



# MESC

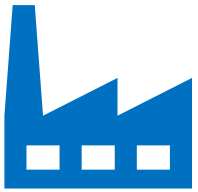
OFFICE OF MANUFACTURING AND ENERGY SUPPLY CHAINS

## Kentucky Governor's Conference on Energy and Environment

Lane Dilg, Senior Advisor in the Office of the  
Under Secretary for Infrastructure



# Powering the Economy



6.8 million jobs in  
traditional and  
energy efficiency  
sectors



120,300 new jobs last  
12 months



Coal-fired generation  
employment declined  
by 8% shedding  
7,700 jobs



Coal is fourth largest  
source at 11%.



# U.S. Manufacturing Stats



12.85 million  
workers



\$2.2 trillion  
generated  
annually



\$768 billion  
in wages



718,796  
manufacturing  
businesses



3.8% annual  
growth for  
previous five  
years



# Manufacturing

To participate in the lithium-based battery market, the U.S. needs a robust supply chain to produce state-of-the-art, reliable EV and grid storage batteries at scale.

- Inflation Reduction Act provides up to \$7,500 in tax credits for new EVs made in U.S.

To retain a competitive manufacturing base, the U.S. needs a competitive EV industry supported by battery manufacturing.

- Automotive manufacturing drives \$1.1 trillion into the economy each year
- 10 million U.S. jobs are directly associated with the automobile industry



# Wind and Solar

Wind and solar sectors added a combined 9,300 jobs last year, growing at 5.5%

Solar energy companies employed 333,887 workers in 2021

The largest number of solar energy employees are in the construction industry, with 173,283 workers

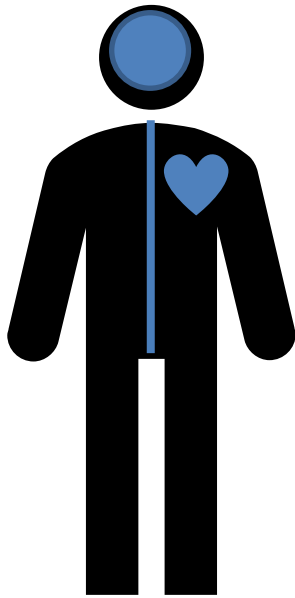
Wind energy companies employed 120,164 workers in 2021

The majority of wind workers in the United States—119,287—are in land-based wind, while the remaining 877 are in the offshore wind sector



# Building a Better America

*A Clean Energy Economy that is American-Led and American-Made*



➤ **The Bipartisan Infrastructure Law**

➤ **The CHIPS & Science Act**

➤ **The Inflation Reduction Act**

**\$550 billion in new  
spending**

**\$1.2 trillion total  
authorization**





# Bipartisan Infrastructure Law – The Backbone



# Bringing Foundational Infrastructure into the Future

## Transportation

- Devote \$42 billion to strengthen **ports, airports, and rail**
- Appropriates \$110 billion for **roads and bridges**
- Invest more than \$750 Million in **Electric Vehicle and Sustainable Transportation initiatives**

## Broadband

- Appropriates \$42.45 billion for **reliable high-speed internet** across the country

## Ensuring Resilience and Longevity of the Grid

- Invest \$11 billion to **enhance the resilience of the electric infrastructure** against disruptive events such as extreme weather and cyber attacks
- Back a \$3 billion expansion of the **Smart Grid** Investment Matching Grant Program
- Provides \$1 billion to **modernizing electric generation facilities**





# Clean Energy Demonstrations

The deal will provide **\$21.5 billion** in funding for clean energy demonstrations and research hubs, including:

- \$8 billion for **clean hydrogen**
  - **\$7 billion to be used for Regional Clean Hydrogen Hubs**
- More than \$10 billion for **carbon capture, direct air capture and industrial emission reduction**
- \$2.5 billion for **advanced nuclear**



**Carbon Capture and Frontier Carbon Solutions:** The first large-scale direct air capture (DAC) project in the United States. The carbon capture project is expected to be operational by late 2023.



# Investing in the future of Energy in American Communities

## Revitalizing domestic supply chains and America's manufacturing leadership

- Invests more than \$7 billion in the **supply chain for batteries**
- Provides an additional \$1.5 billion for **clean hydrogen manufacturing and advancing recycling RD&D**
- Directs \$750 million to support **clean energy manufacturing and recycling in Energy Communities**
- Offers \$400 million to **enhance efficiency and productivity** at existing facilities

## Investing in America's workforce

- Requires all construction workers on projects funded by the deal to be paid **prevailing wages**
- Invests hundreds of millions in **workforce development**
- Establishes a multi-agency **Energy Jobs Council**



# The CHIPS & Science Act

The **CHIPS & Science Act** supports cutting-edge science and innovation to boost American competitiveness and bring jobs and supply chains home.

- **Bolster U.S. leadership in semiconductors:** **\$52.7 billion** for American semiconductor research, development, manufacturing, and workforce development
- **Catalyze regional economic growth and development:** **\$10 billion** to invest in regional innovation and technology hubs across the country, bringing together state and local governments, institutes of higher education, labor unions, businesses, and community-based organizations to create regional partnerships to develop technology, innovation, and manufacturing sectors.
- **Spur private investment:** Companies have announced nearly **\$50 billion** in additional investments in American semiconductor manufacturing



# The Inflation Reduction Act (IRA)

The **Inflation Reduction Act** is the most aggressive action on tackling the climate crisis in American history, which will lift up American workers and create good-paying jobs across the country.

The IRA will:

- Build American clean energy supply chains
- Support American workers with targeted tax incentives aimed at manufacturing U.S.-sourced products
- Strengthen America's manufacturing base
- Create good-paying jobs in energy communities



# Grants, Loans, and Tax Credits to Revitalize Energy Communities

**Bipartisan Infrastructure Law 40209: Advanced Energy Manufacturing & Recycling Grant Program:** \$750 million to re-equip or build facilities for clean energy manufacturing and recycling

**Inflation Reduction Act 1706: Energy Infrastructure Reinvestment Act:** \$250 billion in loan authority to (a) retool / repurpose / replace energy infrastructure or (b) avoid, reduce, utilize, or sequester greenhouse gas emissions enable operating energy infrastructure

IRA § 13101 (Sec. 451) – Electricity produced from certain renewable resources, etc.

IRA § 13102 (Sec. 48) – Energy investment credit

IRA § 13701 (Sec. 45Y) – Clean electricity production tax credit

IRA § 13702 (Sec. 48E) – Clean electricity investment credit

IRA § 13501 (Sec. 48C) – Qualifying advanced energy project credit



# Other Relevant Federal Programs

**Advanced Solar Energy Manufacturing Initiative: \$20 million** for R&D and commercialization of new solar energy manufacturing technologies

**Assistance to Coal Communities: \$33.5 million** for matched funds grants to assist state and local interests in designing and implementing strategies to adjust or effect change to an economy

**Battery Manufacturing and Recycling Grants: \$3 billion** to ensure the U.S. has a viable domestic manufacturing and recycling capability

**Coal Communities Commitment: \$300 million** for direct support of coal communities – EDA exceeded this initial commitment and awarded **\$551.8 million** in total

**Energy Improvement in Rural or Remote Areas: \$1 billion** to improve cost effectiveness of electricity generation, transmission and distribution systems in places with less than 10,000 inhabitants



# DOE Approach to Community Benefits: Four Priorities

## Justice40

Meet or exceed the objectives of the Justice40 initiative that 40% of benefits accrue to disadvantaged communities

## Diversity, Equity, Inclusion, and Accessibility

Equitable access to wealth building opportunities (teaming, access to good jobs, business and contracting opportunities, etc.)

## Good Jobs

Create good-paying jobs to attract and retain skilled workers and ensure workers have a voice on the job over decisions that affect them (wages, working conditions, safety, etc.)

## Workforce and Community Agreements

Meaningful engagement with community and labor partners leading to formal agreements



\*In most cases, these plans equate to 20% of the technical merit points for project proposals

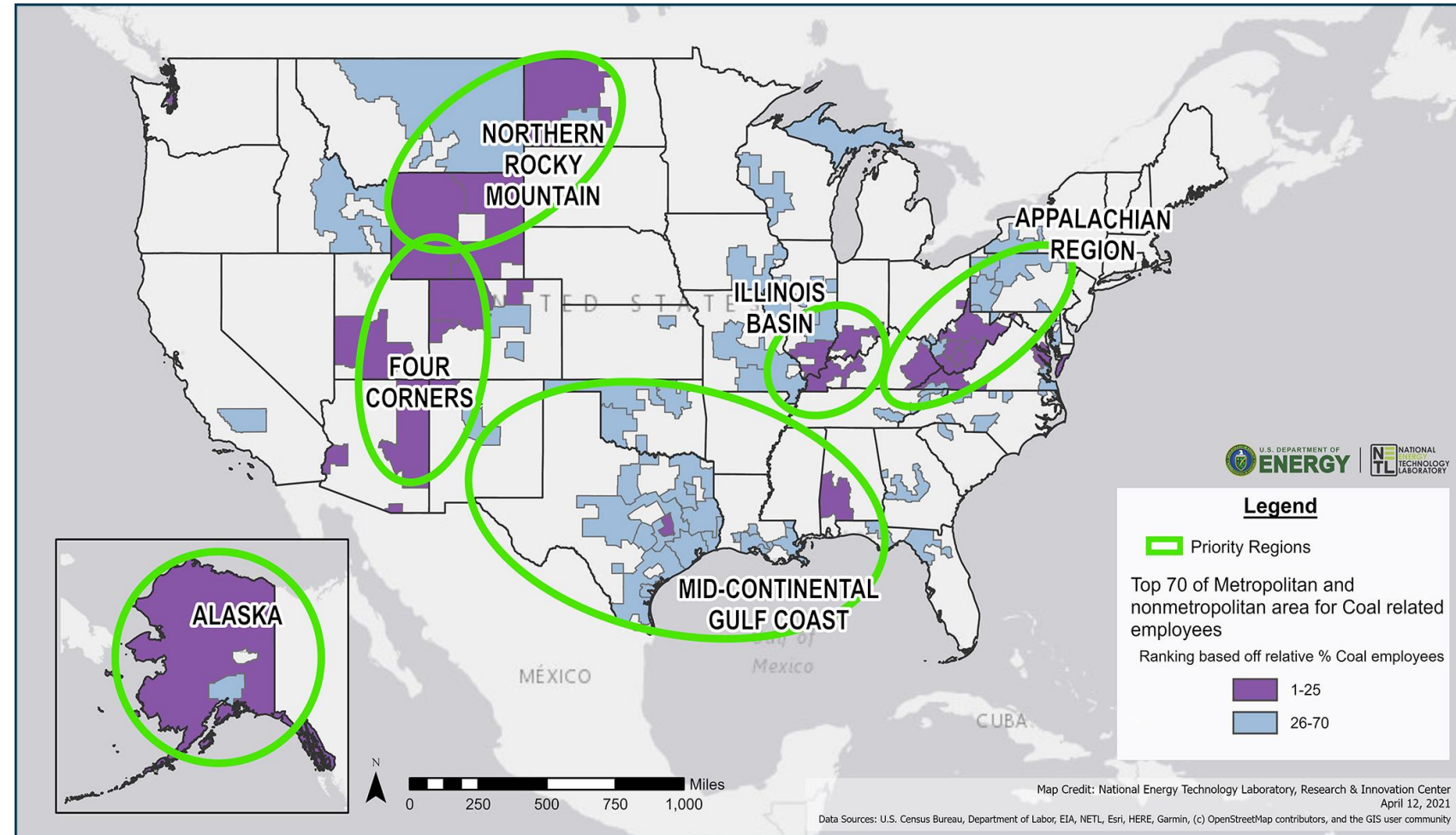


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# Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization

- Identified **25** priority Energy Communities
- Coal communities identified as immediately challenged
- #2 Eastern KY & #6 Western KY
- New Rapid Response Team of interagency officials to partner directly with local KY leaders in Illinois Basin region



## For more information...

1. **Advanced Energy Manufacturing & Recycling Grant Program:**  
[www.energy.gov/bil/advanced-energy-manufacturing-and-recycling-grants](https://www.energy.gov/bil/advanced-energy-manufacturing-and-recycling-grants)
2. **IRA Opportunities through the Loan Programs Office:**  
[www.energy.gov/lpo/inflation-reduction-act-2022](https://www.energy.gov/lpo/inflation-reduction-act-2022)
3. **Department of Energy Bipartisan Infrastructure Law Programs:** [www.energy.gov/bil](https://www.energy.gov/bil)





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**MANUFACTURING &  
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