Proactive Technical Assistance Supports Energy Code Adoption and Success

Direct Technical Assistance

Last 5 digits of project number | 72220
Principal Investigator (PI) | Kim Cheslak
Lead Organization | Pacific Northwest National Lab
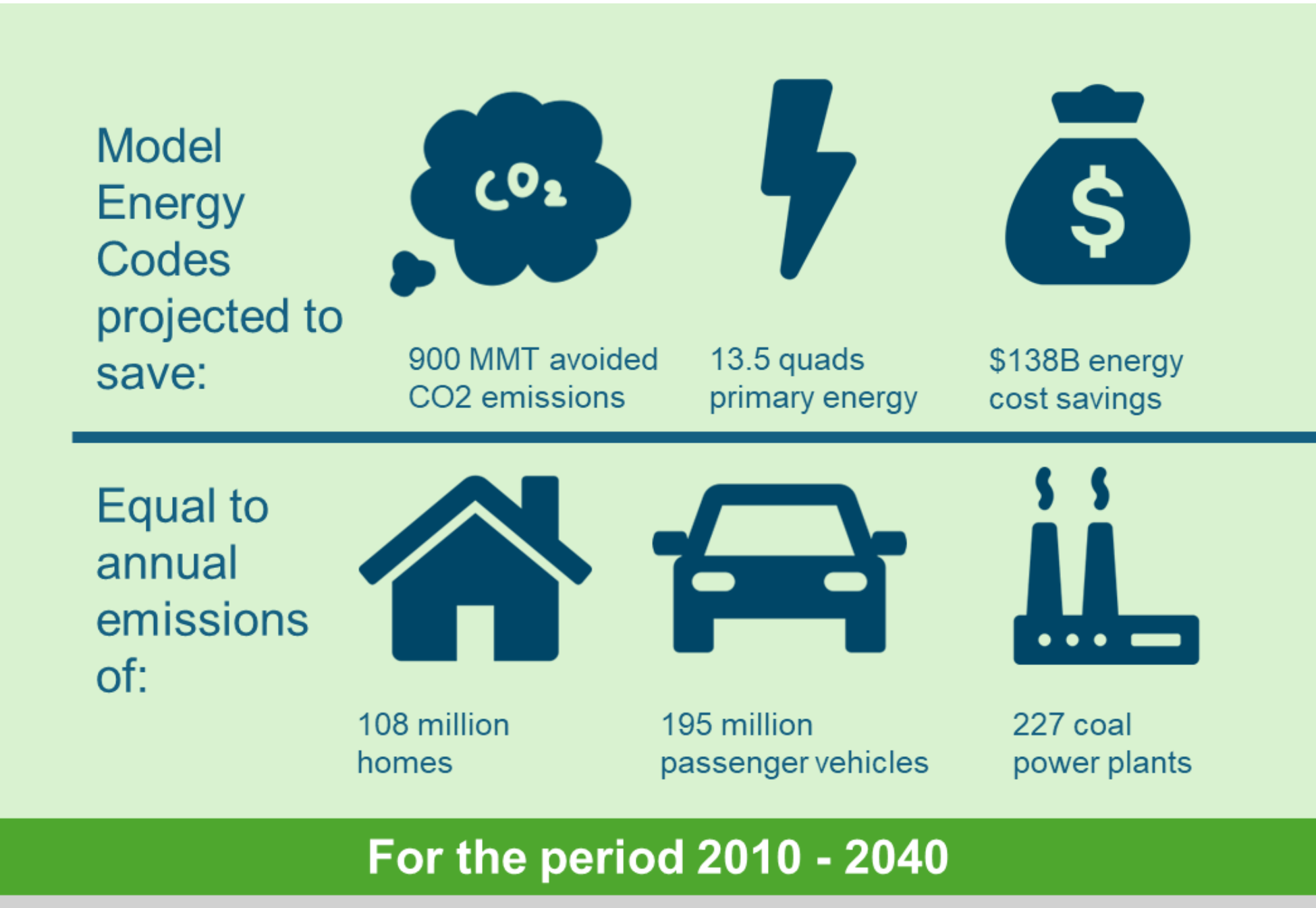**PI Email** | *kim.cheslak@pnnl.gov*

BACKGROUND

Direct Technical Assistance (Direct TA) offered through the Building Energy Codes Program (BECP) offers a robust and ever-evolving collection of information and resources to help states and local jurisdictions save energy and improve their buildings. The program provides technical support for building energy code adoption, implementation, and enforcement at state and local levels. Needs for each state and jurisdiction can vary significantly. To "meet jurisdictions where they are," BECP has expanded Direct TA to be proactive, offering individualized engagement and customized services to support energy code improvements nationwide.

IMPACT

Building energy codes are essential to meet the ambitious goals of DOE's Buildings Decarbonization Blueprint, saving energy and cutting energy costs, carbon emissions, and demand on the electric grid.
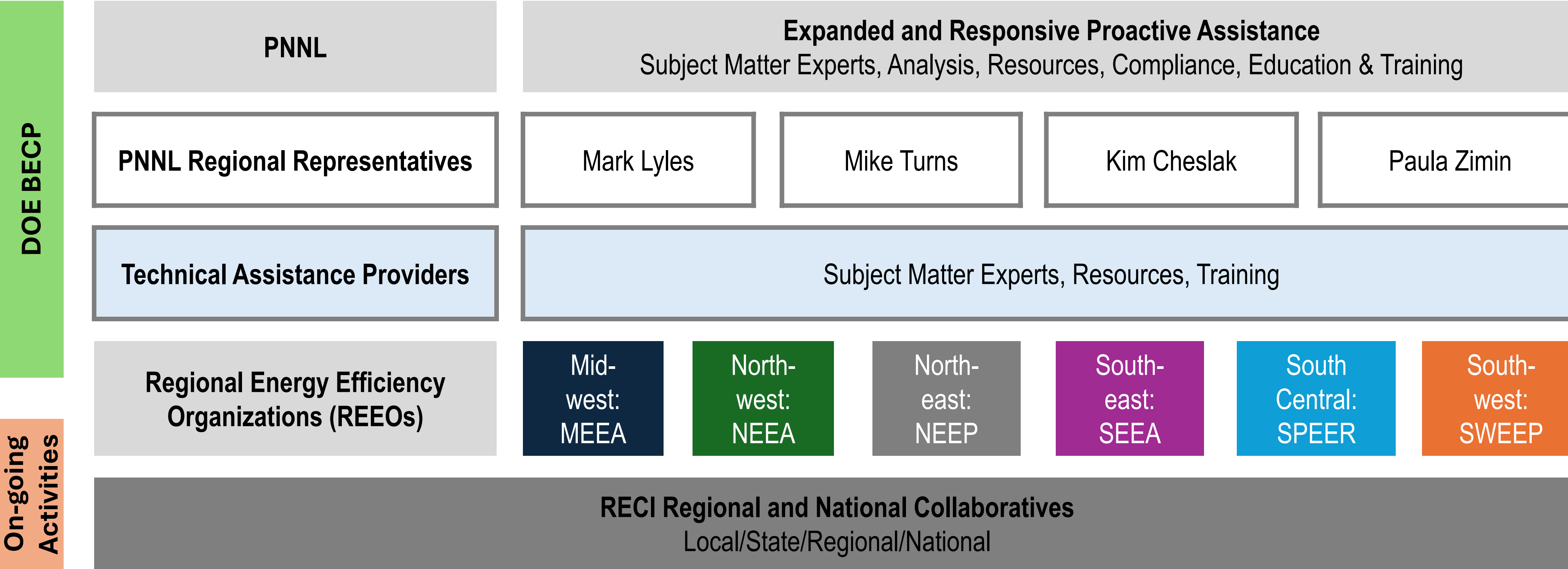
Federal investments through BIL and IRA are expanding opportunities for states to improve their building stock for efficiency, affordability, and resilience. Direct TA provides needed technical support to states, jurisdictions, and Tribal Nations seeking to realize and maximize the benefits of the latest model energy codes.

METHODS

Proactive Technical Assistance directly engages with states and jurisdictions to provide timely analytical and technical input in support of improved energy codes and better buildings. Leveraging PNNL code experts and resources, dedicated Regional Representatives engage deeply in each region and team with local governments and organizations to understand local needs and priorities. The program also coordinates resources developed with additional on-going activities through REEOs and regional and national collaboratives.

DOE BECP					
PNNL	**Expanded and Responsive Proactive Assistance** Subject Matter Experts, Analysis, Resources, Compliance, Education & Training				
PNNL Regional Representatives	Mark Lyles	Mike Turns	Kim Cheslak	Paula Zimin	
Technical Assistance Providers	Subject Matter Experts, Resources, Training				
Regional Energy Efficiency Organizations (REEOs)	Mid-west: MEEA	North-west: NEEA	North-east: NEEP	South-east: SEEA	South Central: SPEER / South-west: SWEEP

On-going Activities

RECI Regional and National Collaboratives
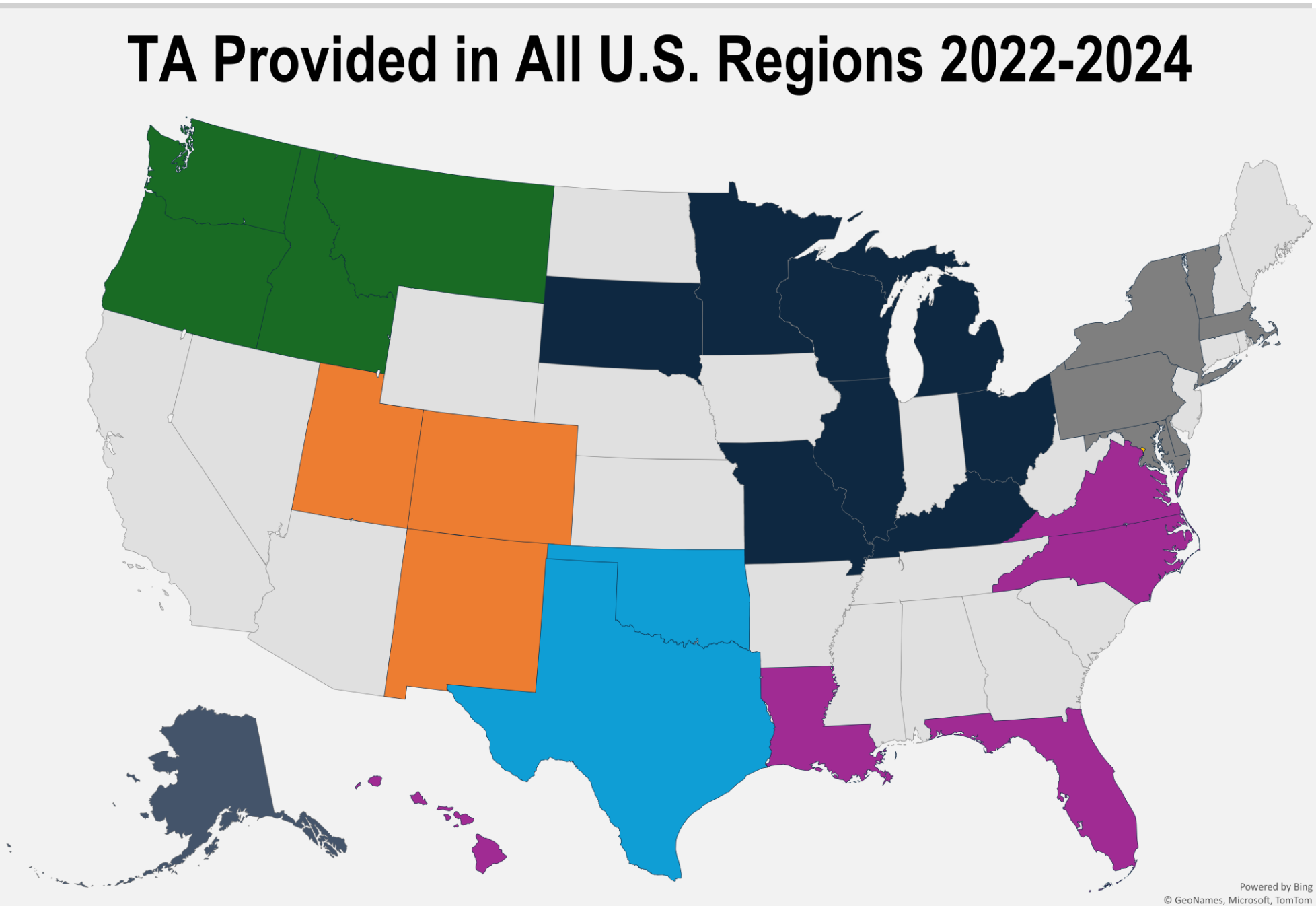Local/State/Regional/National

OUTCOMES & NEXT STEPS
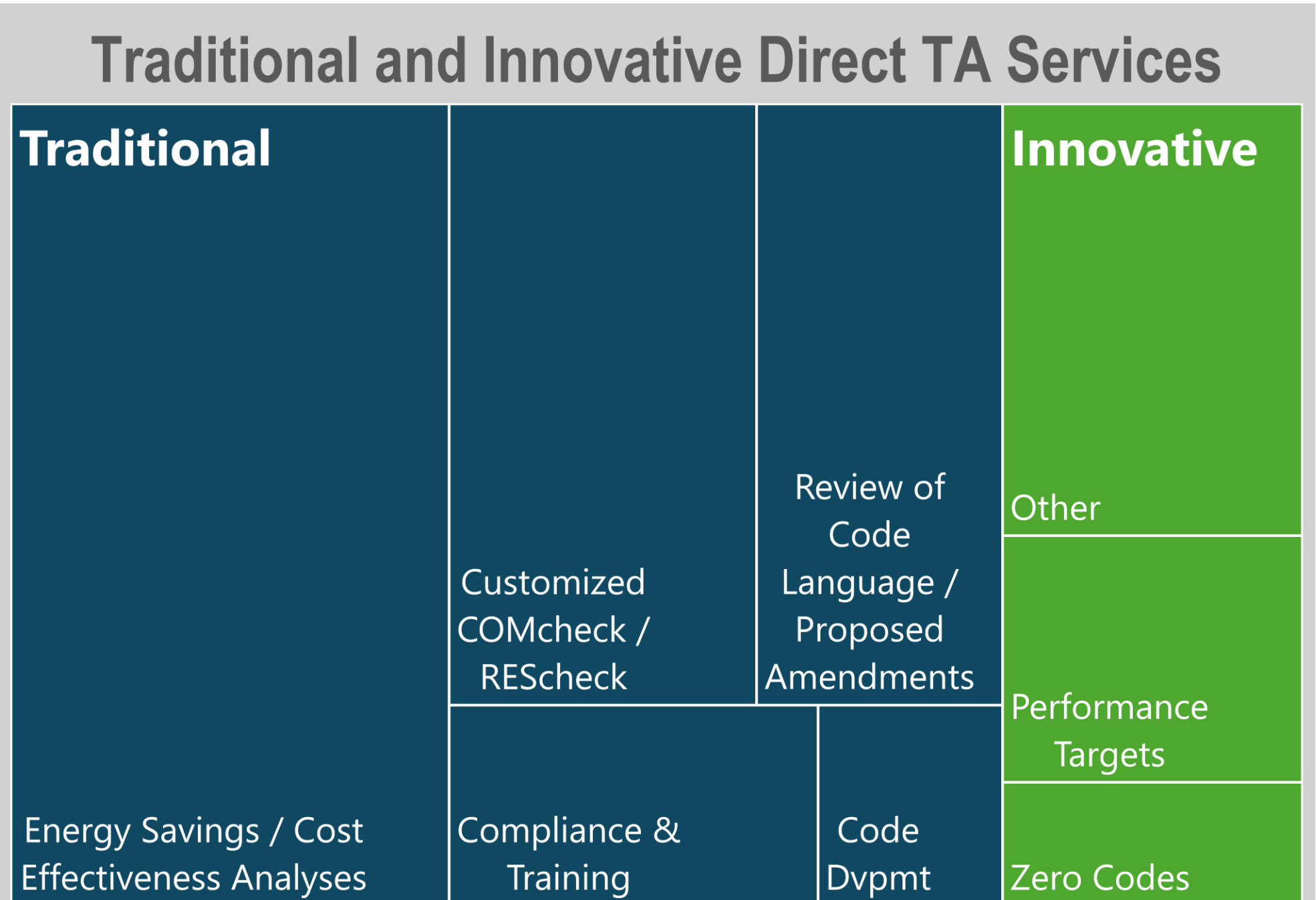
Since FY2022, the Direct TA program has:

- Provided technical assistance to 26 states covering all regions of the U.S., 9 of which were new to the Direct TA program.
- Supported over 56 different projects, 25% of which were innovative analyses to support advanced energy codes such as zero energy codes and performance-based codes.
- Delivered technical analysis to 17 of 20 states who adopted the latest model energy codes.

In FY25, the Direct TA program will:

- Build trusted partnerships and increase proactive support
- Prioritize states and jurisdictions new to the Direct TA network
- Maximize potential reach of regional and national collaborations
- Coordinate resilience codes from regional collaboratives
- Support Tribal Nation energy code development and implementation

Model Energy Codes projected to save:
- 900 MMT avoided CO_2 emissions
- 13.5 quads primary energy
- $138B energy cost savings

Equal to annual emissions of:
- 108 million homes
- 195 million passenger vehicles
- 227 coal power plants

For the period 2010 - 2040

Impact of Energy Codes. Building energy codes represent a significant savings opportunity for homeowners and businesses across the US. The Direct TA program helps to translate these benefits and more for individual states and jurisdictions. https://www.energycodes.gov/impact-analysis

TA Provided in All U.S. Regions 2022-2024

Direct TA Reach. States and jurisdictions who have requested Technical Assistance since 2022. The goal of the Direct TA program is to provide technical support to all states and territories. The program has grown in FY24 with new Regional Representatives to work directly in each region to "meet states and jurisdictions where they are."

Traditional and Innovative Direct TA Services

Traditional:
- Energy Savings / Cost Effectiveness Analyses
- Customized COMcheck / REScheck
- Compliance & Training
- Review of Code Language / Proposed Amendments
- Code Dvpmt

Innovative:
- Other
- Performance Targets
- Zero Codes

Traditional and Innovative Analysis. The program will continue to provide traditional technical assistance, such as energy savings and cost-effectiveness analysis, but will increasingly respond to the changing needs of states and jurisdictions, and grow innovative analyses, such as zero code analysis and building performance targets for new construction.