WEST VIRGINIA
OFFICE OF
ENERGY
A DIVISION OF THE WV DEVELOPMENT OFFICE

Section 60114 - Inflation Reduction Act Public Meeting – County & Municipal Governments

January 8, 2024

PROCEDURAL RULES

Attendee microphones will be muted during WVOE Presentation

Attendees will be given 3 minutes each to suggest GHG reduction strategies:

- **Comments should be limited to County & Municipal Government topics**
- **Comments shall remain civil and not derogatory in nature**

Due to time limitations, there will be no Q&A

- **Attendees will be able to submit written questions to Jackson.r.lgo@wv.gov until January 12th, 2024**

Attendees will be able to submit additional written comments to Jackson.r.lgo@wv.gov until January 31st, 2024

CPRG OVERVIEW

Priority Energy Action Plan (PEAP)

- Reduce GHG Emissions in six (6) key sectors
- Due March 1, 2024

Comprehensive Energy Plan (CEAP)

- Due mid-2025

Implementation Grant

- Application due April 1, 2024
- Competitive process
- $4.3 billion total available
- Award Range - $2mm to $500mm

PROPOSED CALENDAR

Stakeholder Meetings: January 3-8, 2024

Determination of GHG Reduction Strategies: TBD

Grant Writing Application Workshops:

January 18, 2024 (3:00 pm to 5:00 pm)
January 23, 2023 (10:00 am to 12:00 pm)
February 20, 2024 (2:00 pm to 4: 00 pm)
February 29, 2024 (9:00 am to 11:00 am)

Priority Energy Action Plan: March 1, 2024

Proposal Submission Deadline: March 5, 2024

Implementation Grant Application Deadline: April 1, 2024

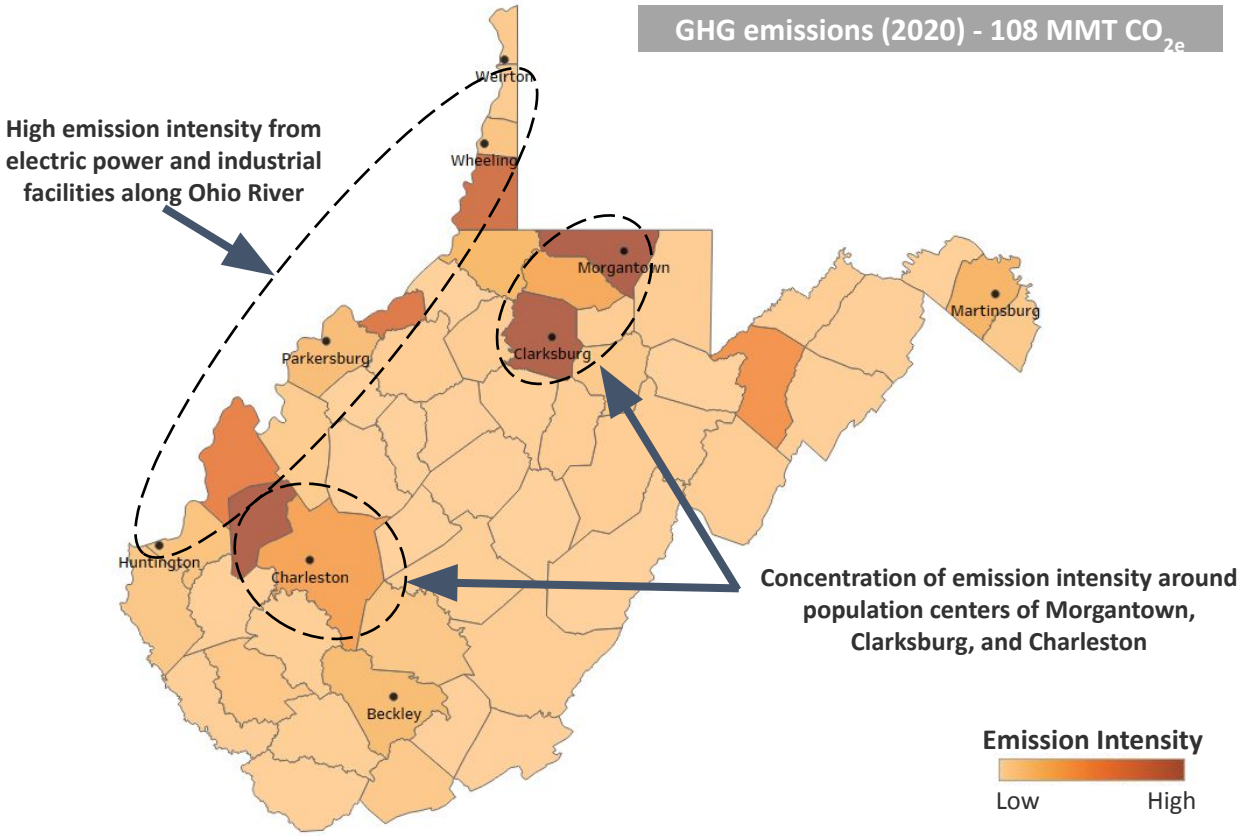
PEAP – SIX SECTORS

1. Power Generation
2. Industrial
3. Transportation
4. Buildings (Commercial & Residential)
5. Agriculture
6. Waste Management

WV GHG Emissions Intensity

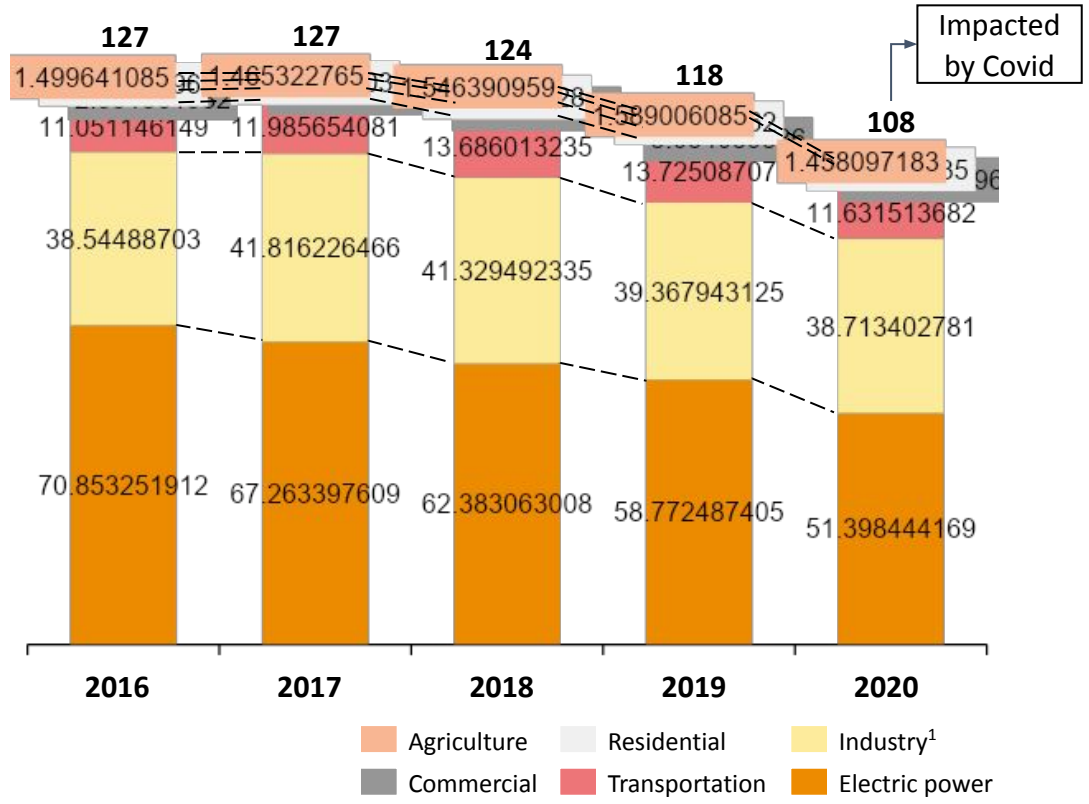
Greenhouse gas emissions in West Virginia are predominantly within the electric power and industry sectors, with emissions concentrated around GHG emitting facilities like powerplants, mines, and industrial facilities

Emission intensity in West Virginia, 2020



West Virginia accounts for **~1.8% of the USA's** total **greenhouse gas emissions** while accounting for ~0.5% of the USA's total population

WV GHG emissions by sector, 2016-2020 (MMT of CO_{2e})



Historically**, roughly half of GHG emissions** within WV have been from the **electric power generation sector**

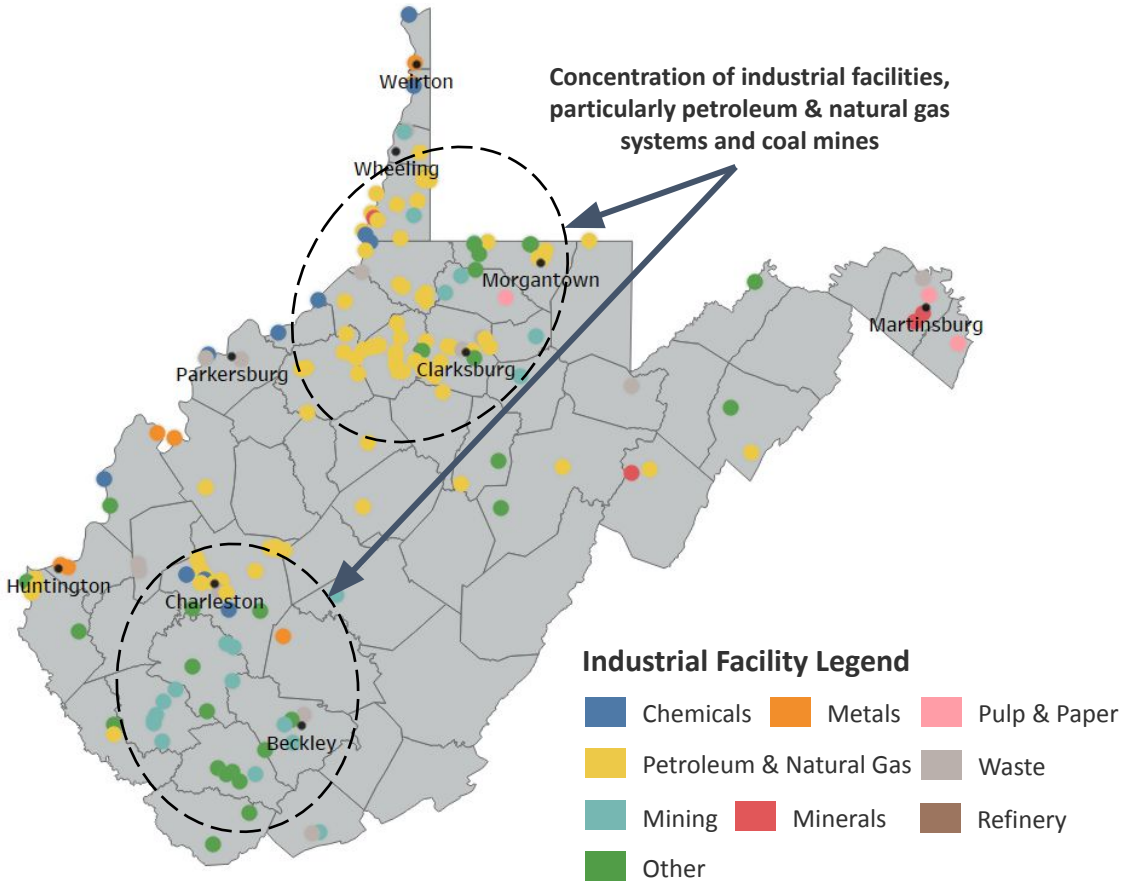
Source: Greenhouse Gas Inventory Data Explorer | US EPA

Notes: 1) Industrial sectors include petroleum and natural gas systems, refineries, chemical, mineral, waste, metal, pulp and paper, and other (which includes coal mining)

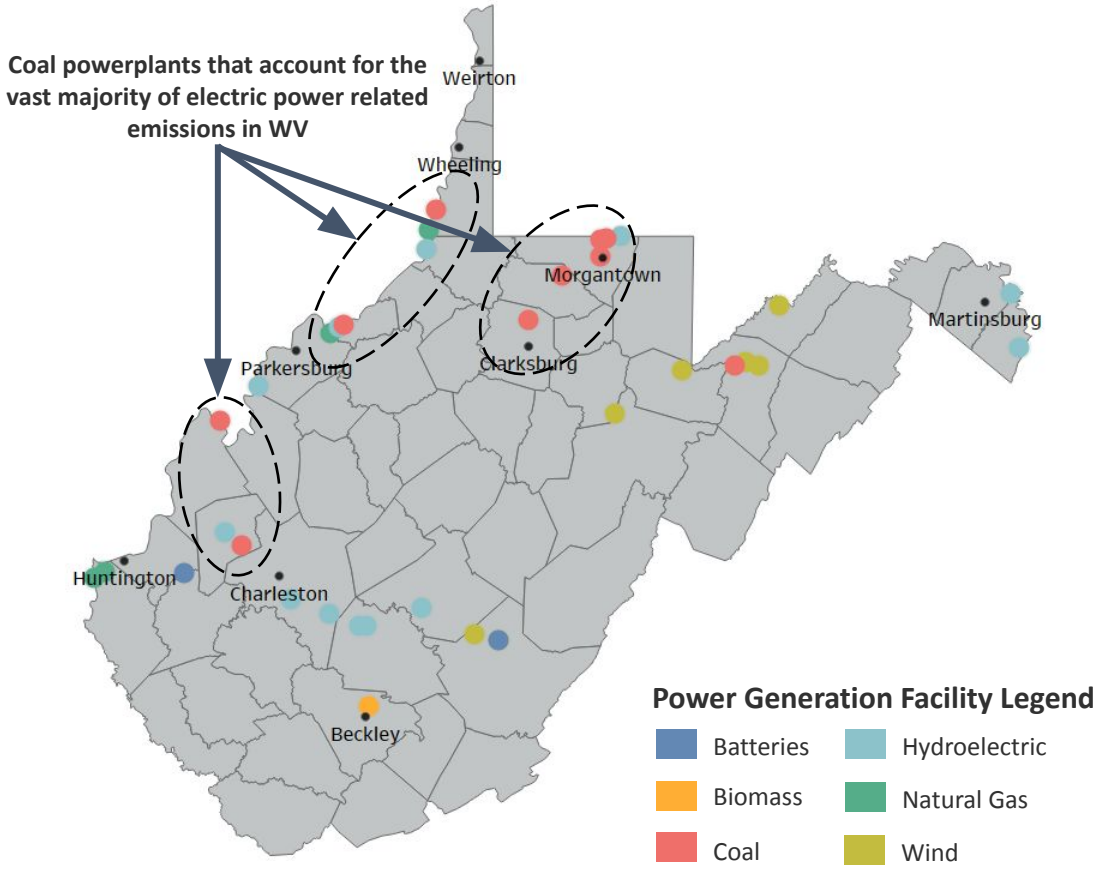
WV Industrial and Power Generation Facilities

Industrial and power generation facilities are clustered in the northern, southern, and Ohio River adjacent areas

Industrial sector plant/facility[1] distribution in West Virginia



Power generation facility distribution in West Virginia



Source: EPA Facility Level GHG Emissions Data; U.S. Energy Information Administration - EIA - Independent Statistics and Analysis; Layer Information for Interactive State Maps (eia.gov)
Notes: 1) Facilities which report GHG emissions in West Virginia have been considered, excluding power generation facilities

C2C: Clean Energy *to* Communities

U.S. DEPARTMENT OF ENERGY

C2C Expert Match

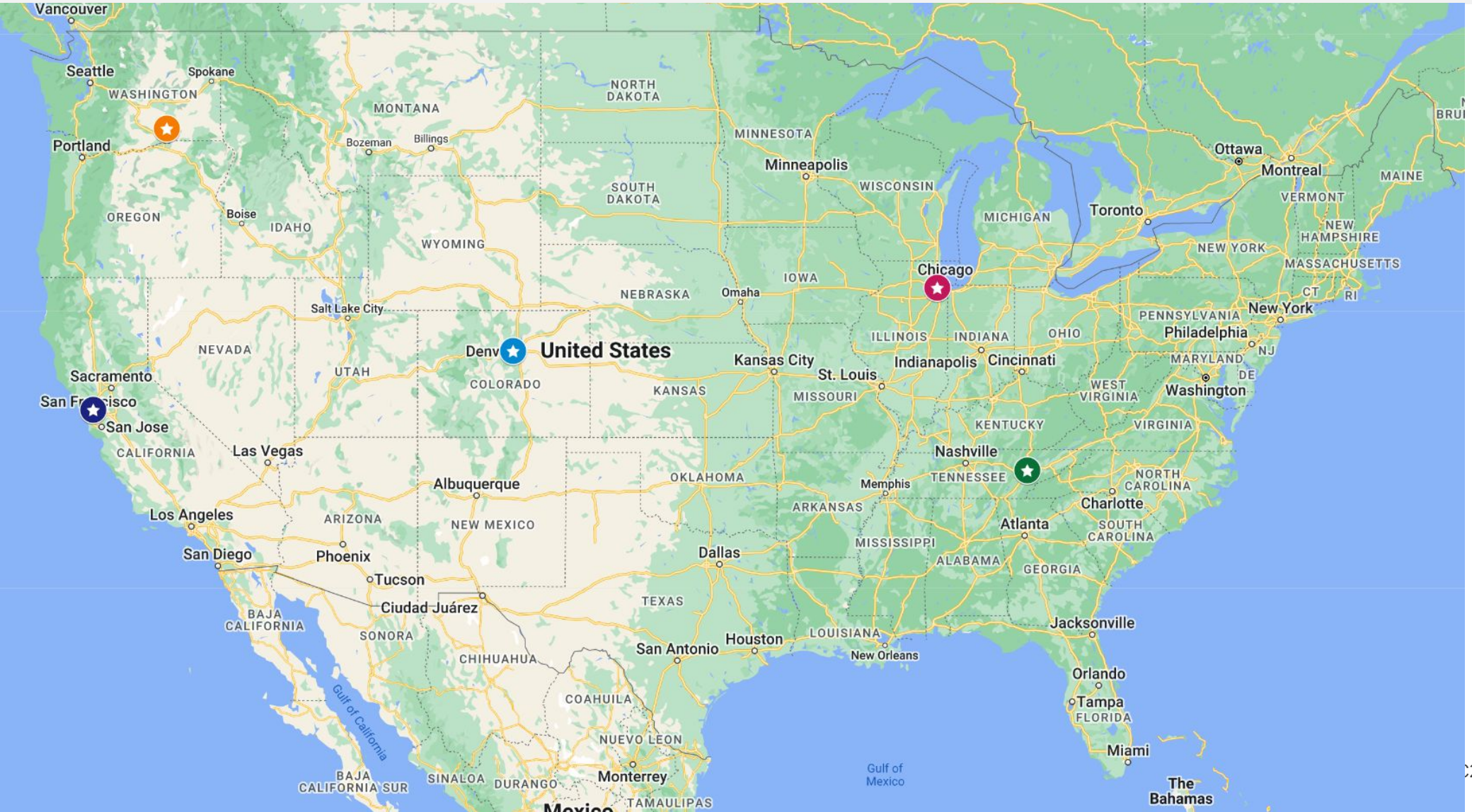
Overview for WV Climate Pollution Reduction Grant Online Forum

Sarah Inskeep, Jonathan Morgenstein, Sharon Smolinski
National Renewable Energy Laboratory (NREL)

January 8, 2024

Photos clockwise, starting in upper left: iStock, 1282045969; by Werner Slocum, NREL 65138; iStock, 945938110; by Erik Nelsen, NREL 64276; iStock, 1372334808

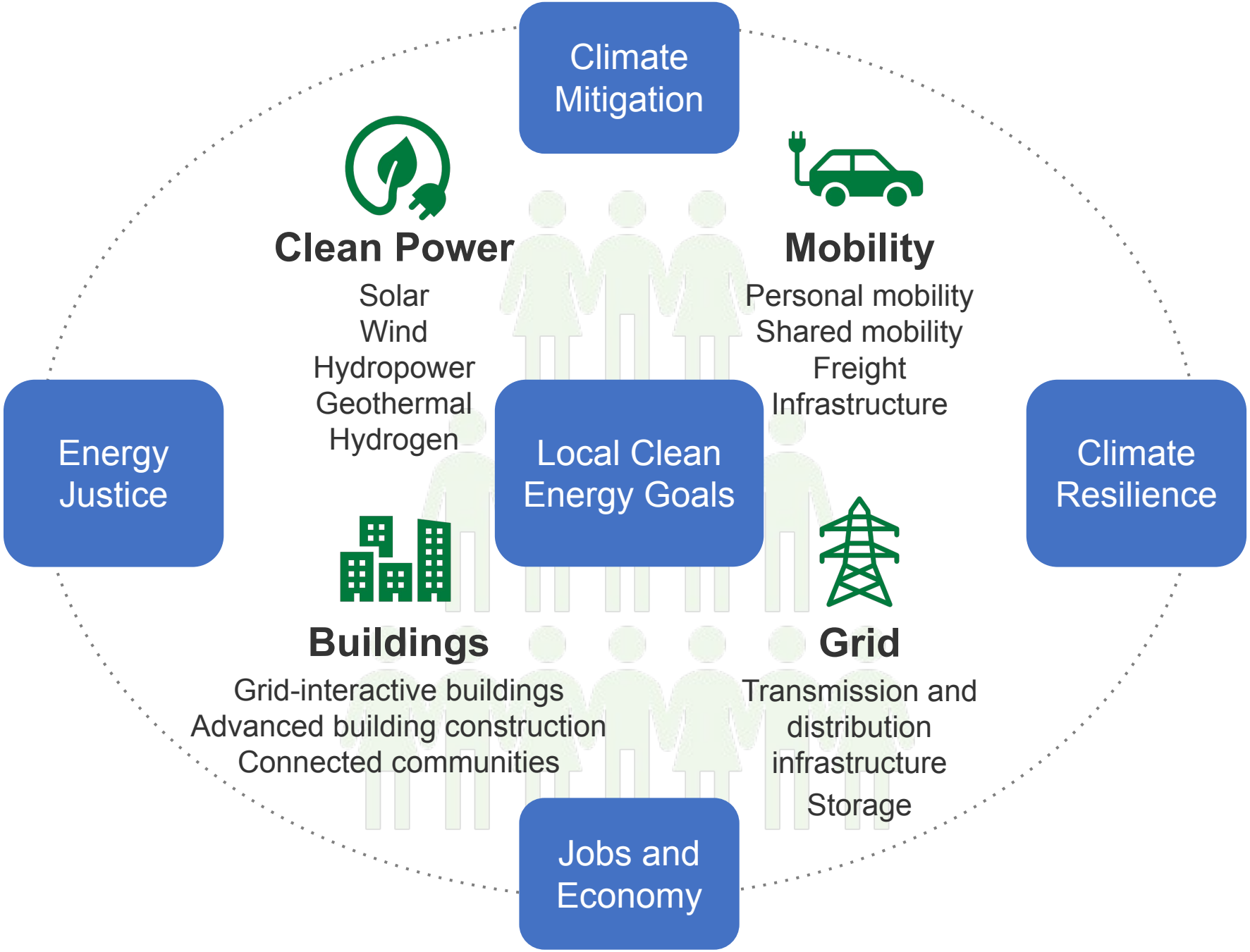
DOE National Laboratories Supporting C2C



- National Renewable Energy Laboratory (NREL) www.nrel.gov
- Pacific Northwest National Laboratory (PNNL) www.pnnl.gov
- Lawrence Berkeley National Lab (LBL) www.lbl.gov
- Argonne National Lab (ANL) www.anl.gov
- Oak Ridge National Lab (ORNL) www.ornl.gov

For more about DOE National Labs, visit https://www.energy.gov/national-laboratories

C2C will provide **innovative, cross-cutting technical solutions** using an **integrated** approach

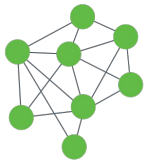


C2C Technical Assistance Opportunities

In-depth Partnership ~3 years

Multiyear partnership made up of teams (local government, community-based organizations, and electric utilities) that work alongside national lab staff to apply robust modeling and analysis tools and conduct hardware-in-the-loop testing of solutions to evaluate and test potential scenarios and strategies before full technology deployment.

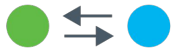
Can support about 4 communities per year, ***subscribe to mailing list for updates about the next round of RFPs.***



Cohorts ~6 months

Multi-community engagements that convene regularly for approximately 6 months to exchange strategies and best practices, learn in a collaborative environment, and workshop plans and strategies to overcome challenges around a common clean energy transition topic. Eligibility varies by cohort topic.

Can support about 100 communities per year, ***next round applications open this March.***



Expert Match ~3 months

Short-term, no-cost technical assistance for communities seeking to answer a near-term clean energy question. Eligible entities include local governments, utilities, community-based organizations, schools, non-profits.

Can support about 200 communities per year, ***applications accepted all year on rolling basis.***

www.nrel.gov/c2c

Expert Match: Cohoes, NY

Cohoes, New York, is a small working-class community in upstate New York with limited resources and energy-related expertise. The city wanted to reduce its climate impact, but its municipal buildings were old and many had slate roofs that weren't suitable for solar panels.

Expert Match helped Cohoes reduce its climate impact and increase its renewable energy capacity by providing guidance on:

- **Retrofitting historic buildings for energy efficiency**, including reviewing proposals for reducing emissions and evaluating technology options.
- Developing a **3.2-MW floating solar project on the water reservoir**, which will generate electricity for municipal buildings and share with other organizations.

For more information, visit:
www.nrel.gov/c2c/expertmatch

Expert Match – Additional Project Examples

Community	Sector	High-Level Overview
Durham, NC	Mobility	EV adoption modeling and analysis to inform EVSE strategy especially in low-income neighborhoods
Williston, VT	Mobility	High-level fleet analysis to inform town's fleet transition; share procurement best practices
Billings, MT	Clean Power + Resilience	Analysis to support deployment of on-site photovoltaics and battery storage for a wastewater treatment plant that currently relies on limited diesel generators for backup
Raymond, NH	Clean Power (Geothermal)	Modeling as a proof-of-concept for an effort to power mobile homes with geothermal power
Questa, NM	Clean Power (Green Hydrogen)	Technical guidance to help determine whether clean hydrogen is a good fit for the local electric cooperative to use for long duration energy storage
Bealsville, FL	Clean Power (Agrivoltaics)	Analysis to understand installation costs, energy outputs, and crop production with agrivoltaics (solar paired with farming); analysis of rooftop solar on houses of worship
Pinellas County, FL	Jobs & Workforce Development	Identify best practices for solar and EV workforce development specific to the county and state of focus, and co-develop a framework for a pilot workforce capacity building event

C2C: Clean Energy *to* Communities
U.S. DEPARTMENT OF ENERGY

Expert Match Program

www.nrel.gov/c2c/expertmatch

Apply year round, at any time

- Applications reviewed on rolling basis

Contact: c2c@nrel.gov

To stay up to date about other C2C program offerings, subscribe to our mailing list:
https://bit.ly/C2Cupdates

Jonathan Morgenstein
jonathan.morgenstein@nrel.gov

Sharon Smolinski
sharon.smolinski@nrel.gov

Sarah Inskeep
sarah.inskeep@nrel.gov

PEAP – SIX SECTORS

1. Power Generation
2. Industrial
3. Transportation
4. Buildings (Commercial & Residential)
5. Agriculture
6. Waste Management

CONCLUSION

Session recorded and will be available at: www.energywv.org

General Information:
www.epa.gov/inflation-reduction-act/climate-pollution-reduction-grants

Specific Questions (submit by January 12th 2024): Jackson.R.Igo@wv.gov

Written Comments (submit by January 31st 2024): Jackson.R.Igo@wv.gov

WV OFFICE OF ENERGY
1900 Kanawha Blvd., East
Building 3, Suite 600
Charleston, WV 25305