

Meeting Minutes

August 6, 2024

GWAC Members

Ron Bernstein, GWAC Chair and President,
RBCG, LLC

Ron Ambrosio, Independent Energy
Transformation Professional, Acting Chair

Kay Aikin, Founder, CPO, Dynamic
Grid/Introspective Systems

Andrew Bordine, Sr. Practice Manager, Grid
Automation, Actalent

Shawn Chandler, Director, Guidehouse

Marc Costa, Dir. Policy Planning, the Energy
Coalition

David Forfia, Principal Consultant, Utilicast

Lorenzo Kristov, Principal, Electric System
Policy, Structure, Market Design

Mark Ortiz, Lead Architect, Dist. Energy Sys.,
Schneider Electric

Farrokh Rahimi, Executive Vice President, Open
Access Technology International, Inc.

Aaron Snyder, Dir. of Grid Technology
Consulting, EnerNex

Leonard Tillman, Partner, Balch & Bingham, LLP

GWAC Associates & Emeritus

Rahul Bahadur, Assoc. GWAC

Ron Cunningham, Emeritus

Mark Knight, Emeritus

Ron Melton, Emeritus Administrator

Ken Wacks, Emeritus

GWAC Guest Speaker

Chris Castro, DOE

GWAC Friends

Larissa Affolabi

Toby Considine

Larisa Dobriansky

Don Hammerstrom

Anthony James

Jeff Katz

Prabhu Kumar Pothraju

Alaa Mahjoub

Steffi Muhanji

James Orenstein

Lily Roberts

Jeremy Roberts, Green Button Alliance

Andrew Shi

Mark Siira

Tim Schoechle

Jiri Skopek

David Wollman

PNNL Support

Jaime Kolln, PNNL GWAC Administrator

Susie McGuire, GWAC Coordinator

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GWAC Quorum reached at 10:04 Pacific time.

Ron Ambrosio is acting for a portion of the meeting as Chair Emeritus in Ron Bernstein's absence.

A formal GWAC invitation letter for one of Kay's Symposium panelists is needed. Kay will send an email with the details to Susie. (complete)

Ron Bernstein started the meeting at 10:03 am. At 10:06 Quorum was reached

Jaime Kolln noted that today's GWAC meeting is scheduled a bit earlier in the month than usual.

Jaime noted that the GWAC is a public meeting and that to facilitate note taking and recording of the guest speaker, they will be recorded.



Agenda

Call to Order and Roll Call

- Welcome

GWAC Administrative Business

- Minutes
- Upcoming events
- GWAC Accomplishments
- Action Items

Guest Speaker – Chris Castro, Office of State and Community Energy Programs (SCEP), US DOE

Future Activities

- GWAC Strategic Outreach Plan
- Planning 2024 GWAC Conference

Work Product Status Reports

- Working Party Status Update
 - Next Big Thing Slide Deck
 - Grid Future State White Paper
 - Grid Arch for Regulators White Paper
 - Applying Grid Architecture Concepts to Bridge Back from the Future Grid
 - Grid Architecture Concept Model for Transportation Electrification

- Liaison Reports

New Business

Jaime mentioned today's Guest Speaker, Chris Castro with DOE Office of State and Community Energy Program.

After the speaker we will go over GWAC Symposium planning.

Liaison reports will be near the end of the meeting.

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The July minutes were sent this morning, everyone agreed to review them at the F2F. Ron B. has read them and thought they looked good.

GRIDWISE Architecture Council **Conferences and Events**

Date	Event	Location	Attend	Speaker	Topic
June 22-26, 2024	ASHRAE Annual Conference	Indianapolis	Ron Bernstein		
July 21 – 25, 2024	IEEE PES General Meeting	Seattle, WA	Jaime Kolln, Farrokh Rahimi, Ron Melton, Ahlmahz Negash		
August 4 - 9, 2024	ACEEE 2024 Summer Study	Pacific Grove, CA		Marc Costa	Energy Efficiency in Buildings
Sept 9 - 12, 2024	RE+ Anaheim, CA & GWAC Symposium	Anaheim, CA	GWAC		
Oct. 1 – 2, 2024	Grid FWD 2024	Banff, Canada	Jaime Kolln, Ahlmahz Negash		
Oct 15-16, 2024	Design Lights Consortium Summit	Milwaukee, WI	Ron Bernstein		
Oct. 16, 2024	Smart Energy Consumer Collaborative	Reston, VA	Ken Wacks, Jeremy Roberts		
Jan. 21 – 23, 2025	IEEE PES Grid Edge Technologies Conf	San Diego, CA	Kay Aikin, Jaime Kolln, Farrokh Rahimi		
Feb. 10 – 12, 2025	AHR Expo and ASHRAE Winter Conf	Orlando FL	Ron Bernstein	Ron Bernstein	Grid Arch/Future States GWAC F2F proposed
March 24-27, 2025	DistribuTECH	Dallas, TX	Forfia, Rahimi		
April 14-17, 2025	IEEE Energy & Policy Forum	Washington?			Formerly ISGT

Farrokh gave an overview of the IEEE General Meeting held in Seattle that both he and Ron Melton attended. He said several people were affected by the flight problems due to the Crowd Strike issue.

Jaime worked on the Standards committee 21 which is part of 2030.5. He worked with Mark Siira.

The ACEE summer meeting is being held this week and Marc Costa is there.

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GRIDWISE Architecture Council

GWAC Accomplishments

- 2024 – [A Practical Introduction to Common Grid Architecture Techniques \(NEW\)](#)
- 2023 – [Current GWAC Speaker Video Presentations](#)
- 2015-2022 – [Annual Transactive Energy Systems Conference](#) (since 2019, IEEE PES partnership event)
- 2022 – [Blog Post #5 – Decarbonization efforts of three Northern California CCA's - Bahadur](#)
- 2022 – [Blog Post #4 - Decarbonization of the Electric Grid – Bernstein](#)
- 2022 – [Blog Post #3 - Energy Equity in Decarbonization - Negash](#)
- 2022 – [Blog Post #2 - Grid Infrastructure Challenges In A Decarbonized World – Aikin](#)
- 2021 – [Blog Post #1 - Decarbonization – The Pattern that Has Emerged - McCafferty, McCormick, Forfia](#)
- 2020 – [Transactive Energy FAQ](#)
- 2020 – [Smart Buildings as a Transactive Energy Hub](#)
- 2020 – [Decision Maker's Interoperability Checklist v.1.6](#)
- 2020 – [Reliability and Resilience Considerations for TE Systems](#)
- 2019 - [GridWise® Transactive Energy Framework V1.1](#)
- 2018 - [TE Systems Research, Development and Deployment Roadmap](#)
- 2016 - [TE Decision Makers Checklist](#)



GWAC YouTube Channel



Ron Cunningham and Jaime Kolln are working on Grid 3.0 Future states in final stages. They will have the GWAC will do a final review.

Action: Send the final draft of Grid Future States to GWAC for review.

Jaime reminded the group that the white paper that Seemita led, “A practical Introduction to Common Grid Architecture Techniques” is now on the list of GWAC Accomplishments as a recent publication.

These two docs should probably go out for pre-study for the Symposium.

Jaime will ask Seemita if she has a slide for her paper that he can present at the Symposium and likewise he will ask Ron Cunningham for a slide for the Future States paper.

Action: Ask Seemita for a slide on the white paper that she led and prepare that and the Future States paper to be sent to Symposium attendees prior to the meeting.

Jaime reviewed the list of GWAC Accomplishments and noted that the Context setting Framework, constitution is still relevant.

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Action Items

- Send speaker ideas to Jaime Kolln and Ron Bernstein and copy Susie McGuire.
 - **LinkedIn post highlighting Mission/Vision Update**
 - Add an "About the Council" slide to template
 - Make slide deck templates available to GWAC members.
- Website updates
 - Continue to add video presentations including speakers to GWAC database bureau post on the website.
 - Feedback requested on format and errors

Once the Mission and Vision update is posted to the GWAC website we will do a Linked In post and Jaime will create a slide for the Symposium on this.

Jaime mentioned that Susie had sent out the PowerPoint templates to the GWAC.

Farrokh asked if the 20th Anniversary logo needed to be included on the slide.

Ron B. said the 20th logo takes up room on the slide. Maybe just including it on the intro slide would be enough.

Jaime said Symposium panel leaders are welcome to use the 20th logo if they would like to. Panel leaders can decide what works for them.

Jaime also said some speakers may not want to use the GWAC Template and they don't have to use it. Ron Bernstein agreed. Jaime said that the Panel Speakers may use the GWAC template if they choose but they are not required to.

Ron B. put the template in the chat.

Jaime introduced Chris Castro with DOE Office of State and Community Energy Program (SCE).

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Guest Speaker

Chris Castro, US DOE, Office of State and Community Energy Program, (SCEP)



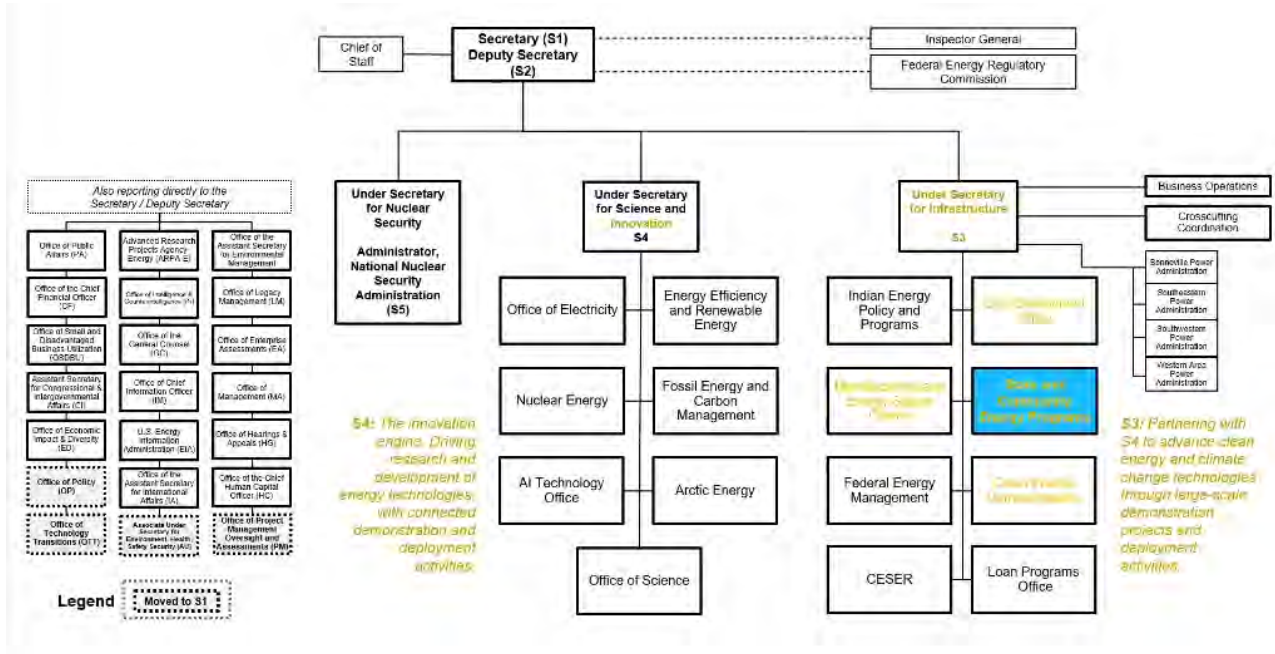
Chris said he is the Chief of Staff for SCEP. He has been with DOE for two years. He had been with the City of Orlando Florida previously.

He will discuss intersections with states and localities and their grid. And will highlight changes underway with the Grid.

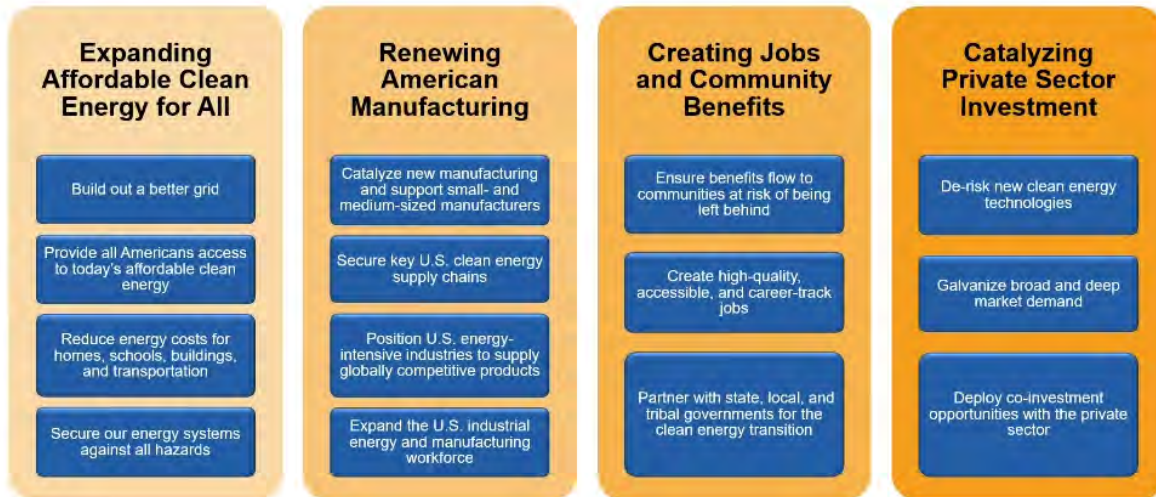
He introduced the current DOE org chart under Secretary Granholm.

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Accelerating the Clean Energy Transition



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This is public and private investment. They will deploy new types of investment vehicles.

Place-based Clean Energy Solutions

SCEP's Mission is to partner with State, Local, and Tribal governments and community organizations to catalyze local economic development and job creation through equitable, clean energy solutions.

SCEP does this through the **management and oversight of \$16 billion** in formula grants, competitive grant awards, consumer rebate grants, and technical assistance.



Prioritize Justice40 Initiative



Deploy clean energy technologies



Catalyze local economic development



Create jobs and increase hiring



Avoid pollution through place-based strategies

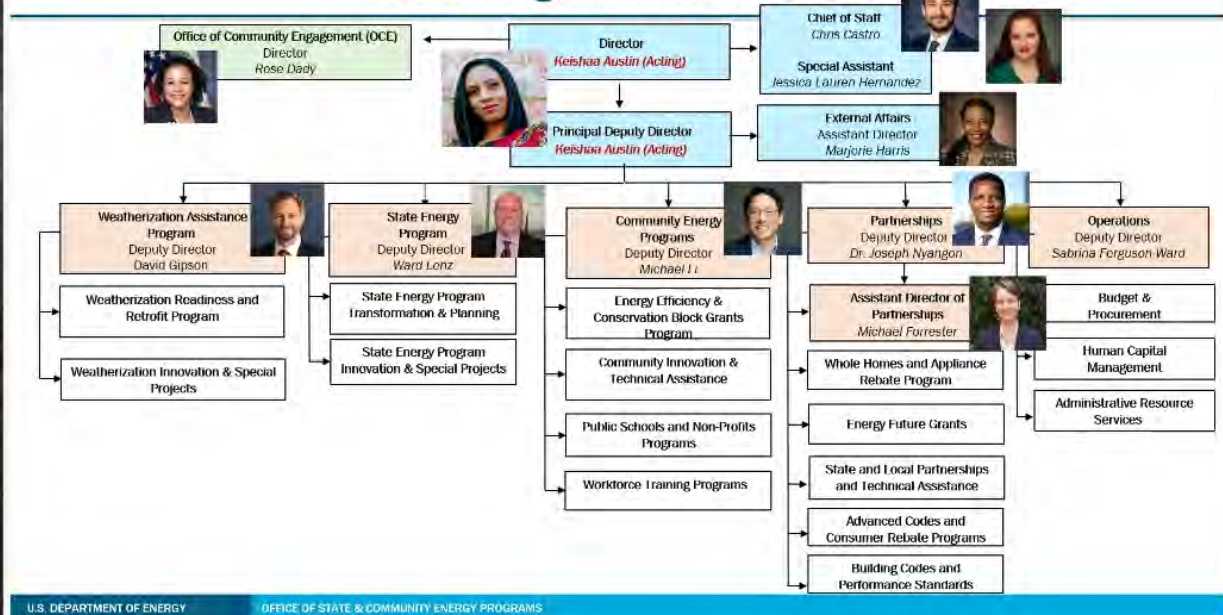


Reduce energy costs

U.S. DEPARTMENT OF ENERGY

OFFICE OF STATE & COMMUNITY ENERGY PROGRAMS

SCEP Organizational Chart

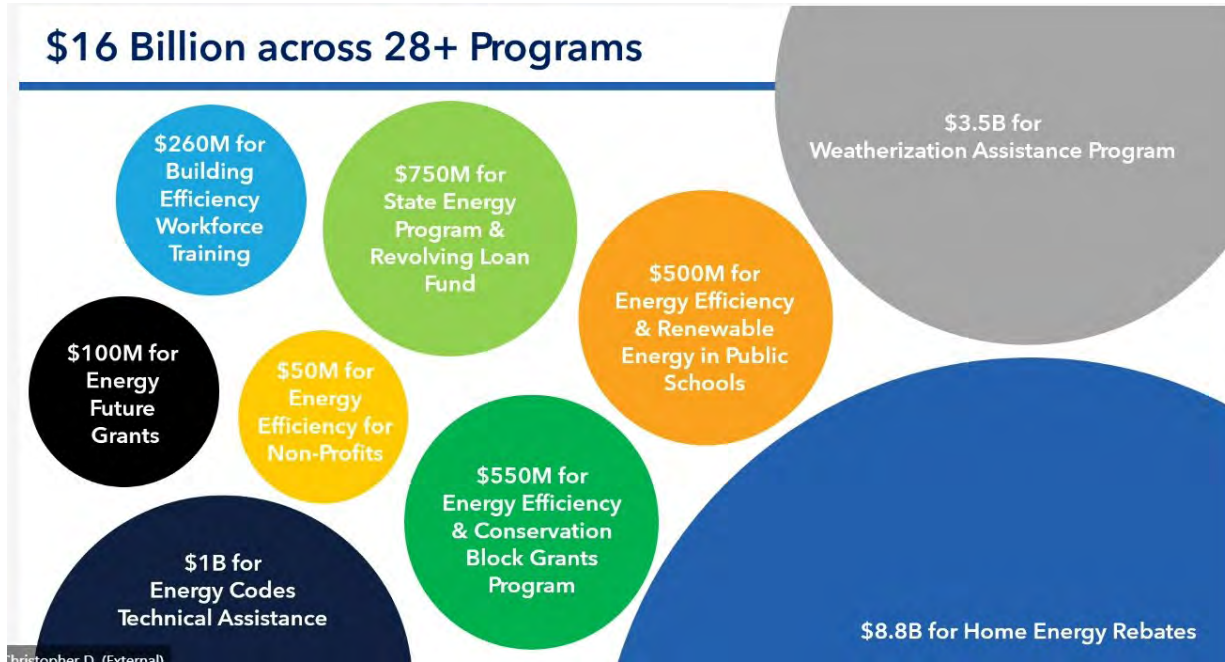


Chris noted that if you will access your formula grant, you are required to present a T&D plan – this will help the states to look at how their grid is changing. States are required by congress to look at distribution planning.

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\$16 Billion across 28+ Programs



SCEP's 28 Funding Programs

- State Energy Program – Base
- State Energy Program – BIL
- State Energy Security Plans – BIL
- EE-Revolving Loan Fund Grants – BIL
- Weatherization Assistance Program – Base
- Weatherization Assistance Program – BIL
- Weatherization Readiness Fund – Base
- WAP Enhancement & Innovation – BIL
- WAP Sus. Energy Res. for Consumers – BIL
- Local Government Energy Program – Base
- Energy Futures Grants – Base
- EECBG-Competitive – BIL
- EECBG-Formula – BIL
- Renew Schools Prize – BIL
- Renew America's Nonprofits – BIL
- Communities LEAP – Base
- Energy Auditor Training program – BIL
- Building Training & Assessment Centers – BIL
- Career Skills Training – BIL
- Training Res. Energy Contractors-Formula – IRA
- Training Res. Energy Contractors-Comp. – IRA
- Whole-home Efficiency Rebates – IRA
- Home Electric & Appliance Rebates-States – IRA
- Home Electric & Appliance Rebates-Tribes – IRA
- Zero Building Energy Codes-Formula – IRA
- Zero Building Energy Codes-Competitive – IRA
- Congressional Directed Projects – Base
- Energy Communities IWG – Base

100% of SCEP programs have been designed and launched for at least 1 round of funding since Nov. 2022. Over \$3 billion has been awarded.

28 programs have been launched and vetted.

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Enhancing Capacity for States, Tribes, and Local Governments



Weatherization Assistance Programs (WAP)

- Increase energy efficiency of dwellings owned or occupied by low-income persons, reduce their total residential energy expenditures, and improve their health and safety



State Energy Program (SEP) and Revolving Loan Fund (RLF)

- Enhance energy security, advance state-led energy initiatives, and increase energy affordability
- Provide funding and technical assistance to the 50 states, 5 territories, and DC



Home Energy Rebates

- Provide low- and moderate-income families up to \$14,000 total for products like electric heat pumps, electric stoves, and more.
- Low-income households can access up to \$8,000, while other households can access up to \$4,000



Technical Assistance for Building Energy Codes

- Technical assistance grants to States or units of local governments with code making authority to adopt updated building energy codes, zero energy codes, or equivalent codes or standards.



Energy Efficiency and Conservation Block Grants (EECBG)

- Reduce fossil fuel emissions
- Reduce total energy use
- Improve energy efficiency in the transportation, building, and other sectors



Training for Residential Energy Contractors

- Reduce the cost of training contractor employees
- Provide testing & certification of contractors trained and educated under a state program
- Partner with nonprofits

Christopher D. (External)

Community Energy Fellows program to help local communities with their grid plans.

We have 12 Arctic Energy Ambassadors to support Alaska.

Modernizing Community, K-12 Public Schools, and Nonprofits Buildings to reduce cost and improve health

Renew America's Nonprofits



Projected Portfolio Impact of Prime Selectees



- **Awarded \$50M** to 9 Nonprofit Prime partners, who will help retrofit over **300 nonprofit buildings** in their region.

- **Awarded \$178M** in grants to **24 Local Education Agencies (LEA)**

- Awards made to LEAs in 22 states
- Benefits 74,000 students, 5,000 teachers in 90+ buildings
- Strong Interest: Applications came from Local Education Agencies in 48 states and 2 territories, received over 1,000 concept papers applying for nearly \$5.5 billion in funding



[In this Facebook video](#), Greenup County Schools (Kentucky) celebrate being selected for the Renew America's Schools competitive grant.

Projects will promote the implementation of clean energy improvements such as HVAC, lighting and retrofits at K-12 public schools across the country



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SCEP is trying to engage communities in a meaningful way to help bring people around to want to support this effort.

Chris said that DOE’s Secretary Granholm will be making an announcement today about funds being award to school districts.

Ron B put the link in the chat: [21 Awardees From 25 States Win Phase One of the Renew America’s Schools Prize! \(herox.com\)](#)

Supporting the Growth of the Clean Energy Workforce

	Statute	Total Funding Amounts	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

her D. (External)

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Driving Innovation in Home Efficiency and Electrification

Moving Beyond the Scope of the WAP Formula Program



Home Energy Rebates

Enabling \$8.8 Billion in funding to States to develop Rebate programs

- State-run Rebate program
- Point-of-Sale rebates and sliding scale based on household income.
- Available to low-and-moderate income households
- Available to renters and owners



Sustainable Energy Resources for Consumers (SERC)

Awarded 15 SERC projects totaling \$22M

- Broadens eligibility for the types of retrofits
- Supports local workforce
- Advances innovative approaches to weatherization or to implement technologies not typically covered under the program



Enhancement & Innovation (E&I)

Awarded 21 Enhancement and Innovation Grants totaling \$38M

- Provides funding to make homes weatherization-ready
- Promotes renewable energy technologies
- Encourages hiring from communities where assistance is provided and from those underrepresented in energy performance workforce

WAP offers competitive grants for innovative practices, provides training and technical assistance to grantees, disseminates best practices, and works to expand the formula WAP.



Christopher D. (External)

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Open to the public tool:

Providing Tools, Data, and Technical Assistance to Support Place-based Clean Energy Deployment

State and Local Solution Center: 400+ tools, resources, and best practices available for States, Tribes, Territories, Local Governments, and more.

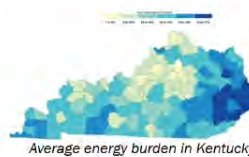


State and Local Spotlight: Monthly newsletter with 34,000+ subscribers



State and Local Planning for Energy (SLOPE) Platform

SLOPE integrates over 50 leading data sources to enable users to explore untapped energy savings opportunities and identify the most cost-effective strategies to meet their clean energy and climate goals



Low-Income Energy Affordability Data (LEAD) Tool

A web-based interactive tool that enables stakeholders to visualize energy burden and housing characteristics at the national, state, city, and census across the U.S.



Case Study: How DER Can Improve Resilience in Public Buildings

Guide that describes the benefits of integrating energy efficiency with other distributed energy resources to assess resilience benefits through the specific application of two DOE tools (REopt Lite and DER-CAM)

Christopher D. (External)
U.S. DEPARTMENT OF ENERGY

OFFICE OF STATE & COMMUNITY ENERGY PROGRAMS

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Looking Ahead: SCEP's Annual Programs

• **Local Government Energy Program (LGEF)**

- First C-SITE FOA was due 5/31/2024.
- TA offerings launching late summer 2024. C-SITE FOA awardees announced late fall 2024.
- Visit energy.gov/scep/local-government-energy-program



• **Energy Future Grants (EFG)**

- First FOA closed. First FOA partner teams announced 4/4/24.
- Visit energy.gov/scep/energy-future-grants



Communities Local Energy Action Program (C-LEAP)

Communities LEAP partners with low income, energy-burdened communities that experience environmental justice challenges and/or direct economic impacts from reducing their historical reliance on fossil fuels to build community-driven action plans for clean energy-related economic development. 24 inaugural communities were selected to participate in March of 2022:



Program Notes:

- In each community, coalitions of local partners, including at least one local government partner and one community-based organization, contribute to project oversight and delivery.
- The National Renewable Energy Laboratory (NREL) is the primary technical assistance provider, delivering technical expertise and supporting community engagement, as well as managing the overall network of TA providers
- Pathway Leads from various DOE offices provide support and thought leadership to communities
- DOE offices are discussing a second LEAP pilot opportunity for a new cohort of communities

Help them use future state funding – roadmap doc

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Energy Communities IWG

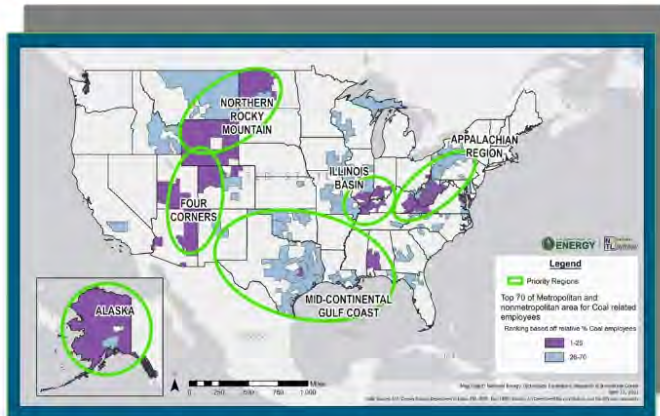
The Interagency Working Group on Coal & Power Plant Communities

Initial Report (April 2021)

1. Identified 25 priority Energy Communities
2. Coal communities identified as immediately challenged due to past and imminent closures
3. Planned expansion to oil & gas communities

Established a "Clearinghouse" for funding and other opportunities:
energycommunities.gov

"Rapid Response Teams" launched 2022



Christopher D. (External)

DOE's Office of Community Engagement (OCE)

OCE Mission

To catalyze a rapid transition to a clean energy economy while centering justice, equity, and inclusion, OCE helps to increase its engagement with communities and strengthen internal coordination across Departmental elements.



OCE Scope

- Access to DOE for every community with off-the-shelf resources available for all
- Proactive, strategic engagement with communities across every region
- Ability to provide additional capacity to give in-depth assistance to specific communities



Christopher D. (External)

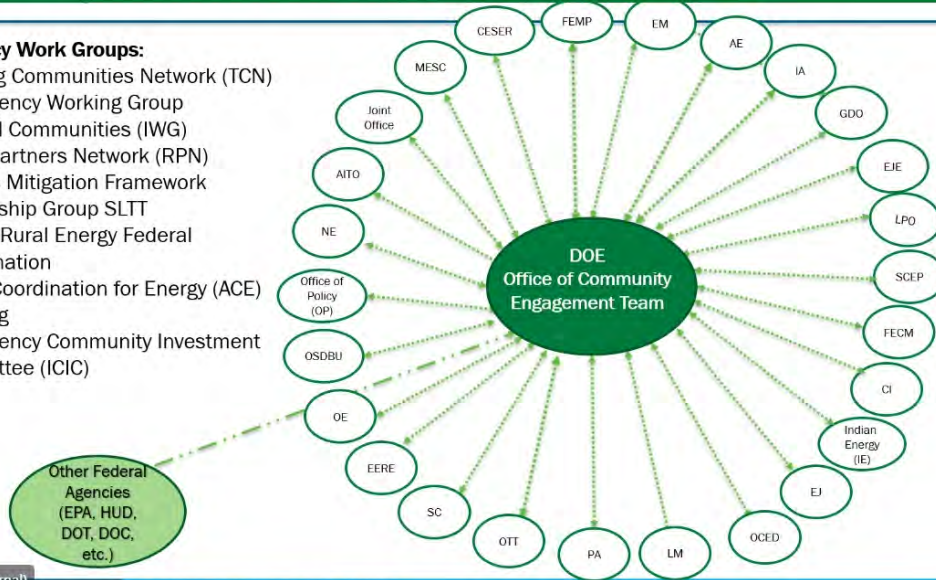
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OCE Hub-n-Spoke Model: Powered by SCEP, Owned by All

Interagency Work Groups:

- Thriving Communities Network (TCN)
- Interagency Working Group on Coal Communities (IWG)
- Rural Partners Network (RPN)
- FEMA's Mitigation Framework Leadership Group SLTT
- Alaska Rural Energy Federal Coordination
- Arctic Coordination for Energy (ACE) Meeting
- Interagency Community Investment Committee (ICIC)



Christopher D. (External)

OFFICE OF STATE & COMMUNITY ENERGY PROGRAMS

Get Engaged Process – (Universal Support / Community Inquiry Request)

- Get Engaged Hotline - 202-586-0822
- Get Engaged Email Address – getengaged@hq.doe.gov
- Get Engaged Landing Page: www.energy.gov/getengaged
- Example Virtual Local Office Hours
 - December 13th – Intro to OCE / Low-Income Communities Bonus Credit Program - 167 participants
 - January 7th – Thriving Communities Network / Philanthropic Partners 166 Participants
 - January 21st - State Small Business Credit Initiative (SSBCI) / Career Skills Training Grant - 62 participants
 - February 7th – EECBG Program – 125 participants
 - February 21st – HOME Rebates – 245 participants
 - March 6th – C-Site – 132 participants

OCE Get Engaged!

The Office of Community Engagement's mission is to collaborate and engage stakeholders to help improve existing and new energy programs, services, and products. We provide OCE staff resources for all and increase its engagement with communities.

Please join us for our first virtual office hours on Wednesday, December 13th at 2pm EST.

Click here to register.

Get Engaged Hotline: 202-586-0822

Get Engaged Email Address: getengaged@hq.doe.gov

December 13th

Office of Community Engagement Virtual Office Hours

January 8th at 2pm EST

January 7th

Office of Community Engagement Virtual Office Hours

January 24th at 2pm EST

Chivette Domergue, MA Management Program Analyst, Office of State and Community Energy Programs, U.S. Department of Energy

Topic: Career Skills Training Program

January 21st

U.S. Department of Energy Virtual Office Hours

February 20th at 2pm EST

The Energy Efficiency and Conservation Block Grant (EECSG) Program

Jeff Mays and Josh Minter will be presenting.

February 7th

U.S. Department of Energy Virtual Office Hours

February 21, 2024 2pm

Adam Hazz Implementation Advisor, IRA Home Energy Rebates Programs

Topic: Home Energy Rebates Programs

February 21st

U.S. Department of Energy Virtual Office Hours

Wednesday, March 6th at 2pm EST

Brooke Martin of the Office of State Community Energy Programs will share details about a new funding opportunity for communities.

SCEP Communities Supporting Investment in Sustainable Energy (C-SITE) Funding Opportunity

Register Now.

Christopher D. (External)


OFFICE OF STATE & COMMUNITY ENERGY PROGRAMS

Chris urged everyone to check out the website: Energy.gov/ -a one stop shop.

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Energy Savings Hub – Energy.gov/Save




**Air Conditioners
(energy efficient)**


[MORE INFO ON AIR CONDITIONERS](#)

Incentive Type: Tax Credit

Incentive Amount: 30% of the cost paid by the consumer, up to \$600.

How to Access: Submit IRS Form 5695¹ if you meet the requirements detailed on IRS.gov².

 Subject to a cumulative, annual cap of \$1,200.

 Believe it or not, another option for energy-efficient home cooling is a heat pump, which provides both air conditioning and heating! Credits exist for both air-source and geothermal heat pumps, which could save you additional money on your monthly costs in the long-run.

www.energy.gov/save

The Energy Savings Hub is a comprehensive tool that shows consumers how they can save money on energy efficient appliances and equipment through tax credits and other incentives.

Connect with Us

State & Local Solution Center (SLSC)

The SLSC is a resource hub for states, local governments, and K-12 school districts that compiles over 400 popular tools and resources, technical assistance offerings, funding opportunities, and more.



Subscribe to the monthly State and Local Spotlight newsletter stay up to date with new funding and technical assistance resources.

Office of Community Engagement (OCE)

OCE serves as the central hub for DOE's engagement efforts, providing a consolidated platform for communities to access comprehensive technical assistance and guidance on clean energy development.

Get Engaged Hotline - 202-586-0822

Get Engaged Email Address – getengaged@hq.doe.gov

<https://energy.gov/GetEngaged>



Jaime mentioned that SCEP is very valuable to the peninsula community of this state, he's talked to people in the PNNL Sequim office about it.

Some of these programs go on into 2026 – 20231 until funding runs out.

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Many requests are coming in, U.S. schools have a tremendous need. They hope to be able to continue supporting schools in the long term.

Kay Aikin thanked Chris for his presentation. She said he spoke to Maine sometime back. Kay appreciated seeing the organization chart of the DOE.

Lorenzo thanked Chris. He asked about distributed resource energy justice and reliant communities. He also asked about schools putting solar panels and batteries on their properties and the possibility of them being able to generate electricity and sell the power to help fund the schools. Is there a fit for this type of program?

Chris said he saw a value in something like that in Orlando where the sale of power offset taxes in the Orlando area.

He also said that Boulder has a similar effort.

Not all communities will be able to do this. But some muni's do allow this for their own operations. They could do it for their community.

Building codes are a fine line – stretch codes – performance standards is something that they can support.

Ken Wacks asked where grants are going and if independent contractors able to apply. Chris replied that 95% are dedicated to states, territories, tribes, and local gov. There are some for 501Cs. The Enhancement and Innovation grant allows that. No funding in SCEP goes to private contractors. But governments can subcontract.

Marc thanked Chris for his presentation today. He asked about Home energy rebate programs. Chris replied that rebates will enable DER that utilities in the future. Our component is seeding the supply, the rebates are related to thermostats, technologies. T&D planning is a requirement – each year to DOE for an updated transmission plan. When a state has technical needs, SCEP sends them to GDO. SCEP is helping states to think about the future grid and seeding supply.

[DOE Office of Under Secretary for Infrastructure](#)

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Planning the GWAC Conference

- Co-Located at RE+ in Anaheim, CA September 9-12, 2024
 - Planning on plenaries and two tracks
 - RE+ Technical Session is Monday and Tuesday.
 - GWAC Symposium will be Wednesday and Thursday
 - Coordinating with Lesley Fondren (RE+)
- Organizing Committee (OC)
 - Weekly meetings scheduled
- All Council Members Participating in Symposium Planning
 - Weekly meetings scheduled - Thursday 8AM PT/ 11AM ET
 - Council members assigned to manage panels
- Registration now open for symposium
 - Full conference coupon codes (30% off) available for all council members.
 - Speaker discount codes available
 - Symposium registration includes business access (show floor) to RE+, lunches, and snacks
- LinkedIn – We are the council! Ron Bernstein posted.



Full conference has a disc for WAC members and that includes lunch

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Jaime sent it out to everyone. Please only share with confirmed speakers.



GWAC Strategic Outreach Plan

- GWAC Mission and Vision Statements

Vision

The GridWise® Architecture Council supports a vision of a decarbonized, decentralized, and democratized electricity system to ensure the energy needs of today and that of future generations.

Mission

The GridWise® Architecture Council (GWAC) was formed in 2004 by the U.S. Department of Energy to propose principles for and accelerate the development and adoption of interoperability concepts and standards across all applications operating and interfacing with electric systems.

The Council's mission is to engage with stakeholders to accelerate the development and application of grid architecture concepts and principles. This leads to:

- Identification of critical paths to facilitate the effective evolution of the systems, devices, and entities that encompass the electric systems and achieve societal objectives.
 - Advancement of standards, applications, and systems interfacing with the current and future electric systems to ensure they are sustainable, reliable, resilient, efficient, extensible, and equitable.
- Guest speaker recordings continue to be developed and published to YouTube
 - Outreach through conference presentations
 - Slide deck to be developed with template and GWAC outreach slides.
 - Other organizations to "cross-pollinate" ideas with.
 - Identify liaison volunteers, e.g. INCOSE

Jaime asked about the We are the Council posts. Ron B, Andy, Aaron have done theirs. They can tag others. Jaime will repost with the GWAC LinkedIn account.

Ron B suggested we have a goal of 2 GWAC LinkedIn posts per week until the Symposium.

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- LinkedIn – We are the council! Ron Bernstein posted.



Jaime noted that all those who registered for the GWAC Symposium can attend the GWAC Tutorial on Monday, the first day of RE+.

Jaime asked about a review date for the Symposium panel speakers PowerPoint slides. Ron B. said the week before will work. He noted a review team is needed.

Jaime will ask for speaker presentations by 30th of August.

Ron B. said they will review the slides for appropriate content and no commercialization

Lorenzo asked about the possibility of a one-day registration for Symposium speakers.

Jaime replied that if the speakers are not eating lunch, just for the panel session, there is a lower cost registration available. If there are financial challenges reach out to Susie about travel support.

Jaime said Back from the Future is in progress. It will address what does the future policy look like, and what the path will be. We have to set the future vision for attendees. It will identify different tools for the future state.

Ron B. said the symposium panels will need some moderation and feedback gathering.

He added that there should be one hour given for the panel and 30 minutes following for the workshop discussions.

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Jaime noted that there is a little time variance among the panels.

Jaime wanted to encourage the GWAC and panelists to go table to tables and encourage productive conversations. We are hoping to get good feedback for future direction.

For the parallel sessions Ron B. will take one room and Jaime will take the other room. Jaime said that panel leaders will also need to push engagement.

Kay said one group may go one way and another table going another way. Kay will set the stage at the beginning with an outline for the panel session. Her panel will have everyone come back and report to the group after the breakouts.

Jaime said he liked Kay's example.

Jaime answered Farrokh that everyone all together session; it is a one-hour wrap session at the end of each day.

Ron B. asked about a no host dinner on Wednesday after the symposium.

Rob B. said he will merge the tutorial and AHR presentation as a strawman for the foundational session. The team can add more slides and he hopes to have it done by next week. There will be five GWAC speakers.

Jaime will reach out to Seemita and get that slide and send it to Ron B.

Farrokh will send his slides from the GWAC presentation at OATI to Ron B. for incorporating into the foundational session.

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Grid Architecture for Regulators

- **Team members:** Lorenzo Kristov, Kay Aikin, Larisa Dobriansky, Jeff Morris, Mark Paterson, Farrokh Rahimi, Chris Villarreal, Ron Bernstein
- White paper will be aimed primarily to GWAC community:
 - Document experiences, observations & lessons learned from the use/non-use/value of Grid Architecture in policy & regulation venues
 - Provide a basis for strategies to promote Grid Architecture among policy makers
 - Paper will be a living document, starting with a few initial case studies and adding new case studies as available
- Initial case studies
 - U.S. — FERC Order 2222
 - State — Xcel Minnesota rate case; CPUC High-DER docket
 - Municipal — Portland Maine
 - International — Ontario, Canada
- Tentative target date: Draft for GWAC review by mid-November; ready for posting early 2024.



Applying Grid Architecture Concepts to Bridge Back from the Future Grid

Building on the previous GridWise Architecture Council work products, this document attempts to provide a roadmap for operators, planners, developers, integrators, and policy makers as guidance to develop interoperable systems that will architect the grid of the future as described in the future states. This paper will include discussions of motivating participation of customer owned assets and opportunities for avoided costs by working toward a long-term vision rather than only short-term needs. This document will be completed in FY24.

- Committee : **Mark Paterson**, Marc Costa, Ron Ambrosio, David Forfia, Kay Aikin, Lorenzo Kristov, Farrokh Rahimi, Aaron Snyder,
- 2:00 PM PT/ 5:00 PM ET Thursday 2 times 1st and 3rd Thursday of the month

Jaime emphasized the value of GWAC publications to demonstrate the long-term accomplishments of the GWAC.

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Jaime hopes that this paper will gain some feedback from the Symposium that will help this paper to move forward.

Kay noted that Mark P. had created an outline. Kay and Shawn have picked their sections, and they are nearly done.



Grid Architecture Concept Model for Transportation Electrification

Analyze various visions of the electrification of fossil fuel-based systems and identify areas where GWAC concepts could provide architectural value to bridge and coordinate between customer and grid objectives. Electrification will introduce dependencies such as those seen in the transportation sector due to electrification. Grid Architecture will be used to describe the touchpoints (for example through sector coupling) that will require collaboration. GMLC reference cases will be included. This activity will take place in FY24 and be completed FY25.

- 15-20 page whitepaper
- Committee: Jaime Kolln, Ron Cunningham, Farrokh Rahimi, Mark Ortiz, David Forfia, Aaron Snyder, Lorenzo Kristov, Bhaskar Mitra, Paul DeMartini
- 1:00 PM PT/ 4:00 PM ET, 4th Tuesday of the month

Jaime will get something out to this group next week. Ron C. and Ron M. have been helping with this one also.

Action: Add Ron Melton to the Grid Architecture Concept Model for Transportation Electrification meetings.

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Liaison Reports

- NIST – David Wollman
 - Green Button – Jeremy Roberts (*New*)
 - EPRI – Sean Crimmins
 - IEEE PES – Farrokh Rahimi, Shawn Chandler
 - ASHRAE, CTA, ASHB (formerly CABA) – Ron Bernstein
 - ISO/IEC, IREC – Ken Wacks
 - SEPA – Aaron Smallwood
 - NARUC – Jeff Morris
- *Are there other organizations we should be hearing from?*

NIST David Wollman: David sent – links to 2 latest newsletter: [NIST Smart Connected Systems Newsletter - June 2024 \(govdelivery.com\)](#) [NIST Smart Connected Systems Newsletter - July 2024 \(govdelivery.com\)](#)

Green Button - Jeremy Roberts commented that they are now at 140 implementations from 75 utilities with Green Button. There will be an announcement by a large east coast utility soon. That will affect about 10 million people. He mentioned that NASB standard has been translated into Korean, and they are using it.

Jaime said Chris Irwin wanted them to look at testing and certification. Jeremy said they do their own certification and testing, to control cost and quality. Jaime asked him to share testing procedures and methods. Jeremy said he would be happy to share that.

Action: Jaime to reach out to Sean Crimmins with EPRI about Liaison reports.

IEEE – Farrokh Rahimi: In 2025 Farrokh will attend the San Deigo new Energy and Policy Forum. The meeting used to be called the IEEE ISGT in February in Washington DC. The last one was very successful. But IEEE has rebranded this meeting. He said it's a new group and he doesn't have a lot of information. Jaime has a date but feels it is not officially confirmed.

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The IEEE Blockchain working group is represented by Farrokh Rahimi and Ron Melton. He will keep us posted.

Ron Bernstein – ASHRAE; Ron is working on a paper on standard graphic interfaces and ASHRAE user interface requirements. It covers things like what data is required to be on the graphics, with uniformity between apps. This builds on industrial work. He is leading this effort. He is also working on a backnet device profile test such as having a way to validate devices for a standard profile.

Ken is preparing to chair the semi-annual meeting of experts developing ISO/IEC standards for home automation and applications including energy management. The meeting next month is being held in Yamagata, Japan about three hours north of Tokyo via the "bullet train" (peak speed about 180 mph). The experts propose standards and write the specifications. The member nations review, recommend changes, and vote on the documents. For approval each standard requires at least two formal votes with support from a super- majority of the voting nations with at least 2/3 YES and less than 1/4 NO votes.

This committee has already completed work on about 60 standards and reports published by ISO and IEC to promote commerce. New participants are welcome. Contact Ken Wacks for more information (email and phone are available at www.kenwacks.com)

Jaime Kolln said he is hoping to find a GWAC representative from INCOSE and GridWise Alliance.

Alaa Mahjoub suggested Gartner. [Hype Cycle for Digital Grid Transformation Technologies, 2023 \(gartner.com\)](https://www.gartner.com)

If you are open to hearing from Gartner Inc. In that case, you can try connecting to the authors of the following report: Hype Cycle for Digital Grid Transformation Technologies, 2023 Published 28 July 2023 - ID G00792465 - 147 min read By Analyst(s): Lloyd Jones, Jo-Ann Clynch Initiatives: Energy and Utilities Digital Transformation and Innovation; Energy and Utilities Technology Optimization and Modernization:

Lorenzo asked about transportation to San Diego after the Symposium. Kay Aikin offered to give Lorenzo a ride.

Ron B. said he can take six people with him from Anaheim to San Diego.

<https://www.re-plus.com/gwac-symposium/>

Ron Bernstein adjourned the meeting at 12:02pm.

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Upcoming GWAC Meetings

Date	Topic or Speaker	Format	Other
September 9-12, 2024	GWAC 2024 Symposium	In Person	Anaheim, CA
September 13-14, 2024	GWAC Face-to-face and 20th Anniversary Celebration	In-Person	San Diego, Casa Bernstein
October 16 th , 2024		Virtual	Teams
November 20 th , 2024		Virtual	Teams

Future speakers ideas: