Community Energy Innovation Summit

Collegiate Track Pitches and Ecosystem Tracks Workshops

June 25, 2024

Washington, DC

AMERICAN MADE
U.S. DEPARTMENT OF ENERGY

CLEAN ENERGY BUSINESS NETWORK

Lynn Abramson

President

Clean Energy Business Network

Access the Summit Program

Get details on:

- Today’s Agenda
- The CEI Prize
- Collegiate Track teams
- Ecosystem Track teams
- American Made program

Thank you to our sponsors!

E2

Good for the Economy.
Good for the Environment.

CLEAN ENERGY FOR AMERICA
EDUCATION FUND

CLIMATE POWER

NRDC

NATIONAL WILDLIFE FEDERATION

Agenda

- 9:30 a.m. ET – Welcome Remarks
- 10:00 a.m. ET – Pitch Presentations (Collegiate Track Teams)
- 12:15 p.m. ET – Networking Lunch
- 1:15 p.m. ET – Federal Funding for Community-Based Clean Energy Initiatives
- 3:15 p.m. ET – Participant Roundtables
- 4:45 p.m. ET – Awards Ceremony (Collegiate Track Teams)

Notice of Video and Photography

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See the full notice at the registration desk and speak with CEBN or NREL staff if you have any questions or concerns.

The Community Energy Innovation Prize

DOE's American-Made Challenges

U.S. DEPARTMENT OF ENERGY

U.S. DEPARTMENT OF ENERGY | *Office of* ENERGY EFFICIENCY & RENEWABLE ENERGY

EERE has run 65+ prize programs across four main categories since 2018, awarding over $200 million

26 Competitions are running now

7 Prizes are currently open for applications

Learn More

bit.ly/EERE_Competitions

supercharge

A REVOLUTION OF **BOLD IDEAS**

AMERICAN MADE
U.S. DEPARTMENT OF ENERGY

$400M
in cash prizes and support

75+
prizes

450+
Network members

AmericanMadeChallenges.org

What is the Community Energy Innovation Prize?

- **$7.49 million in cash prizes**
- Successor of the Community Clean Energy Coalition Prize and the Inclusive Energy Innovation Prize
- Support capacity building, innovation, entrepreneurship, and economic development disadvantaged communities in:
  - Academic Programs
  - Workforce Development
  - Clean Energy Technology
  - Clean Energy Manufacturing

Pathways to a Clean Energy Future

- The Community Energy Innovation Prize aims to fund organizations for ongoing and/or proposed activities related to climate and clean energy that **support, build trust, and strengthen relationships and partnerships with disadvantaged communities.**
- The prize directly supports the Justice40 Initiative, which directs 40% of the overall benefits of certain federal investments to flow to disadvantaged communities, including:
  - Clean energy and energy efficiency
  - Clean transit
  - Affordable and sustainable housing
  - Training and workforce development
  - The remediation and reduction of legacy pollution
  - The development of clean water infrastructure

Who is behind the Community Energy Innovation Prize?

- The Community Energy Innovation Prize was established by:
  - The U.S. Department of Energy's (DOE's) Office of Energy Efficiency and Renewable Energy (EERE)
  - Office of Economic Impact and Diversity (ED)
  - EERE's Advanced Materials and Manufacturing Technologies Office (AMMTO).
- The prize is part of the American-Made Challenges family of prizes
- Administered by the National Renewable Energy Laboratory (NREL).

Community Energy Innovation Prize Tracks

Clean Energy Ecosystem Track

Support communities and organizations who have been historically underserved in advancing community-based clean energy transition programs from a wide range of clean energy initiatives and technologies.

Manufacturing Ecosystem Track

Support communities and organizations that have been historically underserved and further the development of clean energy manufacturing innovation ecosystems.

Collegiate Track

Inspire and support the next generation of climate leaders to make an impact in their communities and support community-based clean energy transition programs.

Introducing the Power Connectors

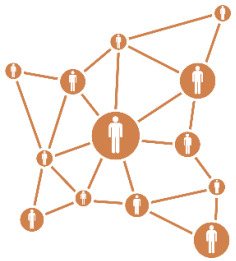
Free Resources for CEI Teams

CLEAN ENERGY BUSINESS NETWORK®

the small business voice for the clean energy economy

Policy Support

Market & Technology Education

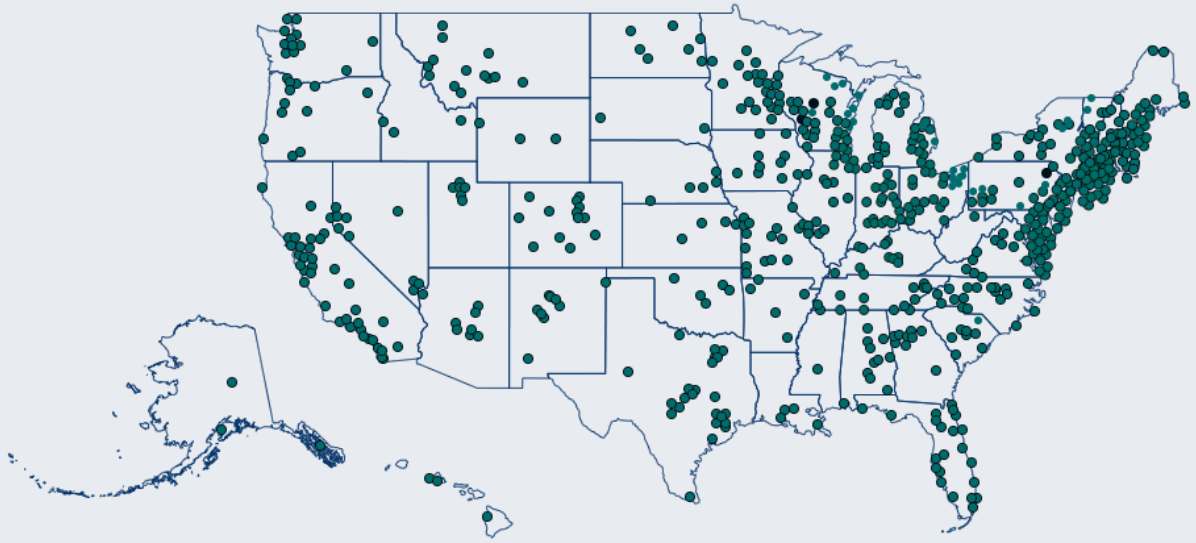


Business Development Assistance

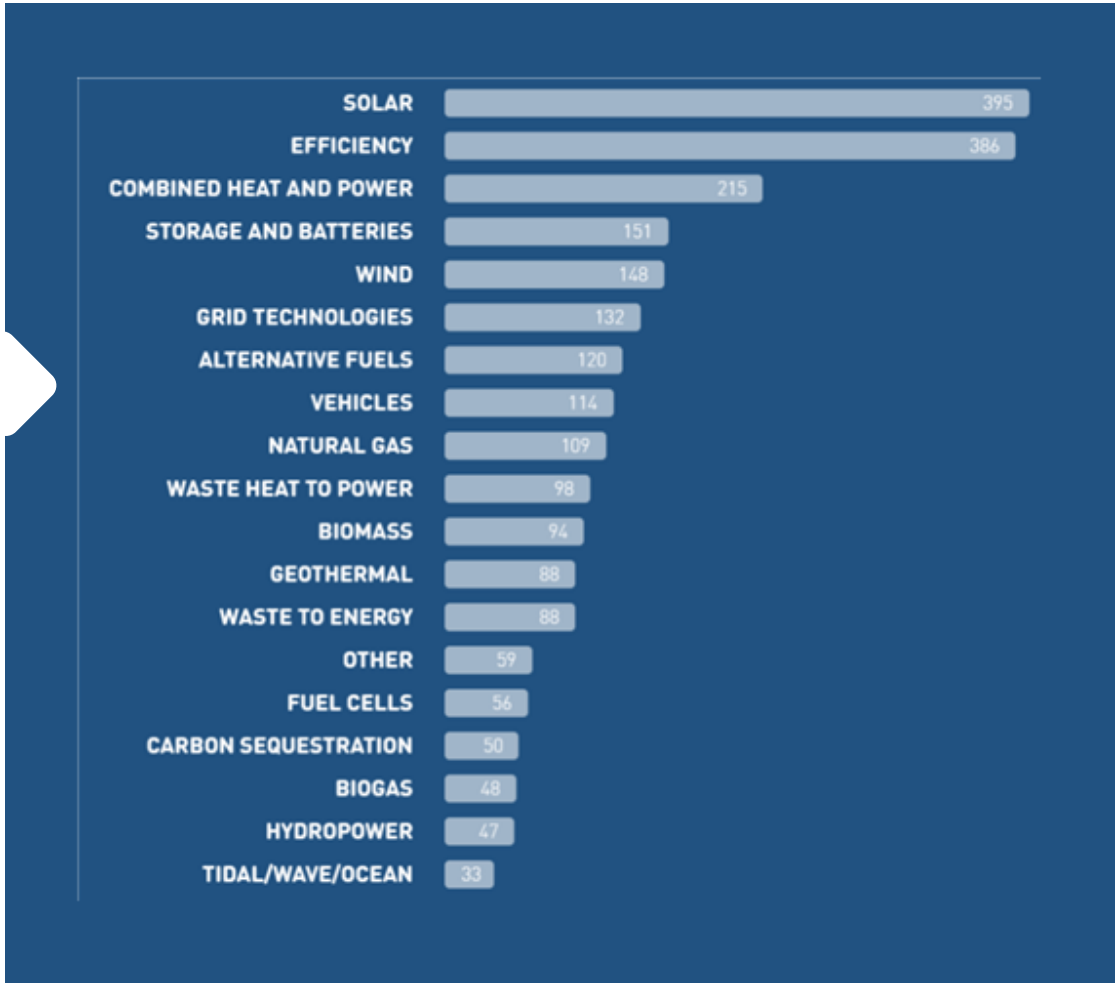
©2024 CEBN

Our Reach

8,000+ small business and community leaders across the United States



Diverse technologies



CLEAN ENERGY BUSINESS NETWORK

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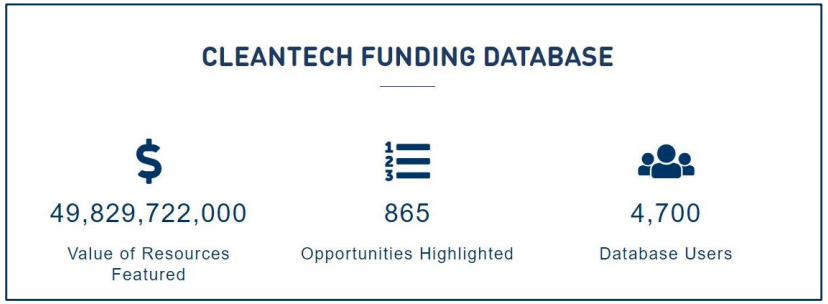
Resources to Help You Navigate Policy and Funding

- U.S. Cleantech Funding Database
- Ecosystem Resource List
- Weekly Newsletter & Monthly Email Digests
- Blog Series
  - Inflation Reduction Act
  - Bipartisan Infrastructure Law
  - Other Federal Programs
  - Latest: Insight into the Greenhouse Gas Reduction Fund



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ADL VENTURES

We decarbonize major industries to create a clean and vibrant world by developing and launching clean infrastructure innovations, including new climate tech ventures, in collaboration with major infrastructure players.

Recruiting

ADL was involved in the recruitment and applicant support of Manufacturing and Clean Energy Ecosystem Track teams for the CONCEPT Phase of the CEI Prize

Team Support

ADL has Collegiate Track teams throughout PROGRESS and IMPACT Phases.

We have supported 5 Clean Energy Ecosystem Track teams through the PROGRESS Phase and will continue through the IMPACT Phase

Event Support

ADL has collaborated with Power Connectors *yet2* and CEBN for Peer Exchange and Pitch Practice Events

ADL is planning Peer Exchange and Learning Module events for Clean Energy Track teams in the IMPACT Phase

Contact: eduardo@adlventures.com; ceip@adlventures.com

adlventures.com

yet2's Global Team of Open Innovation & Technology Scouting Consultants

Our **mission** is to harness Open Innovation to facilitate collaboration and bring innovation to market.

Backed by 25 years of experience in technology scouting, IP, business development, and ventures, with Science & Engineering PhD-led delivery teams spanning the technology spectrum.

yet2 has supported 10+ American Made Prize Challenges by **harnessing our network and scouting expertise to encourage participation** from teams outside of NREL's network.

yet2 continues supporting CEI Prize through:

- Regular mentoring sessions with Phase 1 Winners
- Prize submission review and feedback
- Peer-Exchange Sessions – Idea Exchange Roundtable

For more information, please contact: aguemez@yet2.com

Entrepreneur Futures Network

- Entrepreneur Futures Network is a national non-profit dedicated to empowering communities and innovators. We provide training, advice, and funding development programs powered by 20 years of experience and our network in every state. Learn more at entrepreneurfutures.org.
- As a Power Connector for the Community Energy Innovation Prize, we provided outreach, info sessions, and office hours to potential teams in the **Concept Phase**, guided the **Collegiate Track** through the **Progress Phase,** and are currently supporting the **Manufacturing Ecosystem Track** in the **Progress and Impact Phases.** We are hosting **individual office hours with several options weekly** and **2 peer exchange sessions** in each phase. We are advising teams on their projects, giving feedback, making referrals to experts, potential partners and collaborators, and sharing leads on new funding opportunities.
- Questions? Reach out to our Engagement Director, Cassie Coravos at ccoravos@entrepreneurfutures.org

Acknowledgements

It Takes a Community!

Introducing our Speakers

Sarah Mason

Deputy Executive Director

Clean Energy for America

Education Fund

Jeff Marootian

Principal Deputy Assistant Secretary

Office of Energy Efficiency and Renewable Energy (EERE), U.S. Department of Energy

Collegiate Track Pitches

Georgia Tech Zero Energy Collaborations

Atlanta, GA

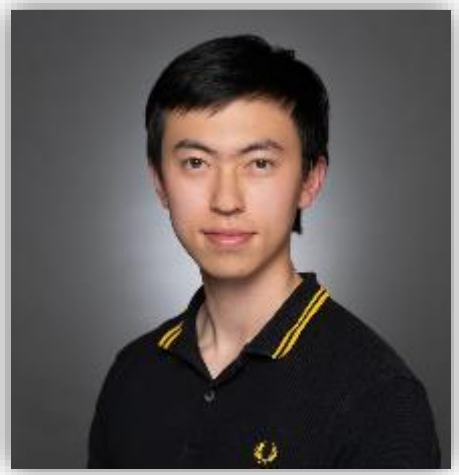
Georgia Tech Zero Energy Collaborations

(a.k.a. Solar Decathlon at Georgia Tech)

Department of Energy Community Energy Innovation Prize

Jackie Zong and Frank Wickstead

June 25th, 2024



Jackie Zong
GTZEC Team Lead

Frank Wickstead
GTZEC Faculty Advisor

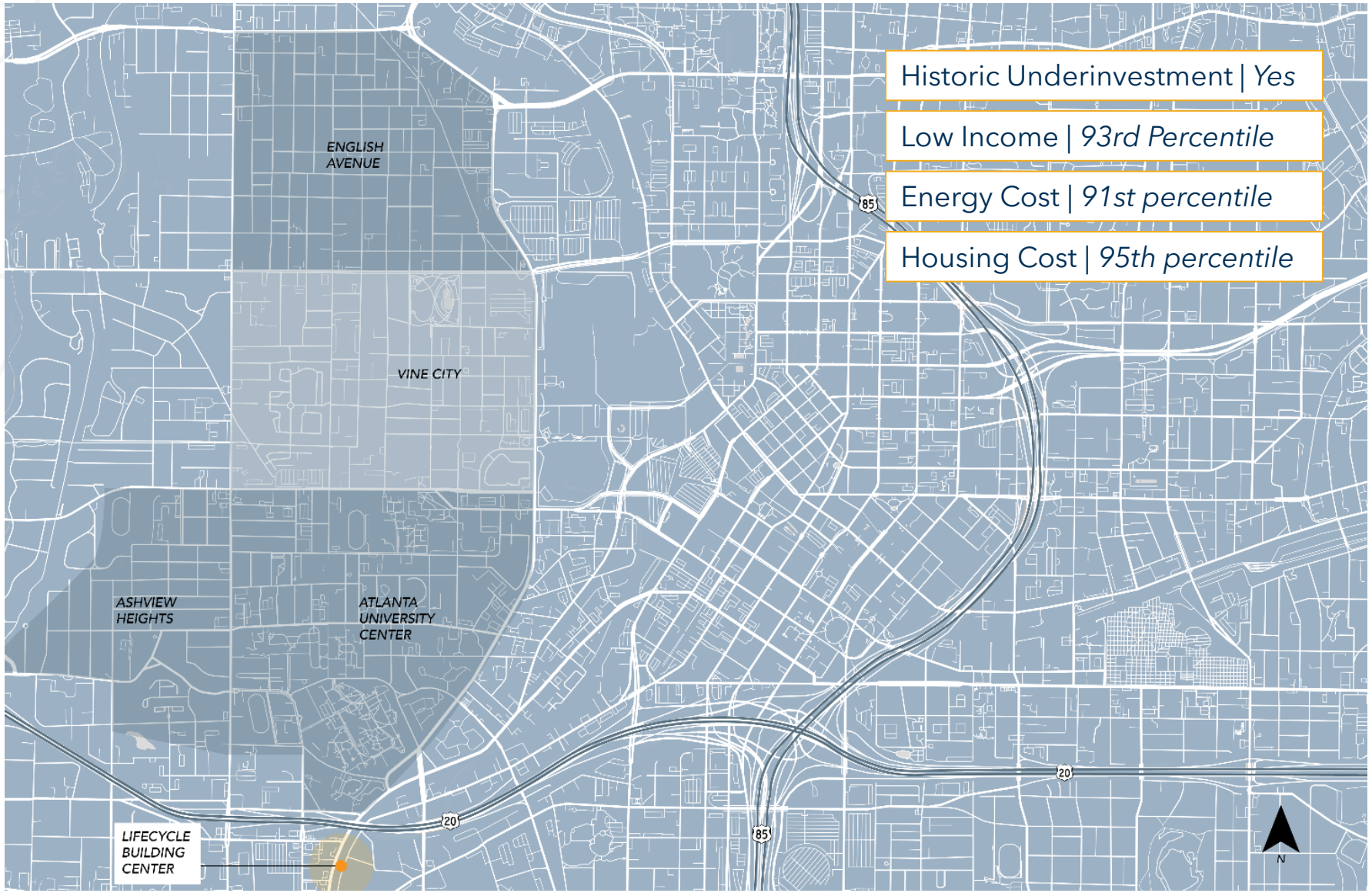
Georgia Tech

Shannon Goodman
Executive Director,
Lifecycle Building Center

Lee Harrop
VP of Real Estate Development,
Westside Future Fund

Georgia Tech

Community Partners



- Historic Underinvestment | *Yes*
- Low Income | *93rd Percentile*
- Energy Cost | *91st percentile*
- Housing Cost | *95th percentile*

Westside Future Fund

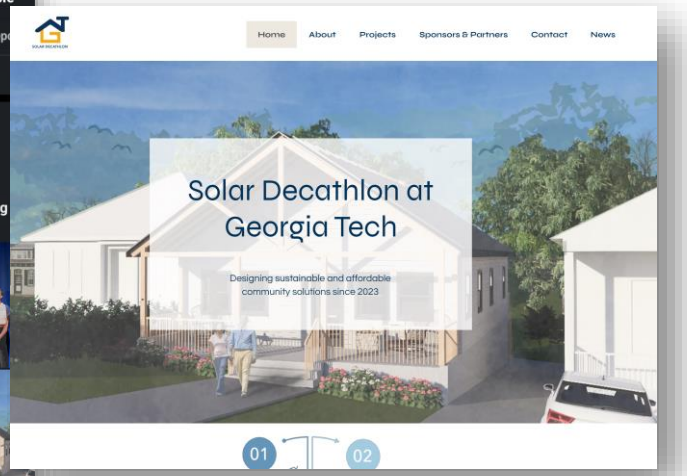
LIFECYCLE BUILDING CENTER OF GREATER ATLANTA

Georgia Tech

What Prize Support Means to the Project

Club formation & meeting expenses

Development of Club social media, website & content to attract sponsorship



Georgia Tech

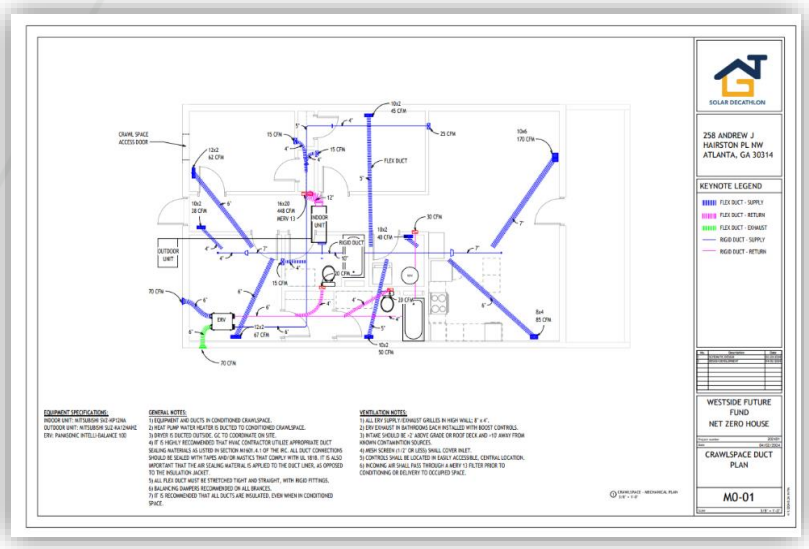
What Prize Support Means to the Project

1st place in SD
Residential Division

Team expenses traveling
to Golden, Colorado

Georgia Tech

What Prize Support Means to the Project

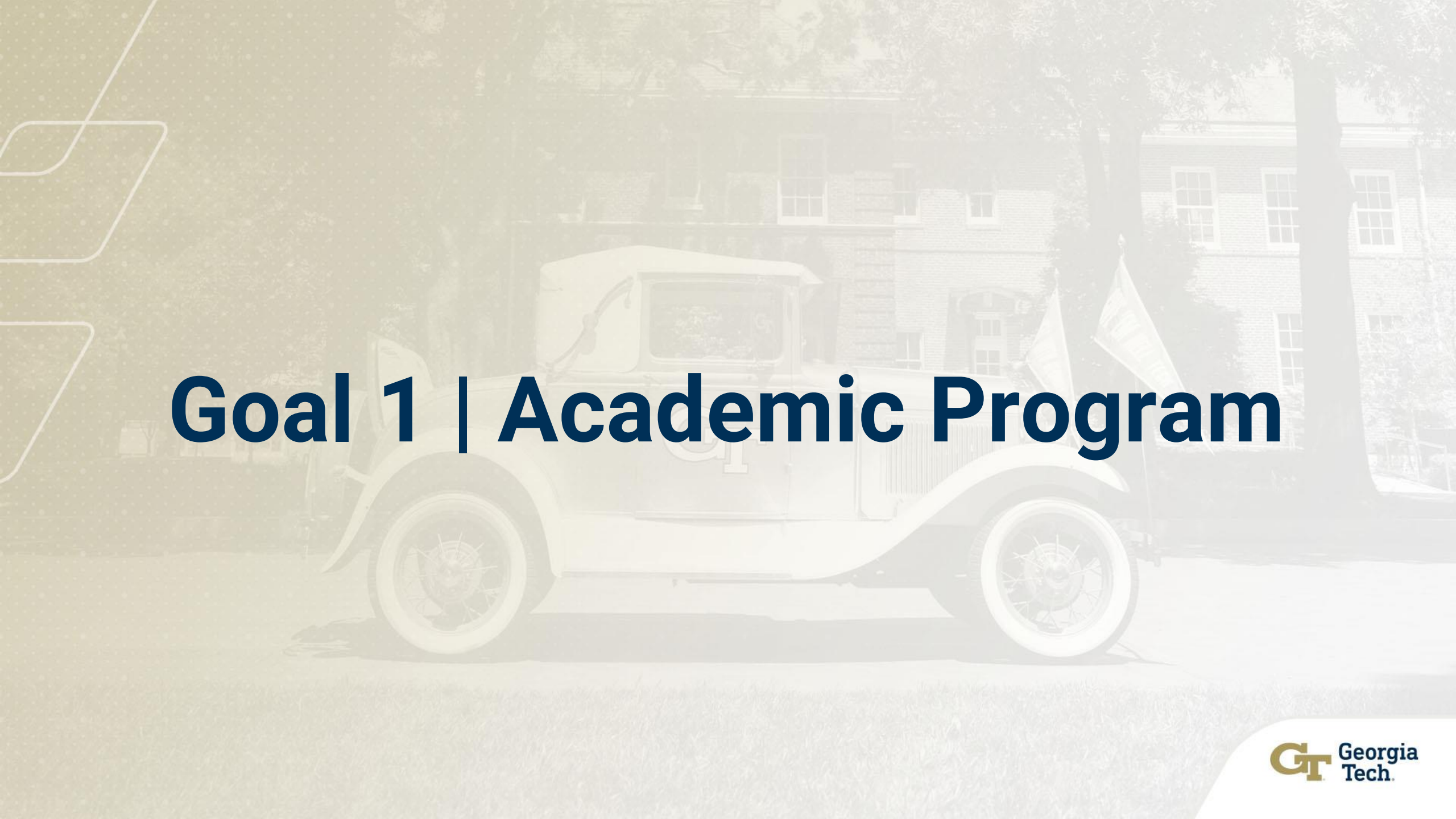


Professional engineering, architecture expenses & permitting expenses

Close the gap between a to-code home & our Solar Decathlon home

Georgia Tech

Goal 1 | Academic Program



Georgia Tech

Registered Student Organization

Faculty Advisor, Professor of the Practice, Licensed GC
Frank Wickstead

3rd Year – Civil Engineering
Jackie Zong

3rd Year – Civil Engineering
Arya Desai

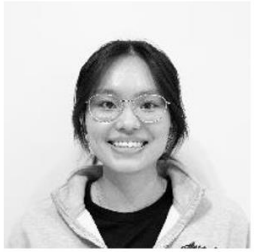
3rd Year – Building Construction
Charles Morris

Masters - Architecture
Rachel Witherspoon

Masters – Building Construction
Aidan Risey

4th Year - Architecture
Yona (Yuhan) Wang

Masters – Business Administration and Environmental Engineering
Wyatt Williams



3rd Year - Architecture
Julie Chen

4th Year - Architecture
Anushka Kibria

1st Year - Architecture
Kiki (Jingqi) Ruan

4th Year – Building Construction
Nader Osman

3rd Year – Building Construction
Joel Jimenez

1st Year – Building Construction
Mahlon Sale

3rd Year – Building Construction
Carlos Hernandez

PhD – Civil Engineering
Arjun Thangaraj Ramshankar

Georgia Tech

Community Engagement

Community outreach
& project PR events

Workshops with
community partners

Georgia Tech

Zero Energy in the Classroom

- Anticipated DOE ZEDD for Georgia Tech's School of Building Construction for the 2024-2027 designation phase
- Designation associated with BC6675, Residential Design & Construction
- The course also aligns with 13 of the 17 United Nations Sustainable Development Goals
- An independent study course that offers 3 elective credit hours for student's annual Solar Decathlon efforts

Georgia Tech

Goal 2 | Workforce Development

Georgia Tech

Workforce Development

Serve as a training site for Lifecycle Building Center's *Breaking Barrier through Deconstruction* Program

Provide entry level workers with green building experience

Georgia Tech

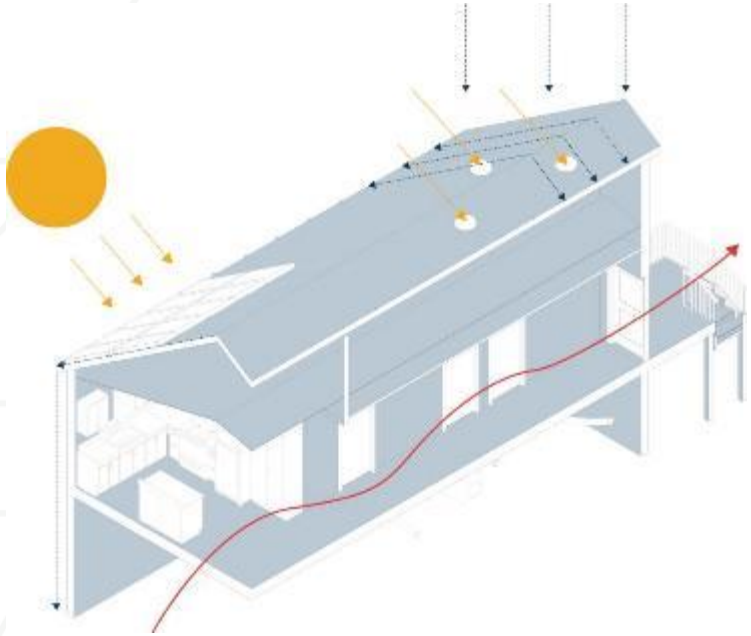
Workforce Development

Subcontract with and purchase from:

1. Local to the neighborhood businesses
2. Minority owned businesses
3. Woman owned businesses

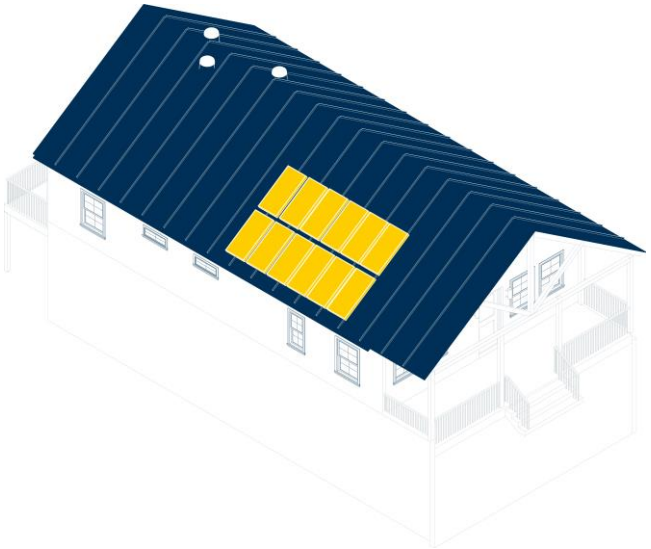
Goal 3 | Clean Energy Technology

Georgia Tech



Passive Design and
Tight Envelope

Efficient MEP
Equipment & Appliances



Rooftop Solar System

BEopt

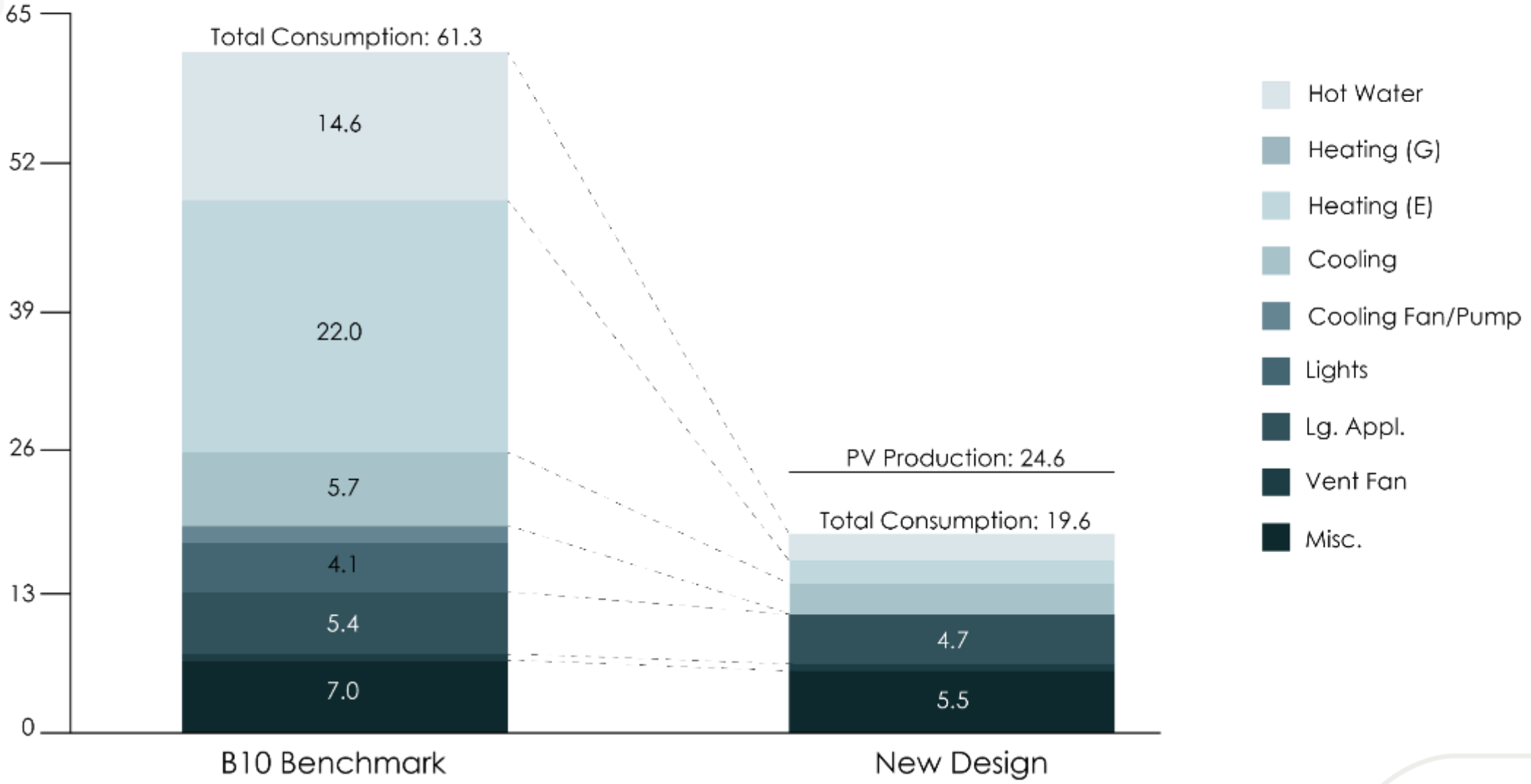
Building Energy Optimization
with Hour-by-Hour Simulations

NREL

National Renewable Energy Laboratory
15013 Denver West Parkway
Golden, CO 80401
www.nrel.gov

Georgia Tech

Site Energy Use (MBtu/yr) - B10 Benchmark vs. New Design

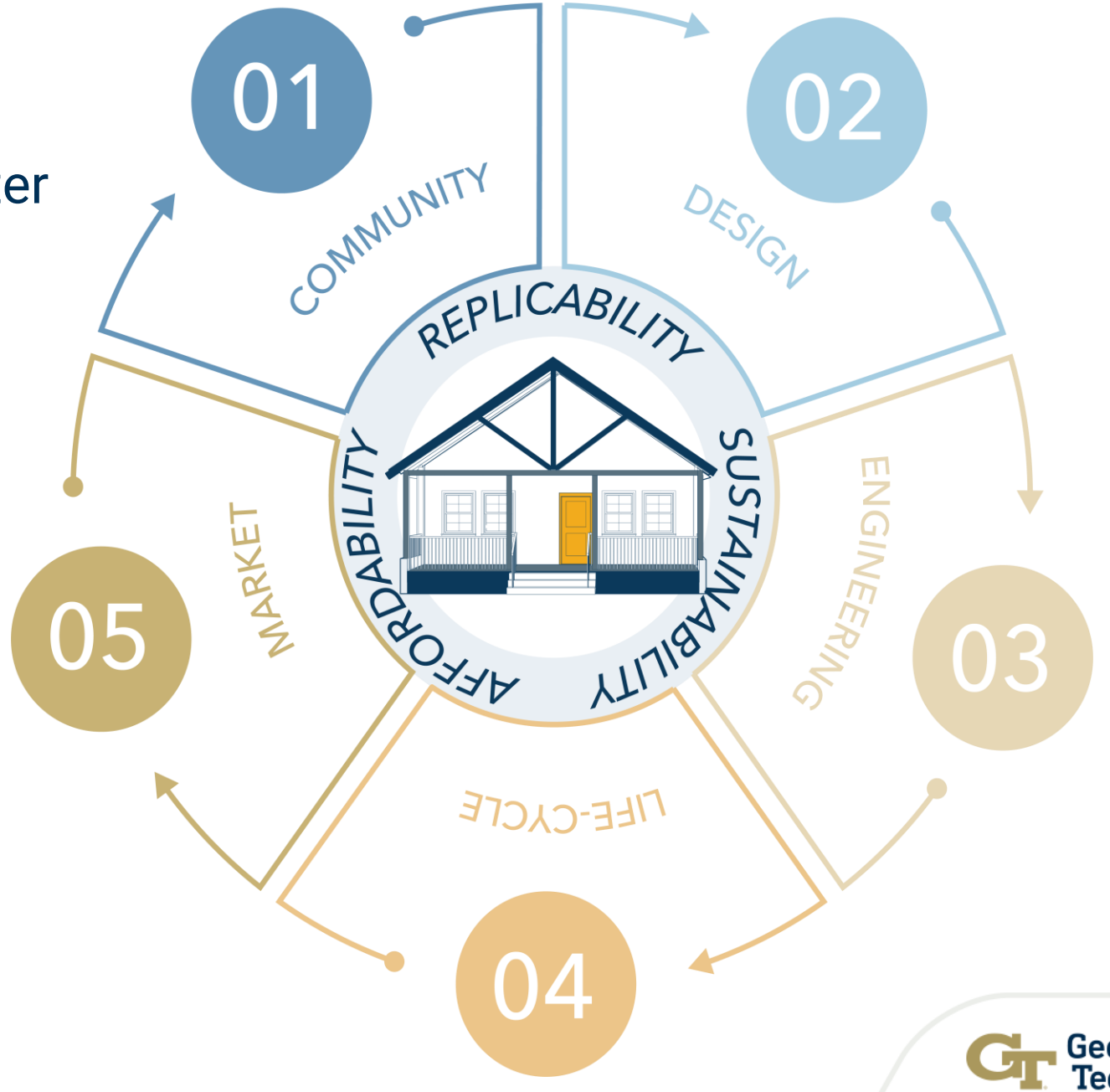


Georgia Tech

Replicability
- Maintain Neighborhood Character
- Land Use Framework Plan
- Local Reuse Centers

Sustainability
- Low Embodied Carbon
- Envelope Efficiency
- Net Zero with PV

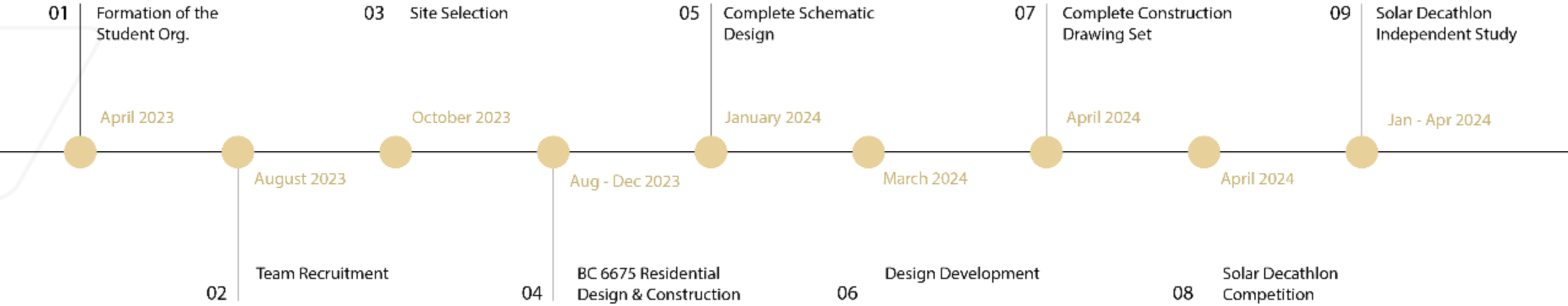
Affordability
- Reclaimed Materials
- Energy Savings
- Downpayment Assistance



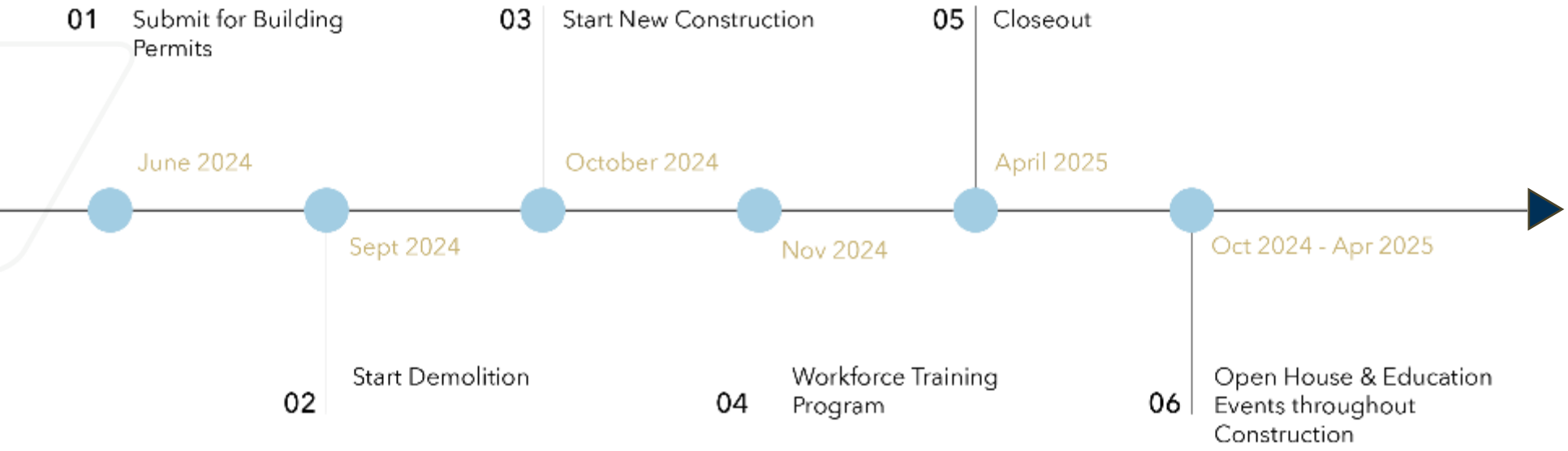
Georgia Tech

Next Steps

Project Timeline



Project Timeline



Georgia Tech

Partnerships

AMERICAN MADE CHALLENGES
U.S. DEPARTMENT OF ENERGY

Georgia Power

HUBER

energy vanguard

Westside Future Fund

MITSUBISHI ELECTRIC

LORD AECK SARGENT

SOLAR DECATHLON

LIFECYCLE BUILDING CENTER
OF GREATER ATLANTA

ASHRAE

SKANSKA

Southface

Honeywell

ALAIR
CUSTOM HOMES · RENOVATIONS

Georgia Tech


Thank you!

Current Project – 258 Andrew J Hairston

Greener CASA

Tyler, TX

GREENER CASA

COMMUNITY ADVANCED SAVING ALTERNATIVES

PRESENTED BY
NELSON FUMO & LORENA REBAGLIATI

AGENDA

01 THE TEAM

02 DEMOGRAPHICS OF THE AREA SERVED

03 COMMUNITY CHALLENGES

04 ENGAGING WITH THE COMMUNITY

05 MEDIA OUTREACH

06 ENERGY AUDITS

07 METRICS

08 KEY LEARNINGS

09 FUTURE PRIORITIES & STEPS

10 TESTIMONIALS

GREENER CASA

An academia-community partnership to bring free energy audits to disadvantaged communities to promote energy efficiency.

COLLEGIATE PARTNER

UT Tyler™
THE UNIVERSITY OF TEXAS AT TYLER

COMMUNITY PARTNER

MONARCA INITIATIVE

Monarca Initiative empowers immigrants and disadvantaged individuals to transform their lives through economic, educational, and social opportunities, fostering financial stability and personal growth.

GREENER

CASA

THE TEAM

100% BILINGUAL

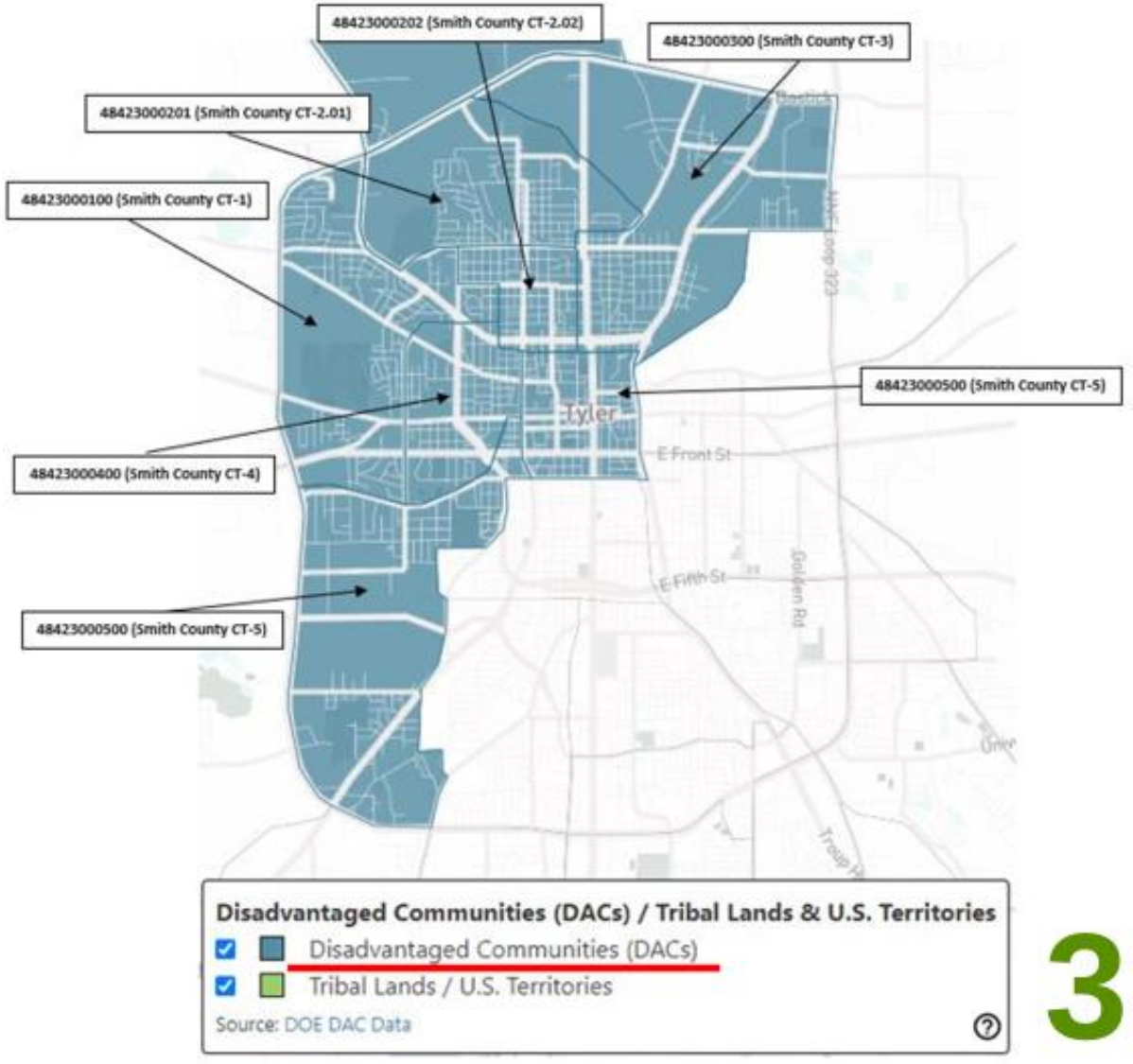
DEMOGRAPHICS OF THE AREA SERVED

AREA SERVED: **TYLER, TEXAS**

DEMOGRAPHIC HIGHLIGHTS:

- TRACTS POPULATION: 29,250
- HISPANIC POPULATION: 12,900 (44%)
- HISPANIC POPULATION BELOW POVERTY LINE: 5,380 (18%)

Area Served: Tyler, Texas



COMMUNITY CHALLENGES

- HIGH ENERGY BILLS
- DETERIORATED ENVELOPE
- OUTDATED HVAC SYSTEMS
- LACK OF ENERGY EFFICIENCY AWARENESS
- LANGUAGE BARRIER

ENGAGING WITH THE COMMUNITY

COMMUNITY WORKSHOPS:

- HOSTED WORKSHOP AND MINI-WORKSHOPS ON ENERGY EFFICIENCY AND CONSERVATION

SURVEYS:

- CONDUCTED TO GATHER INPUT ON ENERGY CHALLENGES AND COMMUNITY NEEDS

GREENER CASA TEAM

NELSON FUMO, PEDRO MONTANO, RAFAEL REYES, JOSEFINA VAZQUEZ AND LORENA REBAGLIATI

ENGAGING WITH THE COMMUNITY

COLLABORATION WITH COMMUNITY BUSINESS

BAAZAR 69 (HISPANIC MARKET)

PARTICIPANTS WORKED ON UNDERSTANDING AND ANALYZING THEIR ELECTRIC BILLS.
Professor Dr. Fumo assisting participants.

MEDIA OUTREACH

- MEDIA OUTLETS HAVE PLAYED A CRUCIAL ROLE IN RAISING AWARENESS ABOUT OUR ENERGY-SAVING INITIATIVES.

- COLLABORATIONS WITH LOCAL RADIO STATIONS, NEWSPAPERS, AND TV CHANNELS TO PROMOTE WORKSHOPS AND PROGRAM

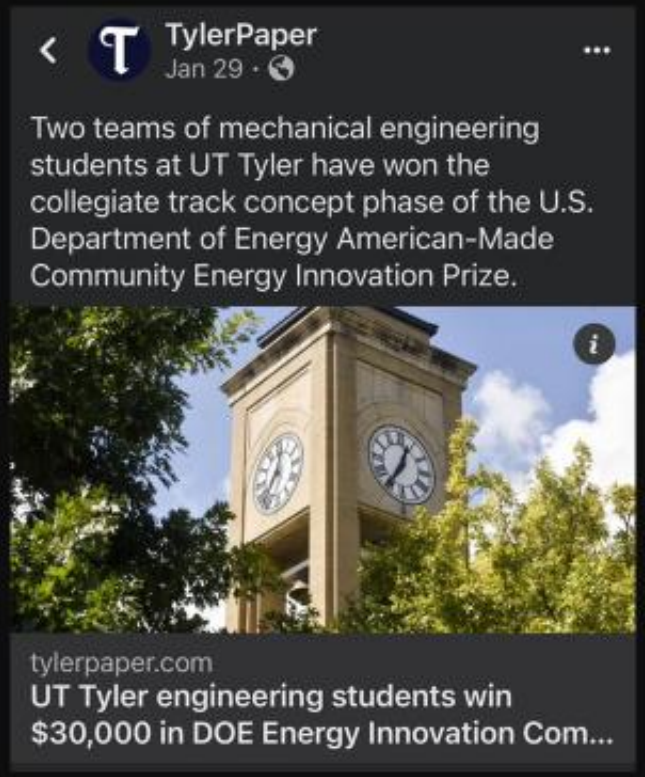
KEY CONTRIBUTIONS

KEY CONTRIBUTIONS

MEDIA OUTREACH

CBS 19 – UNIDOS
LOCAL TV STATION

TYLER MORNING TELEGRAPH
ONLINE LOCAL PAPER



LA INVASORA
LOCAL RADIO STATION

ENERGY AUDITS

ANALYZING UTILITY BILLS HELPS TO IDENTIFY potential energy savings and offers recommendations on appropriate electricity providers.

FAMILY 1

ENERGY AUDITS

THE BLOWER DOOR TEST HELPS TO IDENTIFY the magnitude and location of air infiltrations to pinpoint critical envelope spots.

FAMILY 2

ENERGY AUDITS

THERMAL IMAGING HELPS TO IDENTIFY envelope weaknesses and guide the team on potential low-cost actions like caulking.

FAMILY 3

METRICS

COMMUNITY OUTREACH

96%

COMMUNITY OUTREACH GOAL: 50 PARTICIPANTS

ACHIEVED: 46 PARTICIPANTS

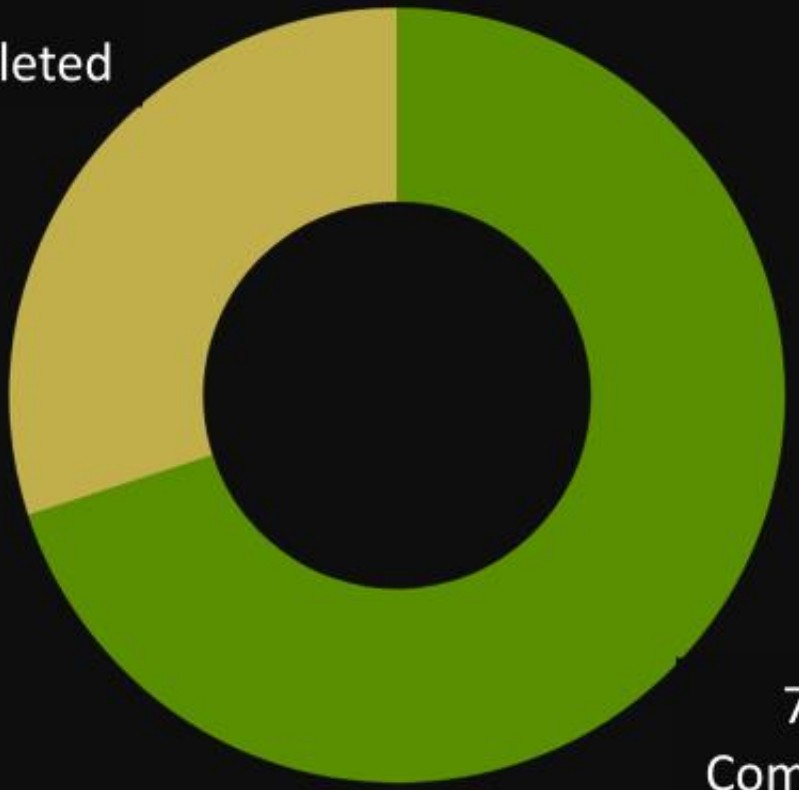
- **17** Participants through a workshop
- **6** Participants through one-on-one mini-workshops
- **23** Participants through activities offered by Monarca Initiative (such as case management and classes)

1 WORKSHOP PLANNED FOR FALL 2024

METRICS

HOME ENERGY AUDITS GOAL: 10

- **7** HOME AUDITS CONDUCTED
- **3** HOME AUDITS PLANNED FOR SUMMER

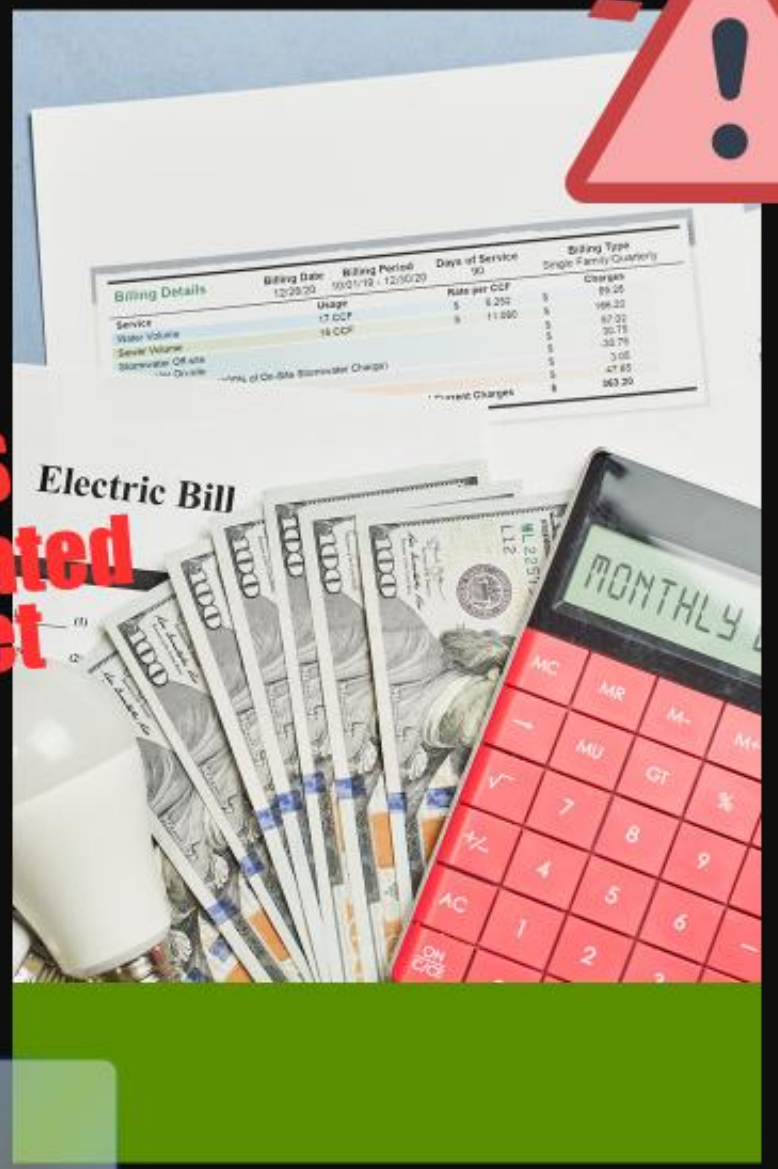


Energy Kits

KEY LEARNINGS FROM
CONCEPT PHASE & PROGRESS PHASE

LACK OF INFORMATION ON ENERGY PLANS:
- DIFFICULTY IN CHOOSING THE MOST COST-EFFECTIVE RETAIL ELECTRIC PROVIDER AND PLAN.

LACK OF UNDERSTANDING OF THE ENVELOPE:
- DIFFICULTY IN UNDERSTANDING THE IMPLICATIONS OF THE ENVELOPE ON THERMAL LOADS.



KEY LEARNINGS FROM
CONCEPT PHASE & PROGRESS PHASE

LACK OF AWARENESS:

- MANY COMMUNITY MEMBERS ARE UNAWARE OF BASIC ENERGY-SAVING PRACTICES.

LACK OF UNDERSTANDING OF A/C:

- LIMITED KNOWLEDGE ON HOW TO OPERATE A/C UNITS EFFICIENTLY WITH IMPROPER THERMOSTAT SETTINGS AND INFREQUENT FILTER CHANGES.

FUTURE PRIORITIES & NEXT STEPS

When families are subscribed to inappropriate plans, it imposes an additional economic burden. Changing the plan, however, incurs a cancellation fee of $150 or more.

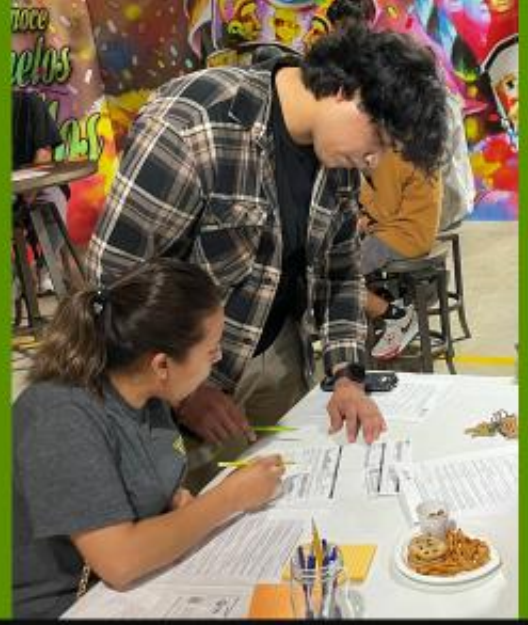
A new priority is to help cover the

cancellation FEE

FUTURE PRIORITIES & NEXT STEPS

From energy audits learnings, the team will:

- INSTALL AND TEACH HOMEOWNERS TO USE SMART THERMOSTATS, WHICH EFFECTIVELY REDUCE ENERGY CONSUMPTION.
- ARRANGE FREE A/C TUNE-UP SERVICE FOR HOMES BASED ON AUDIT RECOMMENDATIONS.



“El taller y la auditoría ha sido de mucha ayuda porque estábamos pagando mucho por que no tener el plan correcto y **Geener CASA** nos ayudaron a encontrar el mejor plan para nuestra casa! También detectaron si había fugas de aire acondicionado como grietas en ventanas etc. Nos proporcionaron nuevos focos de luz y taparon todos los lados que se nos escapaba el aire acondicionado. Muchas gracias al profesor Nelson, los muchachos y a Monarca por su labor y trabajo!”

AUDIT & WORKSHOP
Participant

TESTIMONIAL 1

"The workshop and audit were very helpful. We were overpaying due to the wrong plan, and Greener CASA helped us find the best one for us. They also found air conditioning leaks, provided new light bulbs, and sealed all the gaps. Thanks to Professor Nelson, the students, and Monarca for their hard work!"

TESTIMONIAL 2

"Gracias por explicar cómo elegir el mejor plan eléctrico. Su orientación ha sido muy importante y ha marcado una gran diferencia en mi factura de electricidad. Aprecio mucho su ayuda y dedicación. ¡Gracias!

AUDIT & WORKSHOP
Participant

“Thank you for explaining how to choose the best electricity plan. Your guidance has been very important and has made a big difference in my electricity bill. I greatly appreciate your help and dedication. Thank you!"

"El programa del profesor Nelson, sus alumnos y Monarca me pareció estupendo y muy interesante. Me gustó mucho los consejos que me dieron de como mantener mi hogar fresco sin gastar mucho y de cómo elegir un buen plan de electricidad. Al seguir sus consejos he visto resultados en mi factura de electricidad muchas gracias por su ayuda y su tiempo."

AUDIT & MINI-WORKSHOP
Participant

TESTIMONIAL 3

"The Greener CASA program with Professor Nelson, his students and Monarca, was fantastic and very interesting. I appreciated the tips on keeping my home cool and choosing a good electricity plan. Following their advice has improved my electricity bill. Thank you for your help and your time."

GREENER CASA

(903) 565-5588

NFUMO@UTTYLER.EDU

¡GRACIAS!

QUESTIONS?

Break

GreenSynergy

Houston, TX

GreenSynergy – Community Energy Innovation Prize (Solar Power Charging stations at Houston Community College)

Oswaldo Garcia (Captain)

Peter De Vries (Co-Captain)

Muhammad Khan (Team Member)

Arnold Garcia (Team member)

Dept. of Mechanical Engineering,
University of Texas at Tyler, HEC;

Outline

- Introduction
- Community Partner
- Project Implementation
- Prototype
- Community Engagement
- Testimonials from Community Members
- Project Outcomes
- Challenges Faced
- Professional Skill Development
- Ongoing and Future Plans
- Key Takeaways
- Questions
- Thank you

Introduction

Project Overview:

- The GreenSynergy team is developing a solar power charging station at Houston Community College (HCC) for the Community Energy Innovation Prize.
- This initiative focuses on enhancing clean energy access and promoting renewable energy education among underserved students.

Significance:

- The project addresses awareness of renewable energy to disadvantaged communities at HCC.
- It provides practical learning opportunities and encourages the adoption of sustainable practices for STEM students

Figure 1. Rendering of a Solar charging station

Community Partner

Houston Community College (HCC):

- **HCC Mission**: The College District will equitably deliver relevant, high-quality education and training, ensuring success for all students.

- **Why HCC:** To enhance STEM education and promote renewable energy technology to disadvantaged students. The project provides hands-on experience relevant to the renewable industry for all the team members.

- **Collaboration**: HCC worked with the GreenSynergy team to engage the student community, gather feedback, and tailor the project to meet needs. Provided access to labs, workshops, and tools across Alief and Katy Campus.

Figure 2. The team presenting the project to HCC and UTT faculty

Project Implementation

- **Design and Testing:** Development of a solar-tracking and non-tracking system for micro-mobility devices. Creation of a user-friendly interface for remote data access. Involvement of STEM students from HCC in focus groups.
- **Community Awareness:** Conducted renewable energy awareness sessions and classroom visits in the spring semester. Posters displayed across the HCC Alief campus.
- **Engineering Week Participation:** Demonstrated the working charging station at UT Tyler Houston Engineering Center. Educated the community about renewable energy.
- **Community Feedback:** Conducted focus groups to analyze the response of the HCC student community to further improve design of the system.

Figure 3. Team building solar charging station with HCC student interns.

Team-A: Prototype

Figure 4. Team-A solar tracking charging cart

Team-B: Prototype

Figure 5. Team-B solar charging cart

Community Engagement

Educational Outreach:

- HCC facilitated educational outreach and engagement with students through their career fairs and events.
- HCC engineering leadership hired two HCC summer research interns along with an HCC engineering faculty to acquire knowledge about building and operating the station

Awareness Sessions:

- HCC Classroom visits conducted by Dr. Mohammad Biswas and Peter de Vries focusing on clean energy initiatives and their importance.

Surveys and Focus Groups:

- Gathered feedback on HCC STEM student interest in renewable energy and refined project approaches based on insights.

Figure 6. Flyer for Engineers week

Community Engagement

Awareness Event (Engineers Week):

- The prototype was showcased at HCC Engineers Week at the Alief campus.

Student Participation:

- Students received a quick overview of the system as a whole and how it operates. The students then rode the E-scooter.

Demonstration:

- Charging station functionality was demonstrated by having the students plug in the E-scooter to charge.

Figure 7. Charging station being displayed at Engineers week

Community Engagement

Figure 8. HCC students engaging with the prototype at E-Week.

Figure 9. HCC Interns learning hands-on engineering skills to assist with the build at HCC Katy campus.

Community Engagement

Survey Results (85 Responses)

- 88% Were aware of the renewable resources.
- 52% Have participated in STEM programs with a renewable energy component.
- 65% were likely to be interested in Renewables education.

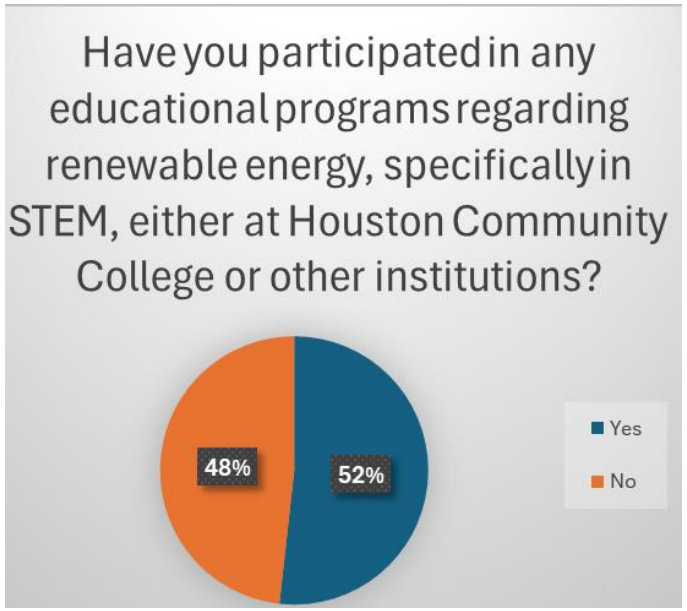


Figure 10. Survey question during E-Week

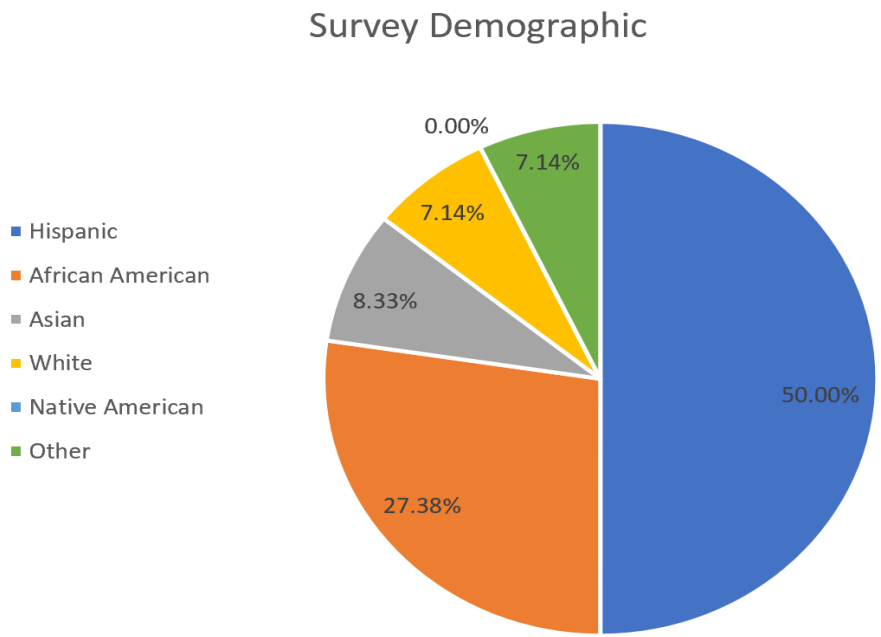


Figure 11. Demographic of the HCC students at the Alief campus during the survey.

UTTyler
THE UNIVERSITY OF TEXAS AT TYLER

Testimonials from Community Members

The impact of our initiatives on the community is tangible, as described by those directly benefiting from our efforts:

Testimonial 1: "The solar charging station is an excellent way to understand how power is produced and delivered to be used. The explanation itself was very educational and conveyed the main features clearly and concisely." – HCC STEM Student

Testimonial 2: "Clear containers/ casing for wiring connections for students to be able to see the connections between components**."** – HCC STEM student

Their words affirm that our efforts are not only making a difference but are also empowering individuals to embrace sustainable practices for a brighter future."

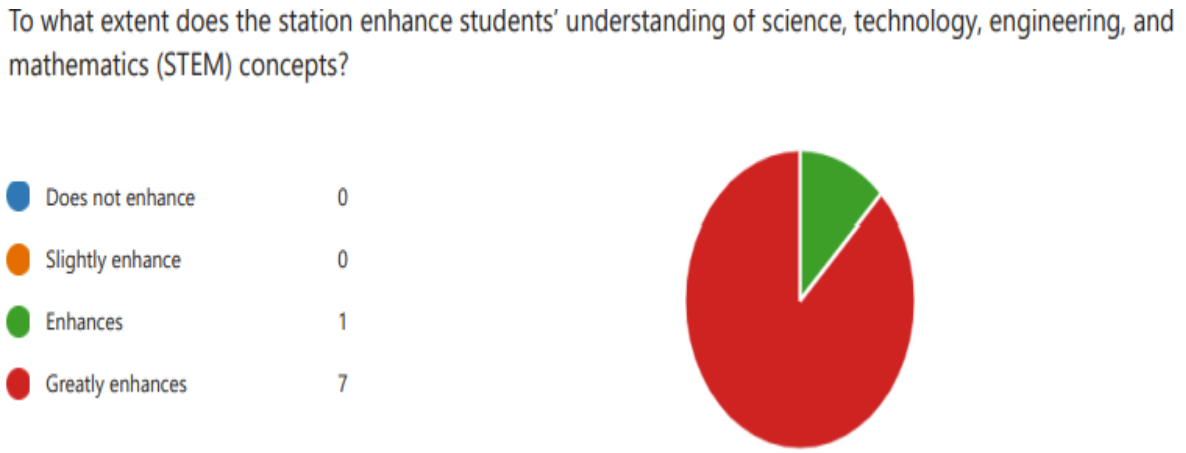


Figure 12. Response to how the station enhanced the students understanding of renewable energy.

Project Outcomes

Educational Impact: Students and community members gained practical knowledge about clean energy. Increased interest in STEM fields related to renewable energy.

Environmental Benefits: Promotion of renewable energy and sustainable practices within the community.

Workforce Development: Preparation of students for careers in the renewable energy industry.

Figure 13. The team engaging with a focus group of HCC STEM students.

Challenges Faced

Scheduling Difficulties: Aligning schedules for focus group meetings and other activities posed logistical challenges.

- **Solution:** Was to use HCC's events and fairs to publicize the project and our mission to educate the students through the prototype. Also allowing a flexible schedule for the focus group to be assembled.

Technical Issues: Initial prototyping faced technical challenges such as equipment malfunctions.

- **Solution:** Troubleshooting sessions with advisors and industry members helped overcome these issues.

Lessons Learned: Importance of flexibility and resilience in project implementation. The Value of external support and expertise in overcoming technical challenges.

Professional Skill Development

This project has significantly influenced the future careers and professional goals of the students involved key impacts on the team members include:

- **Enhanced Technical Skills:** Continued focus on developing technical expertise in renewable energy systems.
- **Leadership and Management:** Building on leadership and project management experiences gained.
- **Community Engagement:** Sustaining and expanding community involvement. Exploring new ways to engage and educate the community.
- **Long-term Benefits:** Prepares students for renewable energy careers, enhances job market competitiveness, and supports Texas's growing energy industry.

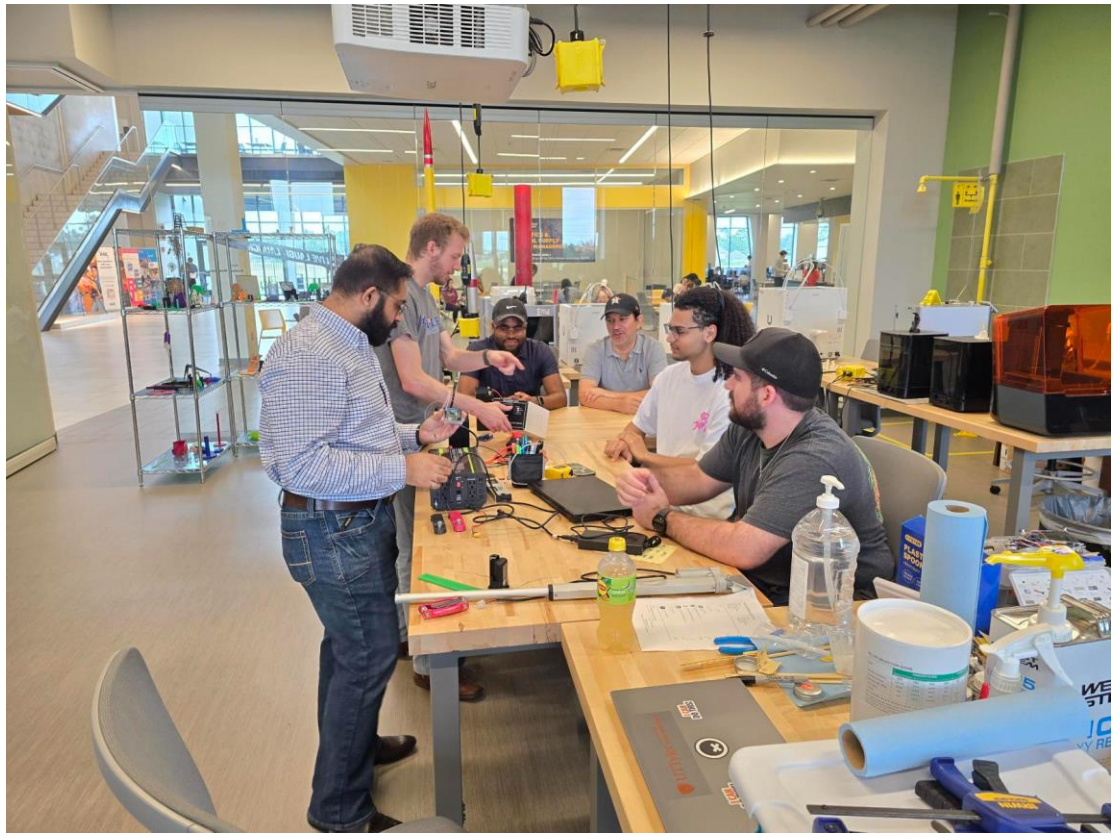


Figure 14. The team working with HCC STEM student interns on the project.

Ongoing and Future Plans

Deliver Solar Stations: Deliver both completed tracking and non-tracking stations along with operations manuals to HCC Alief campus.

Commitment to Mentorship: Engaging HCC STEM students with UT Tyler HEC students throughout the projects reinforced commitment to mentorship. As most of the team members graduate and advance in their careers, the aim is to mentor future engineers and give back to the HCC community.

Prospective Funding: With more funding these prototypes are easily replicated to be used in multiple courses throughout the STEM programs at HCC. With the HCC community being spread over the Houston area more of these prototypes can be available at all the campuses.

Figure 15. The stations could be put in the commons area when not in use by classes.

Key Takeaways

•**Importance of Engagement**: Continuous interaction with the community is crucial for project success.

•**Educational Integration**: Aligning project activities with academic curricula enhances learning and innovation.

•**Sustainable Practices**: Promoting clean energy solutions has long-term environmental and social benefits.

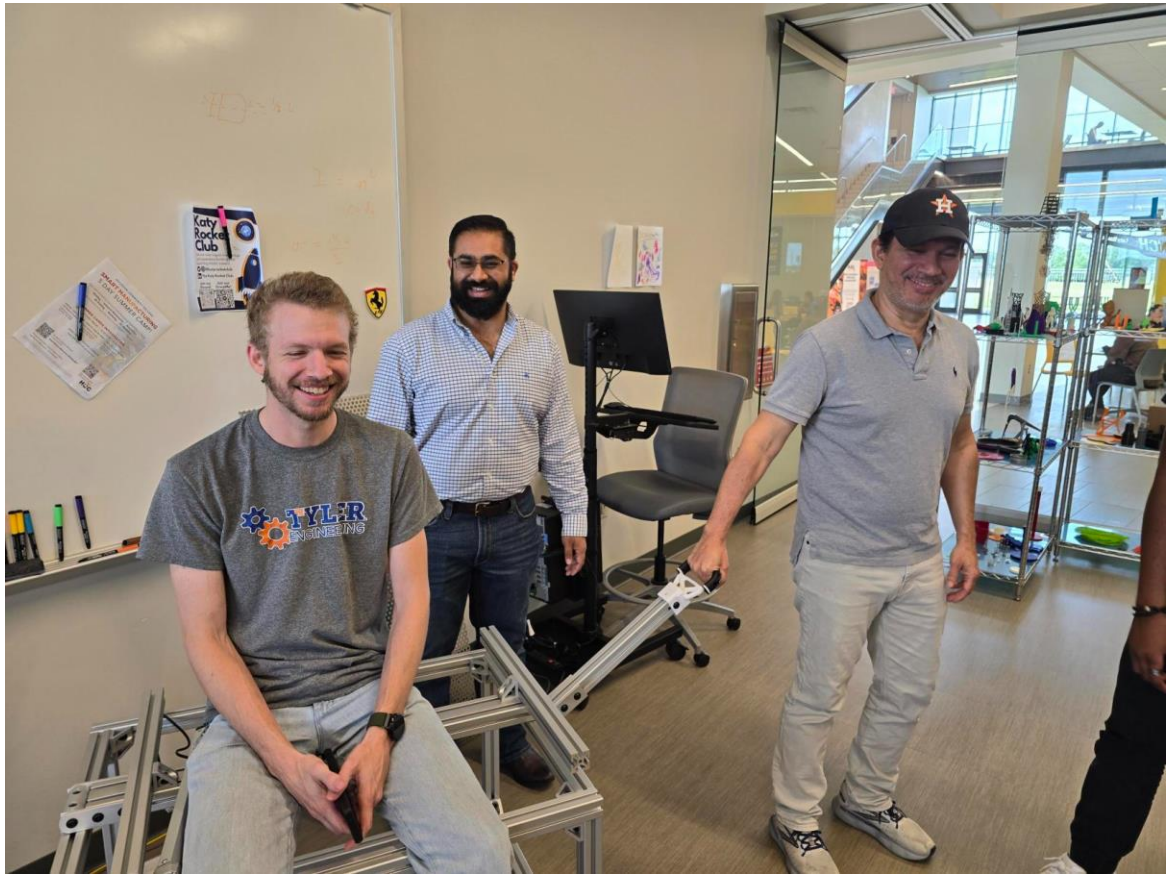


Figure 16. Showing the strength of the frame of HEC-B to students.

Thank You

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Questions?

UTTyler
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Networking Lunch

Thank you to our sponsors!

E2

Good for the Economy.
Good for the Environment.

CLEAN ENERGY FOR AMERICA
EDUCATION FUND

CLIMATE POWER

NRDC

NATIONAL WILDLIFE FEDERATION

Download the Summit Program

Discover funding for your next clean energy project

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- ☑ Filter by technology, stage, resource type
- ☑ Find incubators, technical assistance, and more

bit.ly/cleantechfunding

CLEAN ENERGY BUSINESS NETWORK

Federal Funding for Community-Based Clean Energy Initiatives

Rob Sandoli

Deputy Director

Integrated Strategies Office

U.S. Department of Energy

Resources

Interagency Work Group on Coal and Power Plant Communities (https://energycommunities.gov/)

- Includes sources of funding and technical assistance from across the Federal government
- Many resources a broadly available, not just for coal communities

DOE State and Local Solution Center (https://www.energy.gov/scep/slsc/about-state-and-local-solution-center)

- Targeted resource for local funding and technical assistance, as well as tools and events

World Resources Institute (https://cityrenewables.org/ffold)

- Searchable database of “America’s Federal Funding Opportunities and Resources for Decarbonization”
  - Not a U.S. government website

Diana Bauer

Deputy Director

Advanced Materials and Manufacturing Technologies Office (AMMTO)

U.S. Department of Energy

U.S. DEPARTMENT OF ENERGY

Office of ENERGY EFFICIENCY & RENEWABLE ENERGY

ADVANCED MATERIALS & MANUFACTURING TECHNOLOGIES OFFICE

Advanced Materials & Manufacturing Technologies Office (AMMTO)

Federal Funding for Community-Based Clean Energy Initiatives

Diana Bauer

June 25, 2024

About AMMTO

Mission

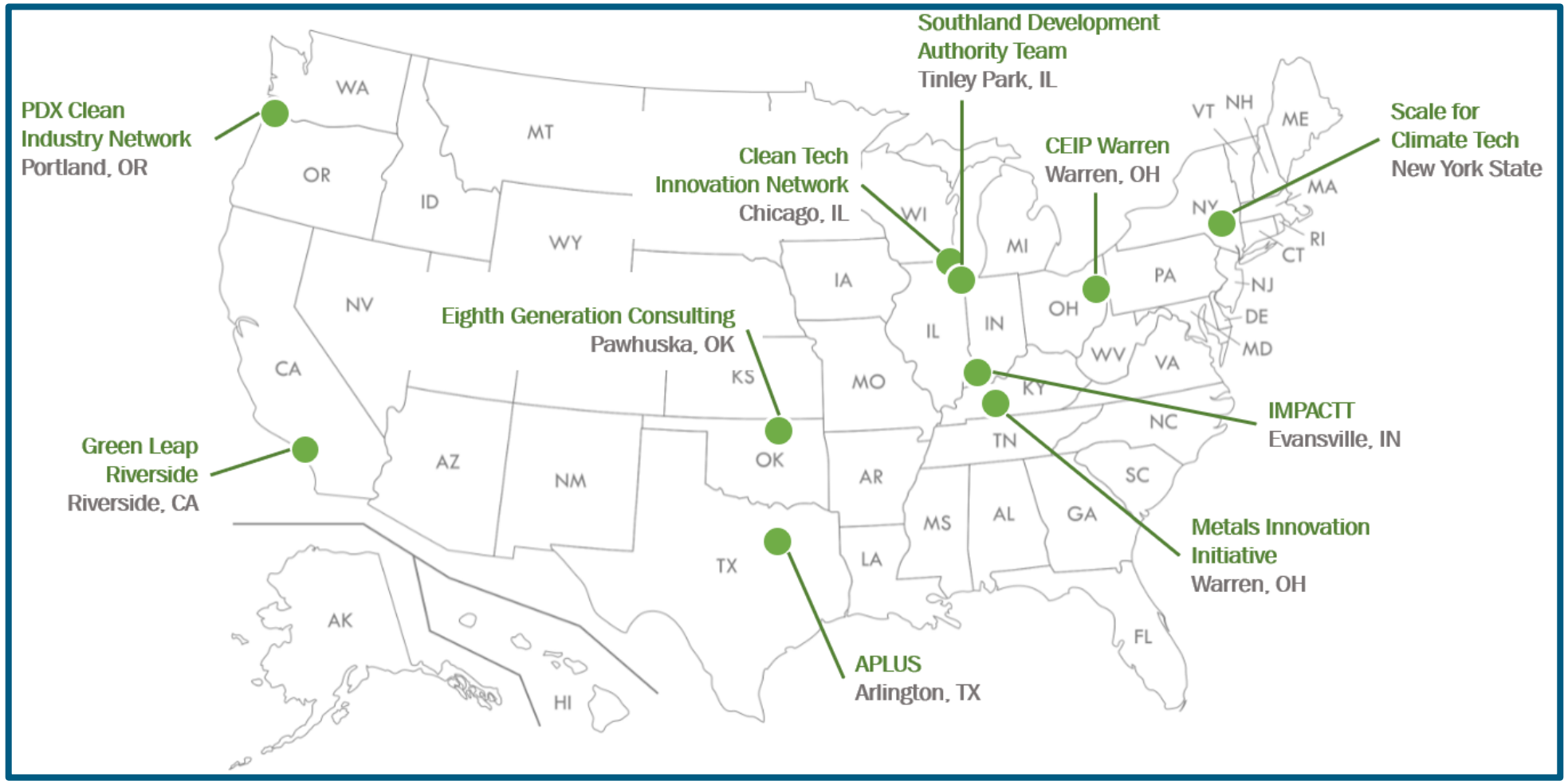
We inspire people and drive innovation to transform materials and manufacturing for America's energy future.

Vision

A globally competitive U.S. manufacturing sector that accelerates the adoption of innovative materials and manufacturing technologies in support of a clean, decarbonized economy.

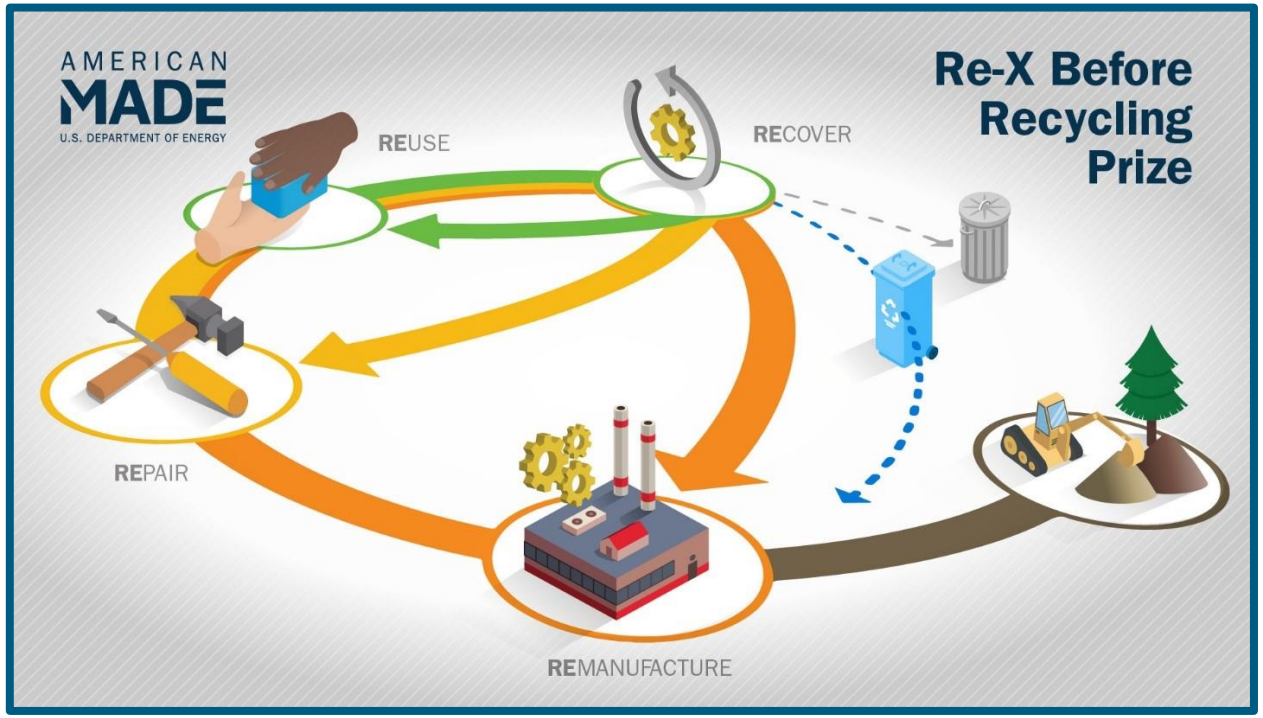
Manufacturing Ecosystem Track (CEI Prize)

Support communities and organizations that have been historically underserved and further the development of clean energy manufacturing innovation ecosystems.



Re-X Before Recycling Prize

PHASE 2 OPEN NOW



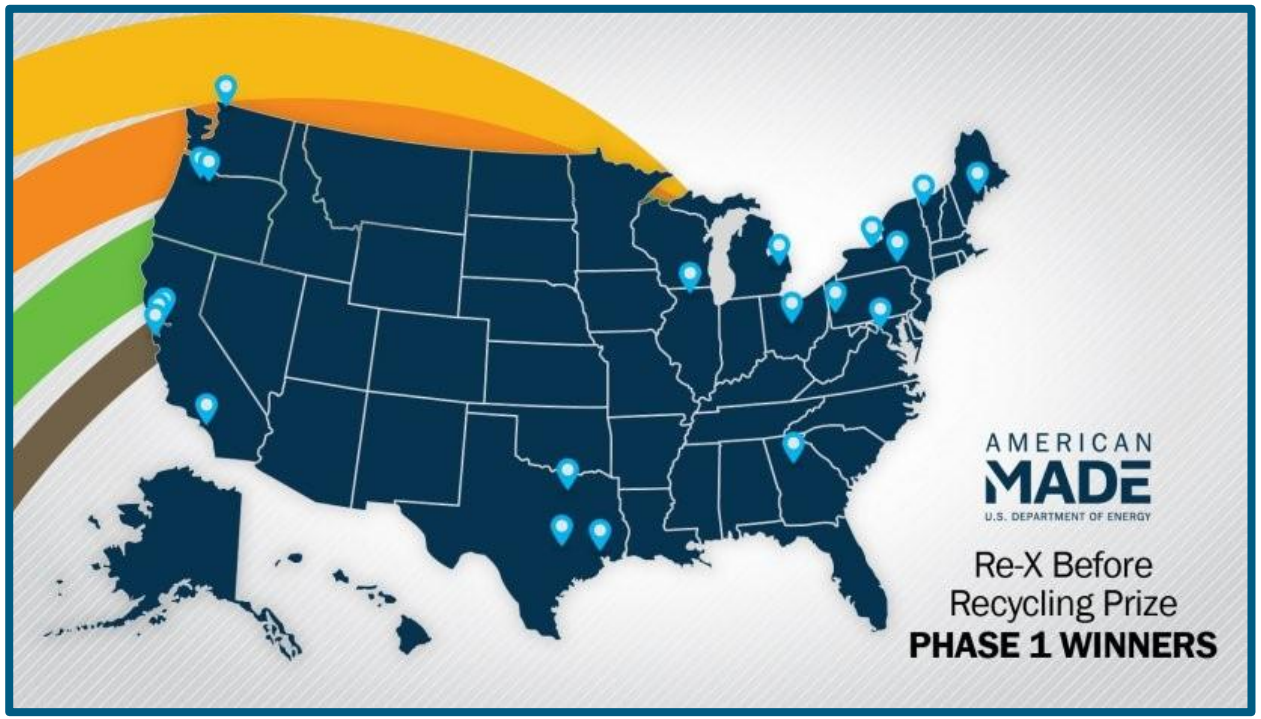
Focuses on extending the useful lifetimes of products or parts to reduce life cycle energy use and emissions

Increasing the recovery and reuse rate of end-of use products can deliver multiple benefits

- reduces embodied energy and carbon of manufactured goods,
- strengthens regional manufacturing supply chains,
- increases U.S. supply security
- reduces environmental burdens related to landfilling, incineration, and extraction

Phase 1 winning teams include those that plan to…

- use salvageable lumber from Georgia's film industry to mass produce nail-laminated panels for reuse in affordable housing projects,
- work to reroute surplus business materials to classrooms in Fort Worth, Texas, leveraging community partnerships so teachers have the supplies they need to provide free curriculum-enhancing experiences,
- expand a workspace-as-a-service model that remanufactures office furniture, establishing a hub-and-spoke network with Tribal nations across the United States.



Understanding Our Impact & Charting A Course

Impact Analysis of Materials and Manufacturing Innovation on Environmental Justice

The mining, separation, and production of critical minerals and materials and the recycling of electronic waste and plastics are processes that can cause harmful environmental justice impacts.

AMMTO is standing up Environmental Justice (EJ) Analysis for data identification, data collection, decision-making methodology development, and prototype tool development to facilitate EJ harm prevention or reduction in communities. The EJ analysis will be focused on the following AMMTO technical areas:

- Critical Minerals and Materials (CMM)
- Circular Economy Technologies and Systems (circularity).

Education and Workforce Development Strategy

Vision: A robust, diverse, and thriving workforce has the skills required to transform and accelerate the development and adoption of innovative materials and manufacturing technologies and drive a globally competitive, clean energy economy.

- **Inspire people to pursue and grow careers in advanced manufacturing, especially clean energy tech**
- **Prepare and equip the manufacturing workforce with the skills and support needed to deploy and advance technology**
- **Prepare and equip the RD&D workforce with the skills and support needed to develop and transform tech**
- **Grow the workforce and support workers and they navigate their careers and acquire KSAs**

Supporting Performers To Expand Community Benefits

Community Benefits Plans for the Advanced Materials and Manufacturing Technologies Office

Advanced Materials & Manufacturing Technologies Office

Advanced Materials & Manufacturing Technologies Office »

Community Benefits Plans for the Advanced Materials and Manufacturing Technologies Office

Are you submitting a U.S. Department of Energy (DOE) Advanced Materials and Manufacturing Technologies Office (AMMTO) funding application and looking for support as you build your community benefits plan (CBP)? If so, this resource page is designed for your assistance.

AMMTO encourages ambitious, socio-politically responsive projects that work alongside communities in meaningful ways. As such, this page is a resource for anyone seeking project support from AMMTO or seeking to strengthen the broader impacts of their proposals, whether or not they have a community benefits plan.

Let's connect and find ways to work together!

Office of
ENERGY EFFICIENCY & RENEWABLE ENERGY
ADVANCED MATERIALS & MANUFACTURING TECHNOLOGIES OFFICE







- **Chris Saldaña & Diana Bauer** (christopher.saldana@ee.doe.gov, diana.bauer@ee.doe.gov)
  - Strategic collaborations, consortia/stakeholder engagement, interagency coordination
- **Kate Peretti – Secure & Sustainable Materials PM** (kathryn.peretti@ee.doe.gov)
  - Circular economy, critical materials
- **Huijuan Dai – Next Generation Materials & Processes PM** (huijuan.dai@ee.doe.gov)
  - High performance materials (composites, metals, ceramics), additive manufacturing, smart manufacturing, high performance computing
- **Seema Somani– Energy Tech. Mfg. & Workforce PM** (seema.somani@ee.doe.gov)
  - Semiconductor manufacturing, power electronics, battery manufacturing, education and workforce development innovation, lab embedded entrepreneurship

Elke Hodson

Deputy Director for Technology Policy

Office of Policy,

U.S. Department of Energy

U.S. DEPARTMENT OF ENERGY | Office of Policy

Inflation Reduction Act Clean Energy Tax Incentives

Elke Hodson | Deputy Director for Technology Policy

Elective Pay Summary

Tax-exempt and governmental entities that do not owe income taxes can now receive a **payment equal to the full value of clean energy tax credits**.

Tax credits earned through Elective Pay **can be combined with DOE grants and loans** with some limitations.

Eligible entities must complete a **pre-filing registration** and then claim the credit by filing a tax return with the IRS after the project or property is placed in service.

Elective Pay – Cash for Clean Energy

Elective pay allows **tax-exempt and governmental entities to receive a cash payment** from the IRS for eligible clean energy investments.

Example: A local government invests $1,000,000 in tax-credit eligible solar, battery storage, and EV chargers at a community center.

Cash-back: Through elective pay, local government receives **a $300,000 cash payment from the IRS** if it qualifies for relevant 30% investment tax credits.

More Details

- IRS.gov/ElectivePay
- IRS Elective Pay FAQ
- CleanEnergy.gov/DirectPay
- Publication 5817-G (6-2023) (irs.gov)

Which tax credits are eligible?

12 of the Inflation Reduction Act clean energy tax credits are eligible for elective pay including:

- Investment tax credit (ITC) and production tax credit (PTC) and bonus credits for clean electricity
- Credit for clean commercial vehicles
- Credit for EV chargers installed in low-income or non-urban areas
- Manufacturing tax credits

See the full list of elective pay eligible credits in the Tax Credit Overview section or at: https://www.irs.gov/pub/irs-pdf/p5817g.pdf

Clean Electricity Investment Tax Credit Example

Tax credit bonuses can stack with the underlying tax credit creating significant opportunity for eligible projects.

Example: 1 MW community solar facility costing $1 million could earn a **70% tax credit** worth $700,000 if eligible for all applicable tax credit and bonuses

If it is owned by an applicable tax-exempt entity, this could be a **direct cash payment** from the IRS

Up to 70% total tax credit!

Low Income Communities Bonus 10-20% increase in ITC
Domestic Content Bonus 10% increase in ITC
Energy Communities Bonus 10% increase in ITC
Base ITC 30%* (*meets prevailing wage and apprenticeship criteria)

Where can I find more information?

Links and Websites

- IRS.gov/ElectivePay
- CleanEnergy.gov/DirectPay
- EnergyCommunities.gov/energy-community-tax-credit-bonus/
- Energy.gov/justice/low-income-communities-bonus-credit-program
- elke.marten@hq.doe.gov or IRATax@hq.doe.gov

Ted Toon

Senior Advisor

Greenhouse Gas Reduction Fund,

Environmental Protection Agency

GREENHOUSE GAS REDUCTION FUND

COMMUNITY ENERGY INNOVATION SUMMIT

JUNE 25, 2024

THE GREENHOUSE GAS REDUCTION FUND IS A HISTORIC INVESTMENT IN AMERICAN CLEAN ENERGY FINANCE

History of the Greenhouse Gas Reduction Fund Program

The Greenhouse Gas Reduction Fund is a historic investment to achieve the United States' climate goals

- **President Biden's Inflation Reduction Act authorized EPA** to implement the Greenhouse Gas Reduction Fund
- **The Greenhouse Gas Reduction Fund (GGRF) is a historic $27 billion investment** to combat the climate crisis by mobilizing financing for greenhouse gas- and air pollution-reducing projects in communities across the country
- **This bold investment will improve health outcomes and deliver lower energy costs for Americans** while ensuring our country's economic competitiveness and energy independence

EPA prioritized robust stakeholder engagement during program implementation

- **Almost 400 public written comments** submitted to the EPA in response to a public Request for Information
- **Over 12 hours of national public listening sessions with over 2,200 registrants** and more than a dozen targeted stakeholder roundtables between October 2022 and May 2023
- **Nearly 150 additional written comments** received in response to the April 2023 Implementation Framework

EPA created three distinct and complementary grant competitions to catalyze American clean investment

- **The three Greenhouse Gas Reduction Fund program objectives** include: 1) reducing greenhouse gas emissions and air pollution; 2) providing benefits to American communities, particularly low-income and disadvantaged communities; and 3) mobilizing financing and private capital to transform markets
- **The three Greenhouse Gas Reduction Fund grant competitions** will scale deployment of clean technologies nationally, build community clean financing capacity locally, and spur adoption of clean distributed solar energy
- **GGRF has selected 68 applicants** to serve as intermediaries to administer the three GGRF across the three programs.

TO ACHIEVE THESE THREE OBJECTIVES, THE GGRF PROGRAM RAN THREE GRANT COMPETITIONS

Overview of the three Greenhouse Gas Reduction Fund programs

	National Clean Investment Fund	Clean Communities Investment Accelerator	Solar for All
Competition description	**Fund 2-3 national nonprofits to partner with private capital providers** to deliver financing at scale catalyzing tens of thousands of clean technology projects	**Fund hub nonprofits to rapidly build clean financing capacity of networks of community lenders** to finance pollution-reducing projects in low-income & disadvantaged communities	**Support states, territories, Tribal & municipal governments, & nonprofits** to expand access to solar for low-income & disadvantaged communities by priming markets for investment
Number and type of grantees	**3** national nonprofits	**5** hub nonprofits	**60** states, Tribal & municipal governments, & eligible non-profit entities
Funding available	**Nearly $14B**	**$6B**	**$7B**
Low-Income and Disadvantaged Communities focus	As part of the Justice40 Initiative, **at least 40%** of the benefits of NCIF must go to low-income and disadvantaged communities.	By statute, **100% of this program** must go to low-income and disadvantaged communities.	By statute, **100% of this program** must go to low-income and disadvantaged communities.

NCIF AND CCIA PRIORITY PROJECT CATEGORIES: CCIA IS RESTRICTED TO THESE, NCIF MUST INCLUDE THESE

A

Distributed Energy Generation and Storage

Projects, activities, and technologies that deploy small-scale power generation and/or storage technologies (typically from 1 kW to 10,000 kW), plus enabling infrastructure necessary for deployment of such generation and/or storage technologies. For this competition, the projects, activities, and technologies must support *carbon pollution-free electricity,* which is electrical energy produced from resources that generate no carbon emissions, consistent with the definition specified in Executive Order 14057 *(Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability).*

B

Net-Zero Emissions Buildings

Projects, activities, and technologies that either (1) retrofit an existing building, making a substantial contribution to that building being a net-zero emissions building and as part of a plan for that building achieving zero-over-time, or (2) construct a new net-zero emissions building in a low-income and disadvantaged community. Net-zero emissions buildings are defined in Executive Order 14057 Implementing Instructions…and include residential (e.g., 1- to 4-family homes, manufactured homes, multifamily housing), commercial, industrial, and other buildings.

C

Zero-Emissions Transportation

Projects, activities, and technologies that deploy zero-emissions transportation modes, plus enabling infrastructure necessary for zero-emissions transportation modes—especially in communities that are overburdened by existing diesel pollution, particulate matter concentration, and degraded air quality. Zero-emissions transportation should be consistent with the zero-emissions transportation decarbonization strategies in The U.S. National Blueprint for Transportation Decarbonization.

Applications are expected to either cover each of the priority project categories in their investment strategies or provide a rationale for why any of the priority project categories are not covered; any application with such a rationale will not be penalized and will instead be awarded points based on the strength of the rationale. ***Note that any project that meets the requirements of a qualified project is eligible for support under this competition.***

FOR NCIF AND CCIA, APPLICATIONS WILL PROPOSE FINANCIAL ASSISTANCE TO QUALIFIED PROJECTS (SEE NOFOS)

Financial assistance…

- Financial assistance constitutes financial products, including:
  - Debt (such as loans, partially forgivable loans, forgivable loans, zero-interest and below-market interest loans, loans paired with interest rate buydowns, secured and unsecured loans, lines of credit, subordinated debt, warehouse lending, loan purchasing programs, and other debt instruments)
  - Equity (such as equity project finance investments, private equity investments, and other equity instruments)
  - Hybrids (such as mezzanine debt, preferred equity, and other hybrid instruments)
  - Credit enhancements (such as loan guarantees, loan guarantee funds, loan loss reserves, and other credit enhancement instruments)
- Subgrants are not eligible as financial assistance to qualified projects
- Expenditures for financial assistance will be in the form of *Subawards*, *Participant support costs*, and acquisitions of *Intangible property* for a financial assistance purpose
- Grantees may provide financial assistance to various types of counterparties, which include (as examples) project sponsors as well as community lenders and other similar institutions

…to qualified projects

The project must meet all requirements listed below at the time of financing to be eligible as a "qualified project."

a. The project, activity, or technology **would reduce or avoid greenhouse gas emissions,** consistent with the climate goals of the United States to reduce greenhouse gas emissions 50-52 percent below 2005 levels in 2030, reach 50 percent zero-emission vehicles share of all new passenger cars and light trucks sold in 2030, achieve a carbon pollution-free electricity sector by 2035, and achieve net-zero emissions by no later than 2050. The project, activity, or technology may reduce or avoid such emissions through its own performance or through assisting communities in their efforts to deploy projects, activities, or technologies that reduce or avoid such emissions.

b. The project, activity, or technology **would reduce or avoid emissions of other air pollutants.** The project, activity, or technology may reduce or avoid such emissions through its own performance or through assisting communities in their efforts to deploy projects, activities, or technologies that reduce or avoid such emissions.

c. The project, activity, or technology would **deliver additional benefits** (i.e., in addition to reducing or avoiding emissions of greenhouse gases and other air pollutants) to American communities within one or more of the following four categories: clean energy and energy efficiency; clean transportation; affordable and sustainable housing; and training and workforce development.

d. The project, activity, or technology **may not have otherwise been financed.**

e. The project, activity, or technology **would mobilize private capital.**

f. The project, activity, or technology **would support only commercial technologies,** defined as technologies that have been deployed for commercial purposes at least three times for a period of at least five years each in the United States for the same general purpose as the project, activity, or technology.

DRAFT // PRELIMINARY // DELIBERATIVE

NEARLY A MILLION HOUSEHOLDS WILL BENEFIT FROM AFFORDABLE, CLEAN ENERGY, FUNDED BY SOLAR FOR ALL

EPA estimates that the 60 Solar for All awardees will enable over 900,000 households in low-income and disadvantaged communities to deploy and benefit from distributed solar energy, resulting in…

30+ million metric tons of CO_2e avoided over 25 years, from 4+ GW of solar energy capacity deployed or unlocked for low-income and disadvantaged communities over the program[1]

$350+ million annual savings for overburdened households for their electricity bills; and all programs committed to delivering at least 20% household savings to beneficiaries

~25 states and territories will have access to residential solar programs for low-income and disadvantaged communities for the first time[2]

Impact figures estimated from data provided in selected grant applications and funding estimates

1. CO_2e figure calculated from applicant reported solar capacity estimates with EPA's AVoided Emissions and geneRation Tool (AVERT) and the National Renewable Energy Lab's Cambrium data set
2. States and territories figure based on survey of previous low- and medium-income residential and community solar programs; states/territories with existing programs defined as any existing or previous state-, utility-, or CDFI-led program across a share of of the state/territory population

KEY TAKEAWAYS, GREENHOUSE GAS REDUCTION FUND:

- GGRF is three distinct but complementary programs;
- Funds will begin flowing via selected intermediaries by this summer;
- $27b will be leveraged to expand on the work;
- NCIF and CCIA are primarily loan programs, not grant programs; SFA will vary;
- All three programs have a Technical Assistance component;
- Significant LIDAC focus across the 3 programs –more than 70% of the $27b;
- Buildings and residential properties make up a majority of the 3 programs;

GREENHOUSE GAS REDUCTION FUND

EPA.GOV/GREENHOUSE-GAS-REDUCTION-FUND

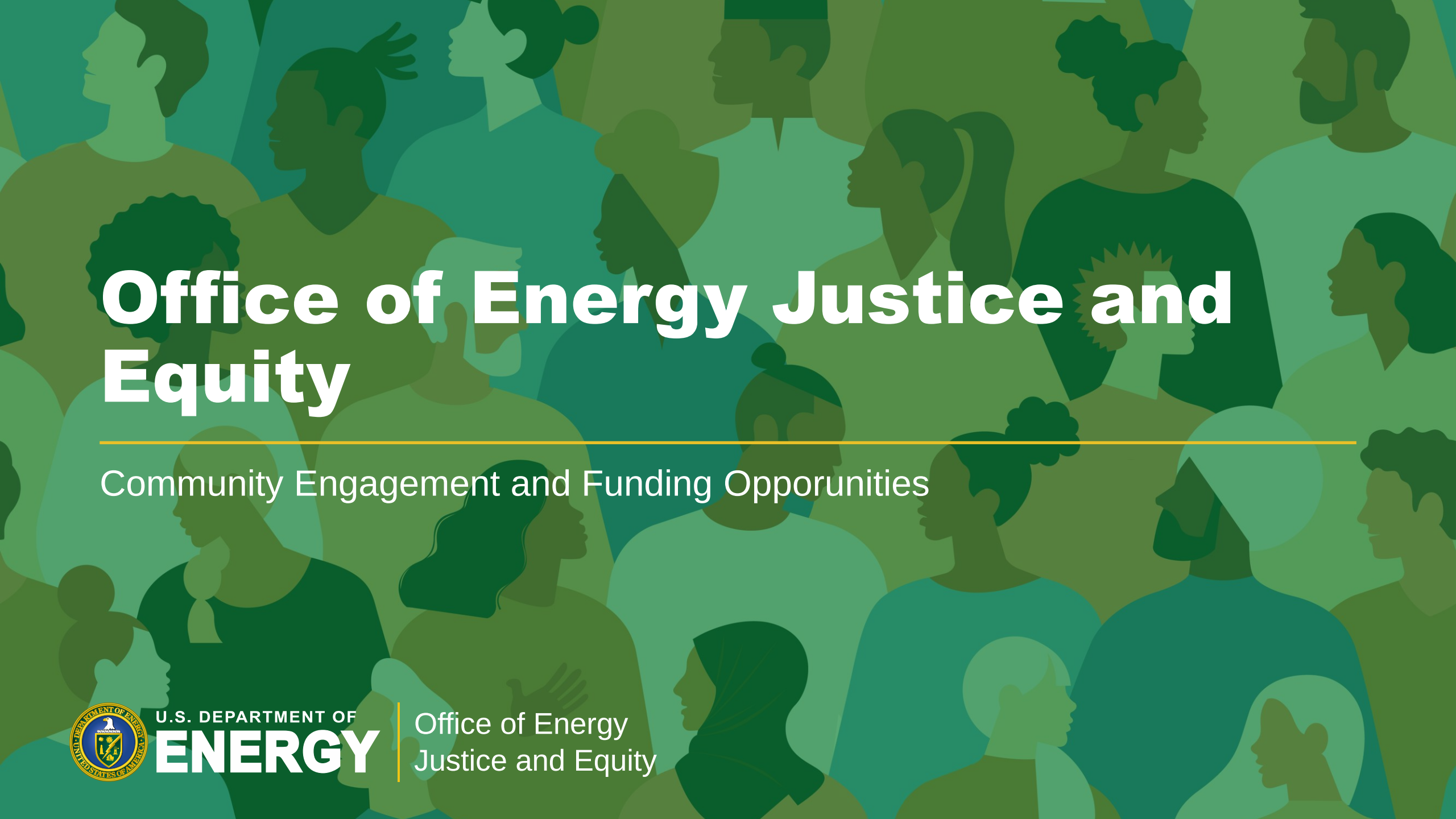
TED TOON, SENIOR ADVISOR, TOON.THEODORE@EPA.GOV

Lauren Ross

Deputy Director for Energy Justice

Office of Energy Justice and Equity,

U.S. Department of Energy



Office of Energy Justice and Equity

Community Engagement and Funding Opporunities

U.S. DEPARTMENT OF ENERGY | Office of Energy Justice and Equity

Office of Energy Justice and Equity

The Office of Energy Justice and Equity develops and executes Department-wide policies to implement applicable legislation and Executive Orders that strengthen diversity and inclusion goals affecting equal employment opportunities, small and disadvantaged businesses, minority educational institutions, and historically under-represented communities.

Our mission is to identify and implement ways of ensuring that everyone is afforded an opportunity to participate fully in the Department of Energy's programs, opportunities, and resources.

Ensuring Community Benefits in DOE Funding

- Meet or exceed the objectives of the Justice40 initiative that 40% of benefits accrue to disadvantaged communities
- Equitable access to wealth building opportunities
- Create good-paying jobs to attract and retain skilled workers and ensure workers have a voice.
- Meaningful engagement with community and labor partners leading to formal agreements

Regional Energy Democracy Initiative (REDI)

The **Regional Energy Democracy Initiative (REDI)** is a DOE initiative to bring together public, private, academic, and philanthropic partners into collaborative regional consortia across the U.S. to:

- **Identify** strategic community investments to leverage DOE dollars;
- **Increase** regional coordination, information sharing, and planning activities to inform the delivery of community benefit commitments;
- **Evaluate** implementation of CBPs and DOE investments impact in the region; and
- **Build** community capacity for CBP implementation and energy democracy.

REDI Overview

Help communities better plan & more meaningfully engage in the development of community benefits & commitments

- **Provide expertise, training, and technical resources** to community-based organizations and community advisory councils to strengthen & support community benefits and commitments.
- Bring regional and local stakeholders together to **coordinate a regional benefits strategy** that will inform overall benefits and commitments.
- **Track and monitor** DOE investments and community benefit commitments in the region.
- **Connect** communities with external funding opportunities and resources (public & private) to further advance community-identified investments.

REDI TIMELINE

Timeframe	Task
May 22, 2024	REDI OPPORTUNITY OPENS!
June 6, 2024	INFORMATIONAL WEBINAR / OBJECTIVE STRATEGIC SESSION (OSS)
Mid July, 2024	IN PERSON OBJECTIVE STRATEGIC SESSIONS Regional opportunities for potential performers to learn more about REDI
July 18, 2024	INFORMATION OFFICE HOURS SESSION ON ENERGYWERX
July 31, 2024	SUBMISSION DEADLINE
September 2024	REGIONAL CONSORTIUM SELECTED DOE evaluates strategy and action plans of regional consortia.
Early October 2024	KICKOFF EVENT IN GULF SOUTH
October 2024 to 2025	Regional consortia develop strategy and action plans to achieve REDI objectives and sustain work in Gulf South region

Low-Income Communities Bonus Credit Program (§48(e))

Supporting the Biden-Harris Administration's Investing in America agenda, the **Low-Income Communities Bonus Credit Program (§48(e))** promotes cost-saving clean energy investments

- in low-income communities,
- on Indian land,
- as part of affordable housing developments,
- and benefitting low-income households.

The bonus credit provides a **10 or 20 percentage point increase to the investment tax credit** for **qualified solar and wind energy facilities**.

DOE's Office of Energy Justice and Equity is administering the program in partnership with the U.S. Department of the Treasury and the IRS.

DOE is accepting applications!
Until **June 27, 2024**, all applications will be considered submitted at the same time.

Visit the Landing Page to learn more and apply:
www.energy.gov/justice/low-income-communities-bonus-credit-program

Questions? Contact the DOE Support Desk:
1 (888) 415-0131
EJBonusSupport@hq.doe.gov

FACES

Faculty-Applied Clean Energy Sciences

Program Video: https://www.youtube.com/watch?v=n-uciPXQG6k

$1.5 Million Invested into MSI STEM Faculty

Thank you!

U.S. DEPARTMENT OF ENERGY | Office of Energy Justice and Equity

Michael Forrester

Assistant Director of Partnerships

Office of State and Community Energy Programs (SCEP),

U.S. Department of Energy

SCEP
STATE & COMMUNITY ENERGY PROGRAMS

Opportunities with SCEP

Michael Forrester, Senior Advisor for SCEP

State and Community Energy Program Office (SCEP)

01 WAP

Weatherization Assistance Program

Helps **reduce energy burden** in **low-income households** in every county, state, D.C., and the five U.S. territories. Since 1976, more than **7 million low-income residences** have been weatherized through WAP, reducing energy bills by **$250 to $450 annually**. WAP supports approx. **8,500 jobs** and provides weatherization services to approx. **35,000 homes every year** w/DOE funds.

02 SEP

State Energy Program

Provides **formula funding** and technical assistance to 50 states, 5 U.S. territories, and DC to enhance energy security, **advance state-led energy initiatives**, and increase energy affordability. SEP funds numerous state-led initiatives and programs that generate substantial energy and cost savings, **moving states closer towards climate and clean energy goals**.

03 CEP

Community Energy Programs

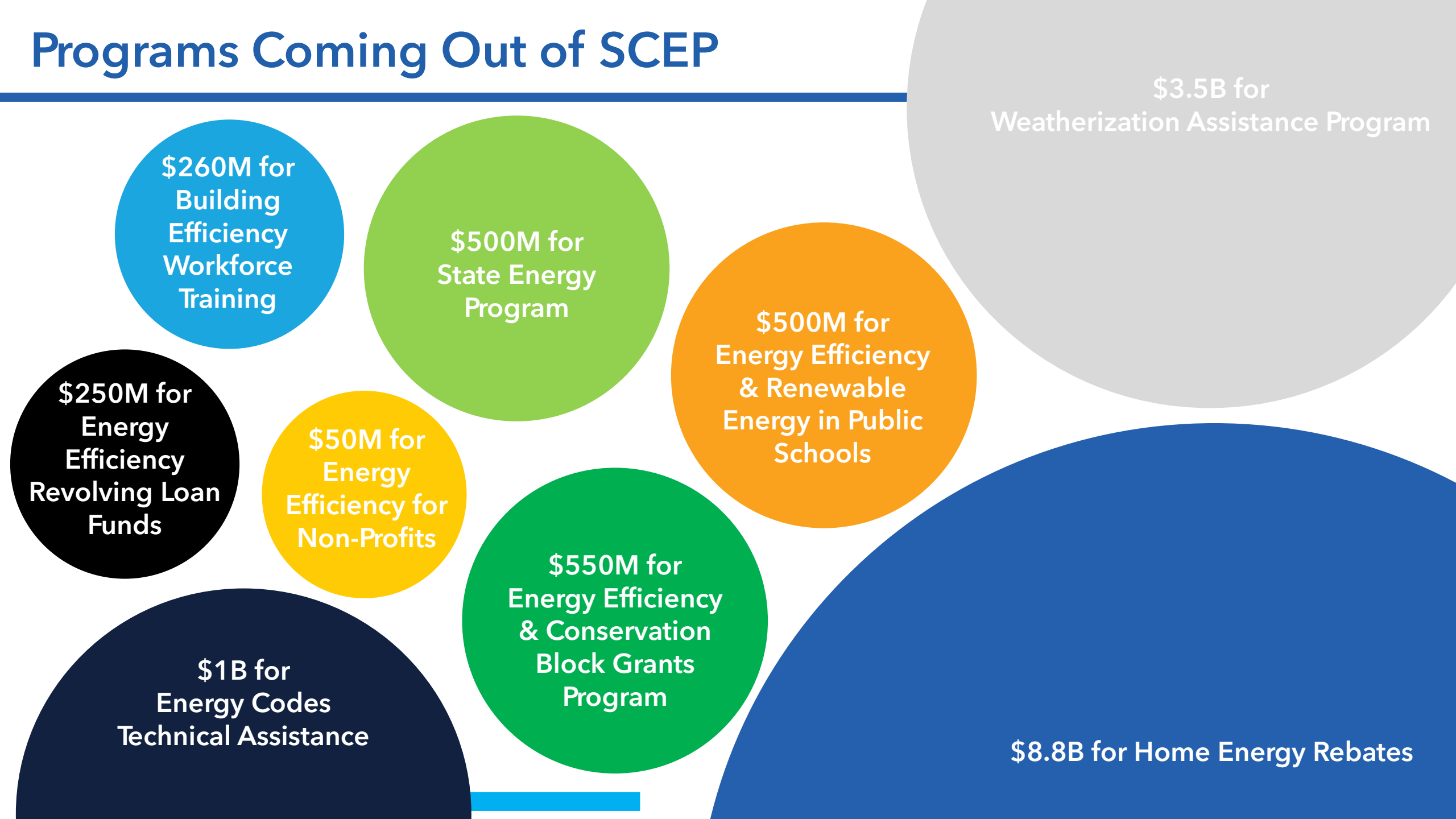
Works with local and tribal governments, public schools, nonprofit organizations, workforce development groups, and other community-serving entities by acting as a front door for federal support and resources. CEP manages multiple active grant programs, including the EECBG, LGEP, EFG, workforce development and training grants, and public school and nonprofit funding programs.

04 TAP

Technical Assistance Partnerships

Serves at the nexus of state and local governments to catalyze lead-by-example programs by **developing tools and solutions to barriers facing state and local governments**, convening and creating peer exchanges to showcase public-sector leadership and effective public-private partnerships, and providing information from leading technical experts.

Programs Coming Out of SCEP



Eligible state, local, and Tribal governments can now apply for $430M in funding from the Energy Efficiency and Conservation Block Grant (EECBG) Program!

Eligible entities can use flexible EECBG Program funding for projects and programs that

Cut Carbon Emissions

Improve Energy Efficiency

Reduce Energy Use

SCEP
STATE & COMMUNITY ENERGY PROGRAMS

States can apply for EECBG Program formula funding through July 2023.
Local governments and Tribes can apply through January 2024.

Energy Future Grants: Place-Based Innovation

Teams (e.g., city-city, city-state, county-tribes) develop innovative, deployment-based strategies inclusive of transportation, buildings, and power sectors.

Program Information

- FOA: Fall 2024
- Website: https://www.energy.gov/scep/energy-future-grants

$27M **Competitive FOA** to help scale local strategies that drive demand for affordable clean energy

Local, states, and tribal governments partner with community organizations, utilities, academia and NGOs.

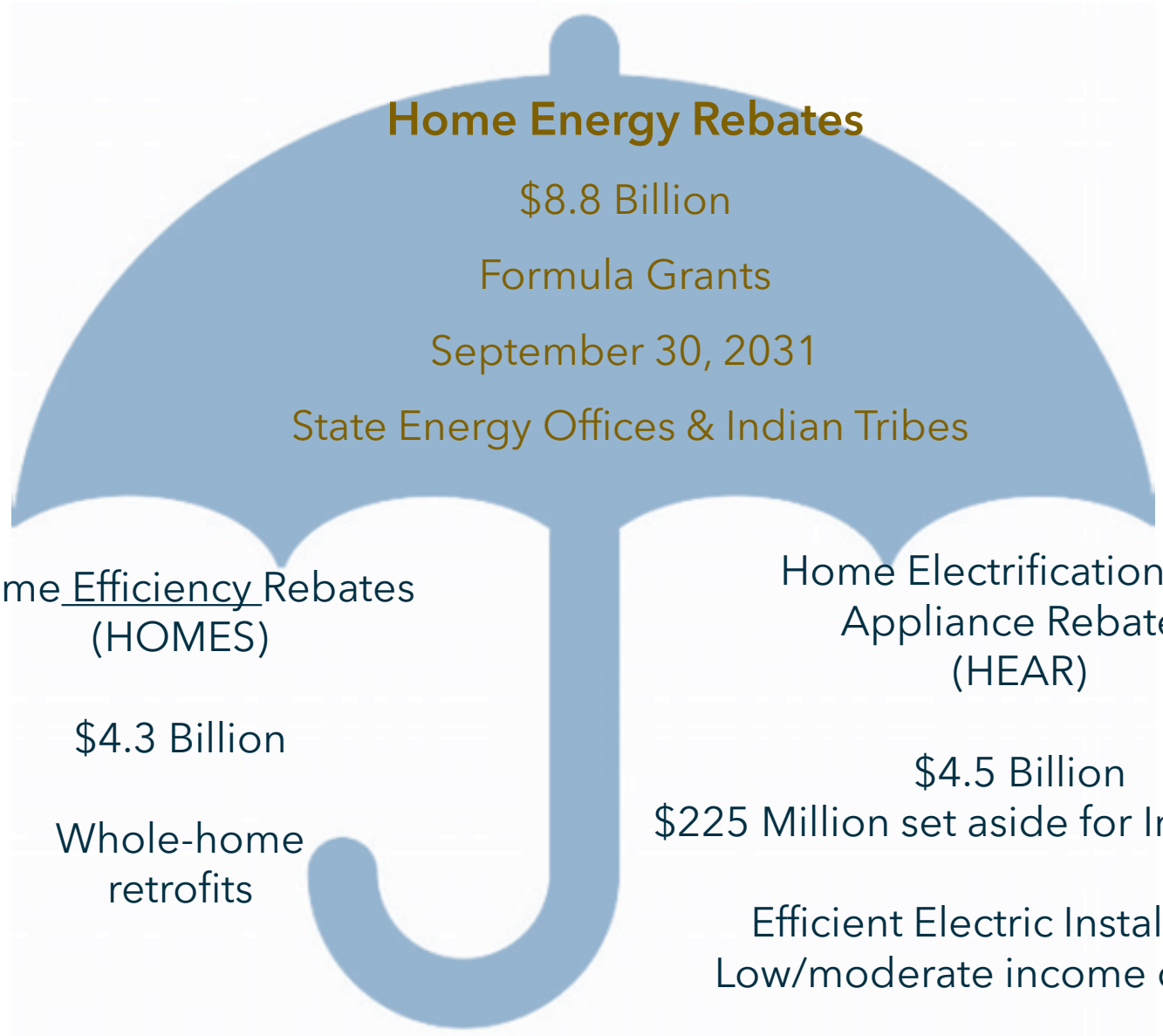
Multi-tiered awards with 2nd round of funding for subset of awardees that make the most progress.

Technical assistance provides analytical and team support to scale innovative solutions.

BIL and IRA Energy Efficiency Workforce Development Programs

	Statute	Total Appropriations & Availability	Allocation of Funds	Building Segment Served
State Based Energy Efficiency Contractor Training Grants	IRA Sec. 50123	$200,000,000 Until September 30, 2031	**State Energy Offices**	Residential
Energy Auditor Training Program	BIL Sec. 40503	$40,000,000 Until Fiscal Year 2026	**State Energy Offices**	Residential, Commercial
Building Training and Assessment Centers Program	BIL Sec. 40512	$10,000,000 Until expended	**Institutions of higher education**	Commercial, Institutional
Career Skills Training Program	BIL Sec. 40513	$10,000,000 Until expended	**Nonprofits**	All buildings

Home Efficiency & Electrification Rebates



Home Energy Rebates

$8.8 Billion

Formula Grants

September 30, 2031

State Energy Offices & Indian Tribes

Home Efficiency Rebates (HOMES)

$4.3 Billion

Whole-home retrofits

Home Electrification and Appliance Rebates (HEAR)

$4.5 Billion
$225 Million set aside for Indian Tribes

Efficient Electric Installations
Low/moderate income qualified

Eligible to Single Family and Multi Family Homes

Payments increase for low and moderate Income

Low Income – less than 80% Area Median Income

Moderate Income – 80-150% Area Median Income

Prohibition on Combining with other federal rebates

Stay Connected!

Additional Information on Incentives:
www.energy.gov/save

US EPA Energy Star Rebate/Incentive Finder:
www.energystar.gov

Stay up to date by visiting our Home Energy Rebate Website:
https://www.energy.gov/scep/home-energy-rebate-program.

Contact me at Michael.Forrester@hq.doe.gov

Federal Policy Panel Discussion

Moderator:
Rob Sandoli
Integrated Strategies Office, U.S. DOE

Lauren Ross
Office of Energy Justice and Equity, U.S. DOE

Michael Forrester
Office of State and Community Energy Programs, U.S. DOE

Elke Hodson
Office of Policy, U.S. DOE

Ted Toon
Greenhouse Gas Reduction Fund, U.S. EPA

Diana Bauer
Advanced Materials and Manufacturing Technologies Office, U.S. DOE

Coffee Break

2:45 – 3:15 pm

Stakeholder Roundtables

- *Goal:*
  - **Share knowledge and resources** and **bridge partnerships** to catalyze **community-driven climate solutions** and foster **a just, diverse, equitable, and inclusive clean energy economy**

- *Structure:*
  - Each table has an assigned moderator
  - Table 6: Special topic on CBPs/CBAs
  - Individual brainstorming on sticky notes, then come together for discussion.
  - Switch tables at 45 minutes.
  - CEBN will distill some major themes in follow-up notes and explore further in future events in 2024.


Existing Resources
Challenges or Barriers
Inclusive, community-driven climate solutions
Additional Needs
Solutions or Opportunities

Award Ceremony

Susan Hamm

Director for Integrated Strategies
Office of Energy Efficiency
and Renewable Energy,
U.S. Department of Energy

GreenSynergy

$25,000 Supplemental Award Winner

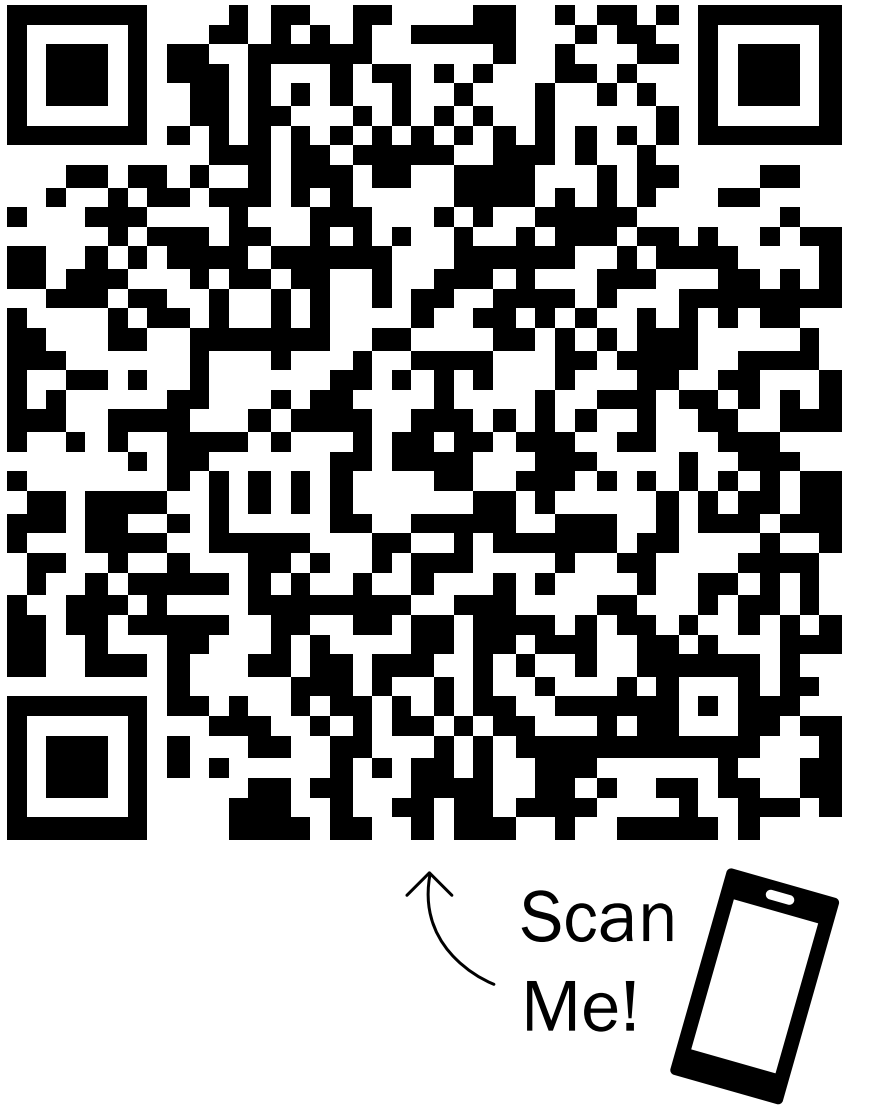
Georgia Tech Zero Energy Collaborations

$30,000 Supplemental Award Winner

Greener CASA

$45,000 Supplemental Award Winner

Help us improve future events by filling out this brief feedback form.



Or visit *surveymonkey.com/r/CEI-Summit*

Thanks for joining us!