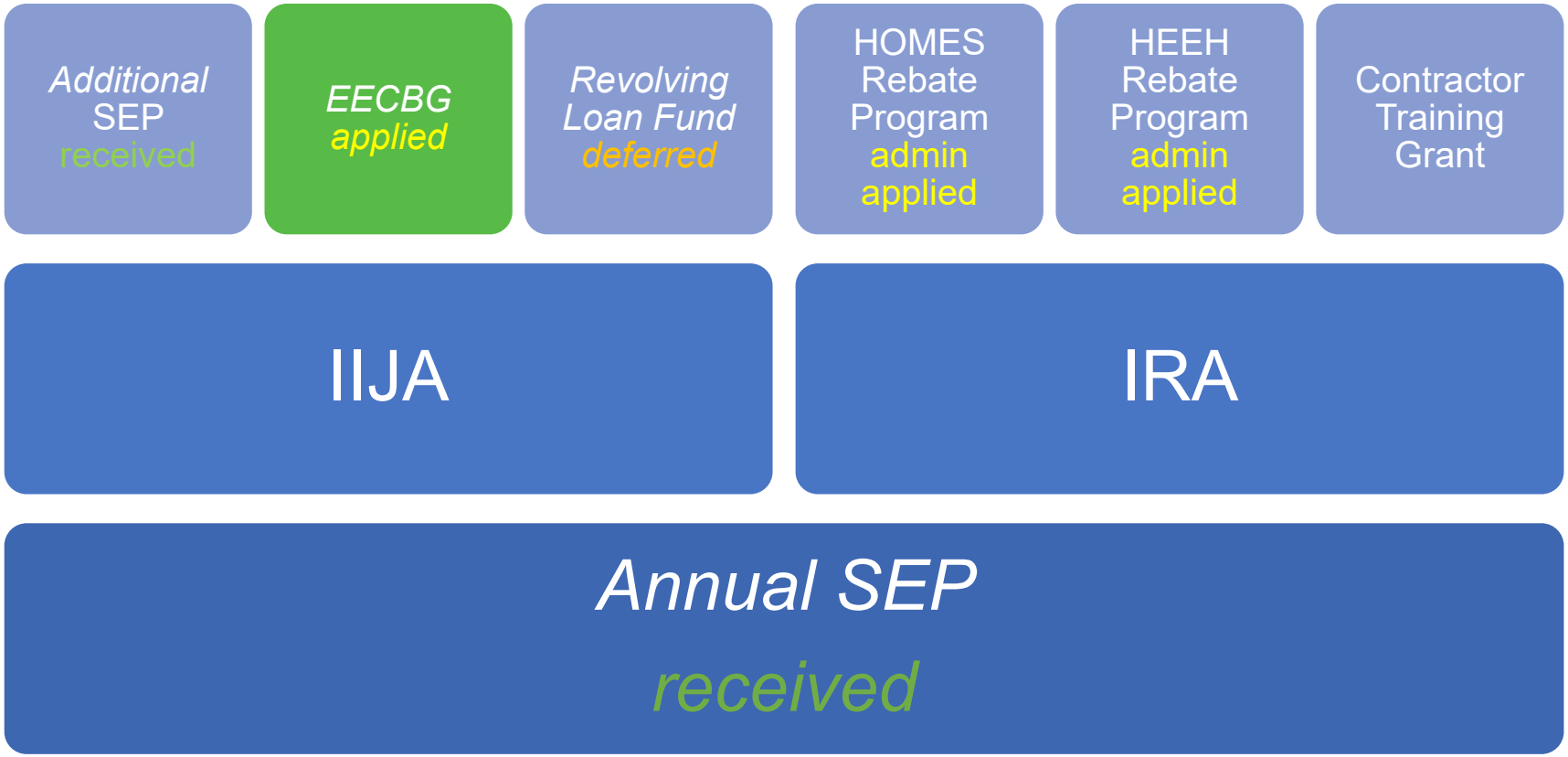
AND

Minimizes:

- ✓ **Cost of energy throughout the State**

SC Code §48-52-210

Federal Funding Received / On the Horizon



SC Competitive EECBG

The Energy Office **anticipates** receiving formula funding through U.S. Department of Energy (DOE) EECBG Program to award subgrants via the SC competitive EECBG program.

- The SC program plans to fund many different energy-efficiency, renewable energy, and clean transportation projects in SC for local units of government.
- Plan to award between 20 - 30 competitive EECBG subgrants for SC.
- The subgrants will range from $50,000 - $75,000 each.

Who may apply for SC's competitive EECBG?

36 counties and over **250 municipalities** in South Carolina are **ELIGIBLE** to apply for the SC competitive EECBG program.

**Municipalities located within a county, receiving formula EECBG funds directly from U.S. DOE, may still be eligible to apply for the SC competitive EECBG program.*

Who is eligible to apply for US DOE EECBG program (not the SC program)?

In South Carolina:

- 10 counties,
- 14 municipalities, and
- 1 tribal nation

have been allocated formula funding directly from the U.S. DOE; therefore, they are **INELIGIBLE** for the South Carolina competitive EECBG program.

SC Municipalities with a Federal Allocation
Charleston
Columbia
Florence
Goose Creek
Greer
Hilton Head
Mount Pleasant
Myrtle Beach
North Charleston
Rock Hill
Spartanburg
Summerville
Sumter

SC Counties with a Federal Allocation
Aiken
Anderson
Berkeley
Greenville
Horry
Lexington
Richland
Spartanburg
York

Tribal Government with a Federal Allocation
Catawba Indian Nation

Project Categories

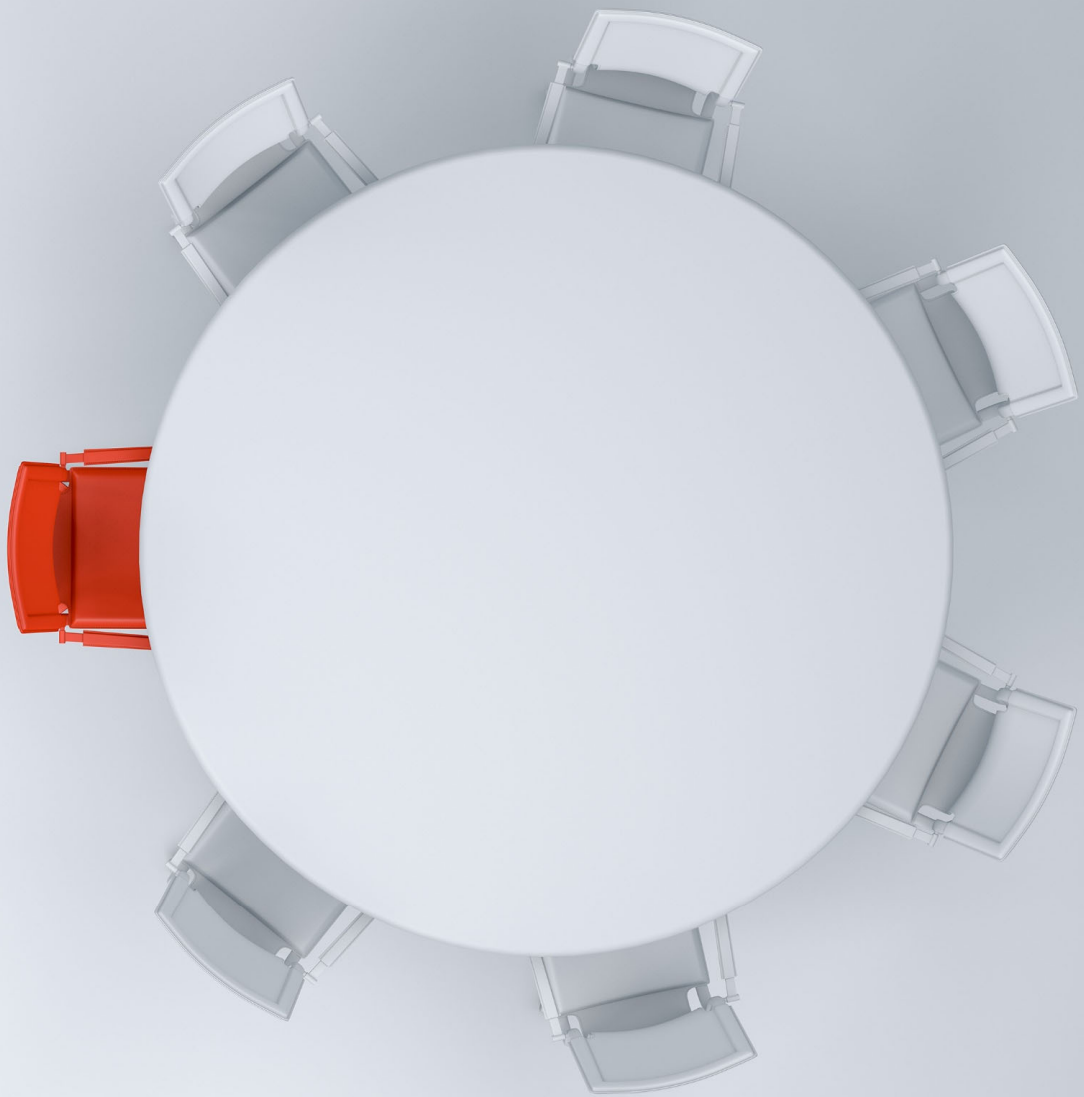
SC EECBG subgrants to fund activities within 8 project categories

- Strategy Development and Implementation
- Energy Efficiency Retrofit Grants for Government Agencies
- Conservation of Transportation Energy
- Building Codes and Inspection Services
- Reduction, Capture, and Use of Landfill Gases
- Replacement of Traffic Signals and Street Lighting
- On-site Renewable Energy on or In a Government Building
- Programs for Financing, Purchasing, and Installing Energy Efficiency, Renewable Energy, and Zero-emission Transportation (and associated infrastructure) Measures and Capital Investments, Projects, and Programs for Leveraging Public and Private Sector Funds

Today's Panelists

- City of Spartanburg
- City of Rock Hill
- Richland County

NOTE: All panelists are US DOE formula funding eligible & not for the SC competitive program.



City of Spartanburg - EV Infrastructure

- Early adopter of chargers
  - Operations/Maintenance
  - Vendors
- Economic development
  - Data collection – visitors/usage
  - Industry partners
  - Hub City
- Equitable and inclusive safe
- Regional EV task force
  - GIS

US DOE Award Allocation $76,580

City of SPARTANBURG south carolina

US DOE Award Allocation $133,080

City of Rock Hill Upfitting HID Streetlights to LED

- ✓ The City of Rock Hill has an initiative to replace all the city-owned HID (Halogen) fixtures (19,000) with a LED equivalent fixture. Replaced roughly 58% of the fixtures YTD.
- ✓ LED fixtures are rated for 100,000 hours or 23 years, much longer than HIS bulbs (10,000 – 25,000 hours).
- ✓ LED lights require no maintenance versus traditional HID fixtures (bulbs, capacitors, ballast, ignitor, overheated wiring, etc.).

- ✓ Replace HID streetlights that consume 285W of Energy with LED equivalent lights that output 105W (63% decrease).
- ✓ The City went from 2- full-time service trucks to one (1) due to the new LED lights we have installed, which help reduce CO2 emissions.
- ✓ LED fixtures have a 10-year warranty from the manufacturer, protecting the grant's capital investment.

- ✓ LED fixture reduces the system electric demand off-hours, freeing up capability on the network for electric vehicles.

- ✓LED lights have directional abilities that control where light is distributed on the ground, which reduces waste by avoiding light spread in unnecessary directions, allowing for fewer fixtures as a result of improved light uniformity and better visibility to vehicular and pedestrian traffic.

Payback

Pay Back through Energy Savings

- Material Cost (Photocontrol, Fixture): $388.00
- Labor (City Crews): $0.00
- Power Saving 180 Watts per Fixture
- Operating Hours Per Year: 12 Hours per day x 365 =4,380
- Cost of Operations: .05 cents per kw * 4,380 x.18 = $39.42
- Return on Investment by energy savings: 9.84 years

Pay Back through Energy Savings and Labor

- Service Crew Cost per hour: $280
- Service: Assumed repair or service (rebulb) one time every four years.
- Maintain Cost per year: $280/4 = $70 (will increase over time as the cost of labor, fuel, and service vehicle gets more expensive)
- Payback less than 4 years.

Richland County

Speaker

Sarah Harris

Proposed Project

Assistance in building energy efficiency and renewable energy back-up in retrofitted Emergency Response Center

US DOE Award Allocation

$278,170

ENERGY OFFICE

Time for Questions

Join at menti.com use code 5804 0319

Mentimeter

What type of EECBG Project are you interested in learning more about?

What's Next?

- Grant Application Guidance coming soon!
- To receive updates such as when the grant program application period opens, please email energycs@ors.sc.gov to be added to our email list.
- Look out for Part 2 of our webinar series after the start of the application period.

Scan here visit our website for more information on SC's EECBG program and project blueprints.

Email our team at energycs@ors.sc.gov with questions regarding the SC EECBG program.

Energy Program Manager

Richelle Tolton

Sr. Energy Specialist

Sam Christmus

Energy Specialist

Kayla Nelums

ENERGY.SC.GOV

SCEnergyOffice