

U.S. DEPARTMENT OF
ENERGY

Office of
**ENERGY EFFICIENCY &
RENEWABLE ENERGY**

Centering Equity in the Domestic Climate Change Policy

Kelly Crawford, Senior Advisor for Energy Equity & Environmental Justice
Office of Energy Efficiency and Renewable Energy

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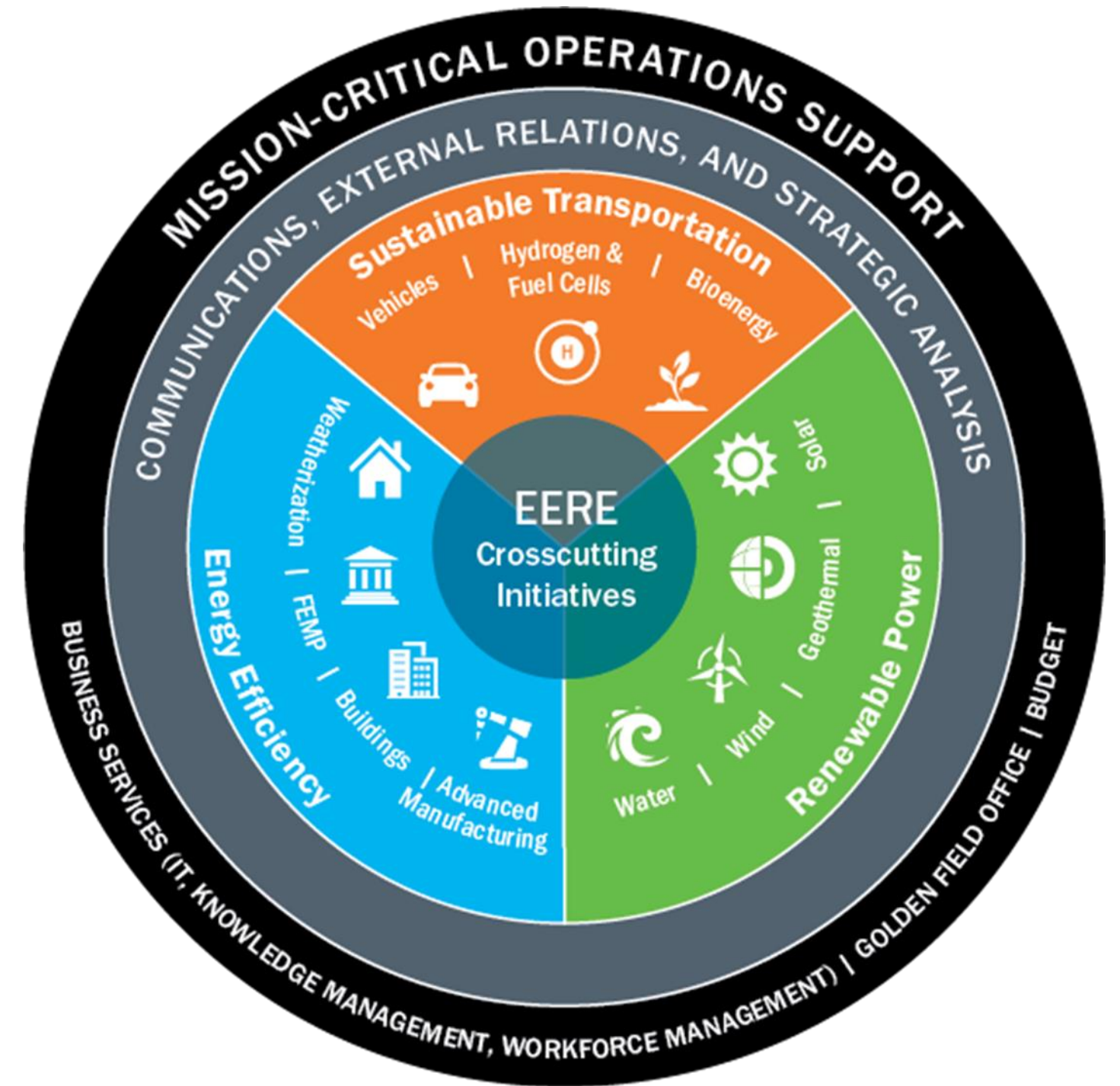


EERE Mission

The mission of EERE is to accelerate the research, development, demonstration, and deployment of technologies and solutions to equitably transition America to net-zero greenhouse gas emissions economy-wide by no later than 2050, while creating good paying jobs for the American people – with a particular focus on workers and communities who have been most negatively impacted by the energy transition, and those historically underserved by the energy system and overburdened by pollution.

EERE is organized into four sectors:

- Office of Sustainable Transportation
- Office of Renewable Power
- Office of Energy Efficiency
- Office of Operations

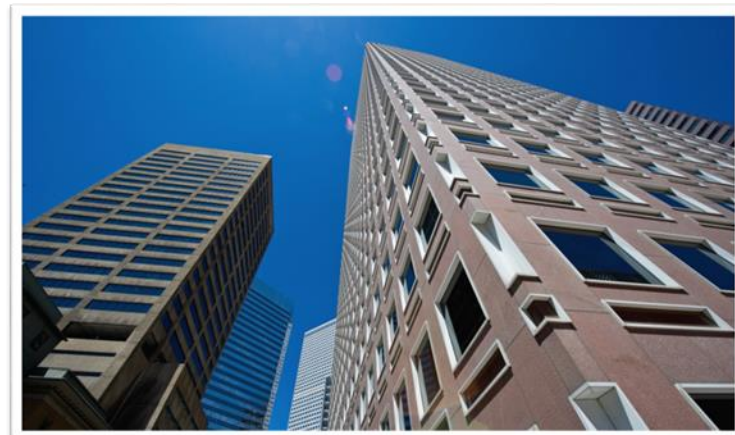


EERE Pillars

Renewable Power

Improve the affordability, reliability, and integration of renewable energy technologies

- Solar Energy Technologies Office
- Water Power Technologies Office
- Wind Energy Technologies Office
- Geothermal Technologies Office
- Renewable Energy Grid Integration



Energy Efficiency

Increase energy productivity of homes, buildings, and industries

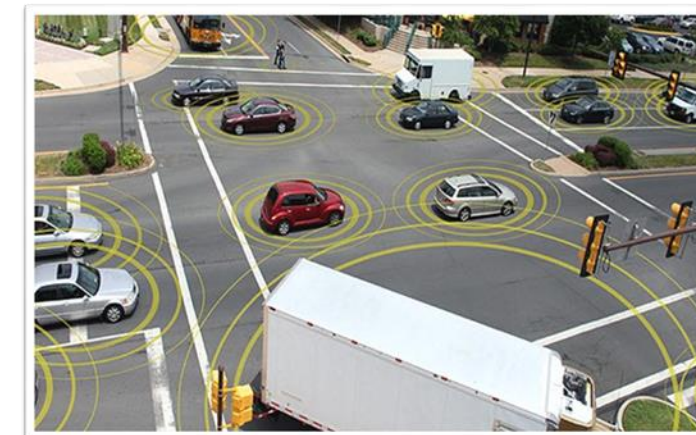
- Advanced Materials and Manufacturing Technologies Office
- Industrial Efficiency and Decarbonization Office
- Building Technologies Office



Sustainable Transportation & Fuels

Focus on research that will lead to more affordable, efficient, and clean transportation energy

- Joint Office of Energy & Transportation
- Vehicle Technologies Office
- Hydrogen & Fuel Cell Technologies Office
- Bioenergy Technologies Office



WHY ENERGY AND ENVIRONMENTAL JUSTICE AT EERE?



INEQUITABLE IMPACTS

- 1930s & 1940's discriminatory housing practices lead to **present day impacts**
- The historic Homeowner's Loan Corporation (HOLC) maps and **redlining** influenced the demographic makeup of U.S. neighborhoods
- Redlined neighborhoods were subjected to **disproportionate environmental burdens** and were more likely adjacent to be oil and gas infrastructure causing **negative long term health impacts**



SCIENTIFIC IMPERATIVE

- Science improves with **diverse teams and approaches**
- Reviewers were more likely to choose similar gender and nationality characteristics in their selections
- Teams with greater ethnic diversity generate papers that get more visibility in scientific literature



- EO13985: Equity in Programming

- EO14008: Climate home and abroad (J40)

- EO14091: Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government

EXECUTIVE ORDERS (EO)

APPROACH: NEXT ITERATION OF CLEAN ENERGY TRANSCENDS TECHNOLOGY SILOS



EERE EEEJ GOALS

Advance energy democracy, alleviate energy insecurity, lower energy costs, and expand access to and ownership of clean energy assets for the broadest set of Americans. Through the EERE Mission, we:

- Provide equitable research, development, demonstration, and deployment funding and project opportunities
- Increases collaborations with disadvantaged and energy transition communities, a diverse set of academic institutions, and wide range of energy system stakeholders.



GUIDING PRINCIPLES

Programmatic Leadership

Integrate equity within congressional intent of technology programs

Central Coordination

Leverage programmatic experience through sharing and learning

Crosscutting Programming

Develop technology neutral RDD&D programs targeting the needs of hard to reach communities

EERE Environmental Justice Impact

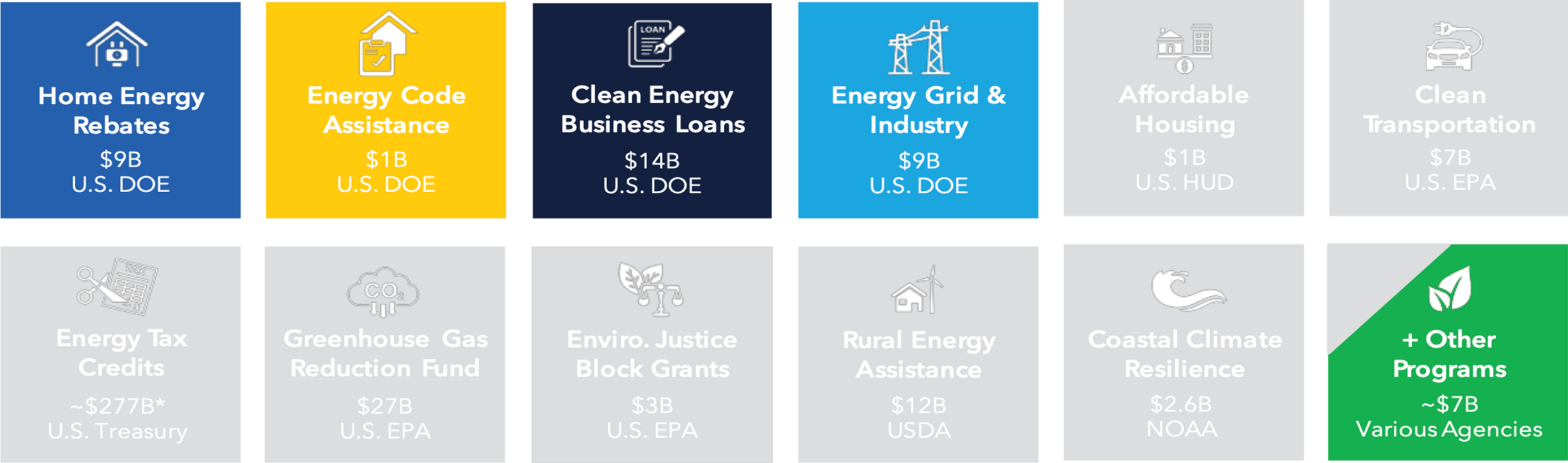
- Since May 2021, **100% of competitive awards from EERE have embedded language that requires applicants to integrate principles of equity and justice within proposals**, and those proposals are evaluated alongside the technical merit.
- To support integration of the language, we hosted over **300 of our staff** for training sessions and Q&A to better understand how to integrate it, and we provided guidance and training for reviewers on how to review proposals.
- EERE is also initiating and expanding our work strategically with HBCUs to build resources at these historic institutions. In FY22, there were **300k in awards with HBCUs**, and we have more than double that in the pipeline as we grow the program.
- Our competitive awards include whole funding opportunities specifically dedicated to hard to reach and underserved communities. Millions of dollars are flowing toward integrating cutting edge technologies with communities that need them the most.

The Community Benefits Plan

- To foster equitable implementation of the Bipartisan Infrastructure Law (BIL), the Department of Energy (DOE) requests that Community Benefits Plans accompany all BIL funding opportunity announcements (FOAs).-related projects.
- Community Benefits Plans are based on a set of four core policy priorities: investing in America's workforce; engaging communities and labor; advancing diversity, equity, inclusion, and accessibility; and implementing Justice 40.
- Note these key principles, when incorporated comprehensively into project proposals and executed upon, will help ensure broadly shared prosperity in the clean energy transition.

Mobilizing Clean Energy Investments Through IRA

The Inflation Reduction Act is the biggest single investment in climate mitigation in our country's history, and it will significantly accelerate the transition away from polluting sources. EERE helps to drive down the costs and improve technologies to make them more accessible for all communities.



*Congressional Budget Office (CBO), [Estimated Budgetary Effects](#)

IRA & Environmental Justice at DOE

Grants

\$760M in grants to facilitate siting high voltage interstate transmission through DOE

Loans

40B for the DOE Loan Program Office

- + \$250B to repurpose, retool, repower, or replace defunct energy infrastructure as well as remediate or reduce emissions of operating infrastructure

\$18B for the Tribal Energy Loan Guarantee Program through DOE

\$2B in loans for electric transmission through DOE

IRA & Environmental Justice at DOE

- Tax incentives for clean hydrogen in the IRA will work in concert with the BIL-funded regional clean hydrogen hubs ([H2Hubs](#)); the \$1.5 billion in BIL funding for research, development, and demonstration to improve electrolysis, manufacturing, and recycling; and ongoing efforts by the DOE's Office of Clean Energy Demonstrations and [Hydrogen Program](#). Together, these investments will help accelerate the clean hydrogen economy and advance DOE's ambitious [Hydrogen Shot](#) goal of being able to produce \$1 per kilogram of clean hydrogen within a decade.
- By enabling a sustainable clean hydrogen economy, these investments will help reduce harmful emissions in communities across the country, which will be especially beneficial for disadvantaged communities that have suffered disproportionately from local air pollution for far too long. Additionally, DOE's [National Clean Hydrogen Strategy and Roadmap](#) and President Biden's [Justice40 Initiative](#) serve as important pillars driving the energy justice efforts.

IRA & Environmental Justice at EERE

- The IRA will promote clean transportation by reducing emissions from commercial trucks, heavy duty vehicles and ports, and by creating grants to support neighborhood equity, safety, and access to affordable transportation.
- IRA is the biggest single investment in climate in our country's history and will significantly accelerate the transition away from polluting sources. EERE helps to drive down costs and improve technologies to make them more accessible for communities.
- The IRA will protect public health by reducing enough pollution from fossil fuels to avoid up to 4,500 premature deaths and up to 119,000 asthma attacks annually by 2030.
- Many of the IRA's rebate and tax credit programs cover even more of the cost of clean home technologies for low-income families. In some cases, low-income households can get a new appliance installed for free.

IRA Solar Tax Credit Bonuses

Domestic Content Bonus (+10% to the Investment or Production Tax Credits)

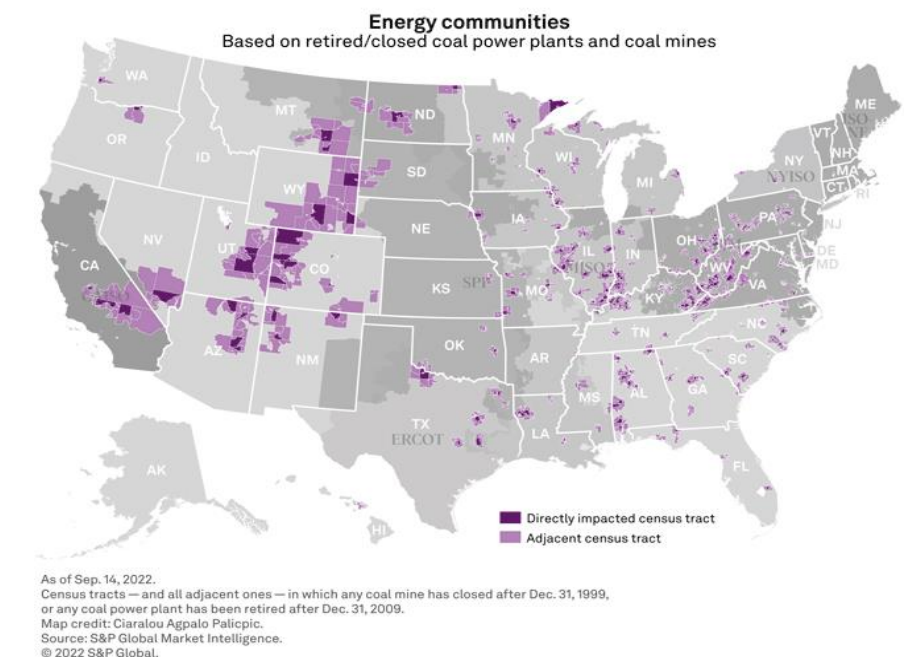
The are two parts to the domestic content bonus:

- Steel and Iron: All steel and iron manufacturing processes must take place in the United States.
- Manufactured Products: A set percentage of the total costs of all manufactured products must be made in the United States.

Energy Community Bonus (+10% to the Investment or Production Tax Credits)

There are three types of sites that qualify as energy communities:

- Brownfield sites,
- Former coal, oil, or natural gas towns that have high unemployment, and
- Census tracts where (or adjacent to a tract where) a coal mine closed (since 1999) or coal-fired electric generating unit closed (since 2009).



From: [S&P Global](https://www.spglobal.com), map is included for illustration purposes only.

Low-Income Bonus (+10-20% to the Investment Tax Credit ONLY)

Up to 1.8 GW_{ac}/year of projects <5 MW_{ac} will be allocated to claim these credits (the excess for a given year can rollover for 3 years) via a program [Treasury announced on Feb 13th](#) and will release further details on later.