

Big Opportunities for Sustainability: *Infrastructure Investment and Jobs Act and Inflation Reduction Act*

Presenters:

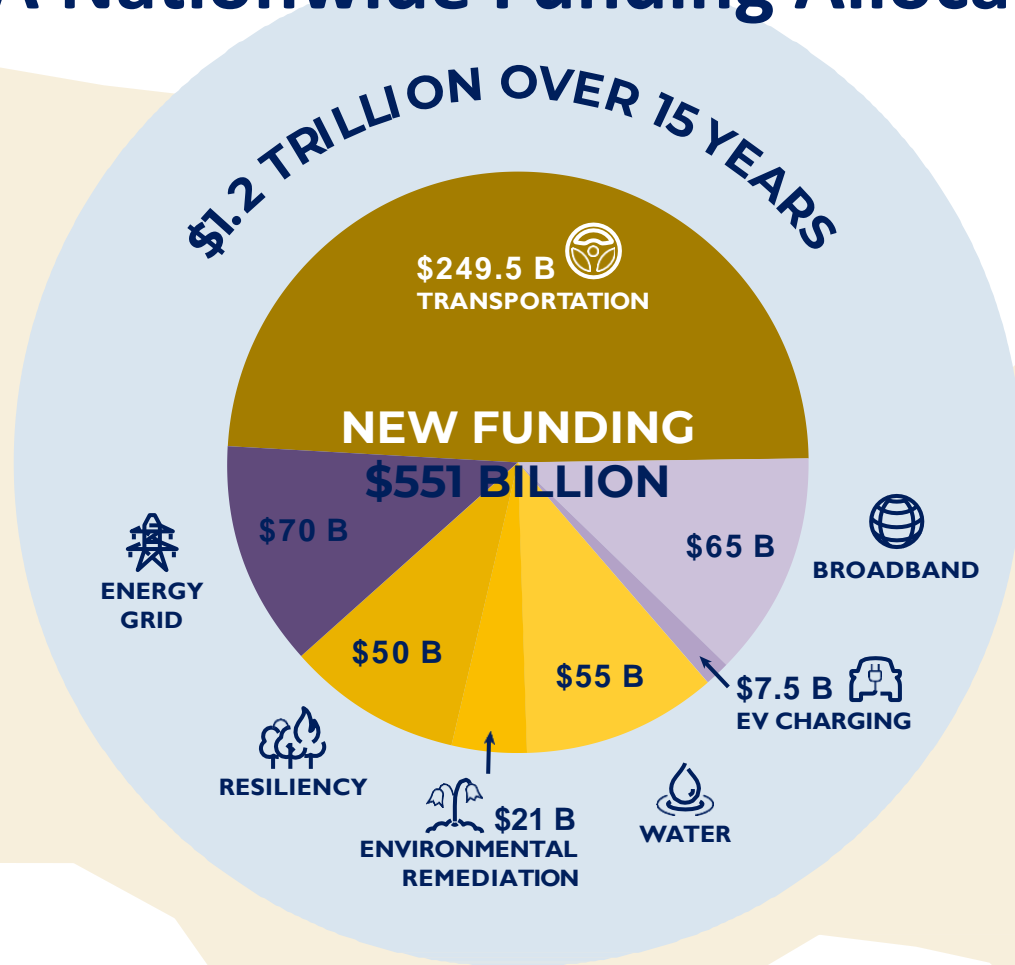
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IJA Nationwide Funding Allocation



Infrastructure Investment and Jobs Act (IIJA) - Overview

Traditional and nontraditional investments

Rebuilding roads and bridges, improving the environment through remediation and abandoned well plugging, ensuring broadband access and digital equity, expanding access to clean drinking water.

Unprecedented amounts

Over **\$19 billion** has already been allocated to Pennsylvania

Importance to Pennsylvania

Goal is to drive as much investment into Pennsylvania as possible, including municipalities and private businesses.

Funding distribution mechanisms

Formula funds to state agencies

Competitive grants to agencies, municipalities, nonprofits, and private businesses



IIJA - Pennsylvania Implementation Structure

Infrastructure Implementation Team

Lead: Jack Groarke, Deputy Chief of Staff

Coordinators:

Jessica Shirley, DEP

Natasha Fackler, PennDOT

Britte Earp, DCED

Brandon Carson, Broadband

Core agencies

DEP

PennDOT

DCED

Broadband Authority

PENNVEST

PEMA

Workforce Support Coordination:

Tom Foley (in collaboration with L&I, the PA WDB, GPO)

General Support: Ernst & Young (EY) Consultants



IIJA – Major Projects and Areas of Investment

Transportation

Electric Vehicles

Legacy Pollution

- Abandoned Mine Reclamation
- Abandoned Oil and Gas Well Plugging
- Brownfields

Clean Water

Clean Energy

Broadband and Digital Equity



Transportation Investments: Roads and Bridges

- Pennsylvania has **3,353 bridges** and over **7,540 miles** of highway in poor condition
- Through the IIJA, PA expects **\$11.3 billion** for federal-aid highway apportioned programs and **\$1.6 billion** for bridge replacement and repairs
- Pennsylvania can also compete for the **\$12.5 billion** Bridge Investment Program
- There is an additional **\$16 billion** in the IIJA dedicated for major projects



Electric Vehicles

- Pennsylvania expects to receive **\$171 million** over five years to support the expansion of an electric vehicle charging network
 - Initially chargers will be placed on designated Alternative Fuel Corridors (AFCs) every 50 miles and within 1 travel mile of the corridor
- There will also be the opportunity to apply for the **\$2.5 billion** competitive grant funding dedicated to electric vehicle charging to support community charging needs
- CHIPS and Science Act, provides **\$52.7 billion** for American semiconductors, including **\$39 billion** in manufacturing incentives.
- **\$7 billion** in funding to support end-to-end domestic supply chain for EV battery manufacturing (DOE).



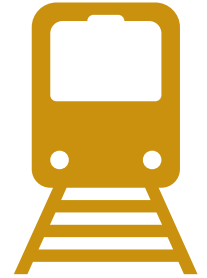
Transportation Investments: Public Transit

- Through the IIJA, Pennsylvania will receive approximately **\$3.2 billion** over five years to improve public transportation options across the state
- **21.9%** of transit vehicles in the Pennsylvania are past useful life
- EPA Clean School Bus Rebate Program:
 - Increased to **\$965 million** this year due to overwhelming demand, **\$5 billion** total
 - State/local entities and eligible contractors
 - 100% of the cost of the replacement bus/charging infrastructure
 - EPA announced \$34.6 million for 89 new buses in 11 districts in Pennsylvania.
 - 83 School Districts in PA applied and are on the “waitlist”



Transportation Investments: Passenger & Freight Rail

- Pennsylvania will be eligible to compete for up to **\$10 billion** for rail improvement and safety grants
- An additional **\$5.5 billion** is available for grade crossing safety improvements. NOFO announced in June 2022
- Federal – State Partnership for Intercity Passenger Rail (National) **\$43.5 billion**. NOFO to be announced in October 2022



Broadband

IJA provides **\$65 billion nationwide** for reliable, high speed, and affordable broadband.



Pennsylvania's funding will be administered by the newly established PA Broadband Development Authority.

Over \$100 million guaranteed for PA for broadband expansion. Hundreds of millions more anticipated, based on formula funding and competitive grant opportunities.

Funding will be prioritized for unserved and underserved households that currently lack access to high-speed internet. Focus will be on equity, access, and affordability.



Building Resilient Infrastructure and Communities (BRIC)

- Shifts away from disaster recovery spending to proactive investment in community resilience.
- Nationwide competitive program
- Commonwealth of PA is applicant, sub-applicants are local governments (PA submits one bundled application)
- Eligible entities may submit the PEMA Form #19 Letter of Interest year-round to get on an annual listing
- 75% federal/25% non-federal cost-share requirement; economically disadvantaged rural communities have 90%/10% cost-share



Legacy Pollution



Abandoned Mine Reclamation

- Funding to clean up abandoned coal mine sites and related problems that pose a threat to public health and safety, and restoring land and water resources degraded by the effects of past coal mining, and addressing emergency projects.
- Historic levels of funding – the most in history
 - **\$244.9 million per year for 15 years (total of \$3.2 billion)** to PA
- New grant program for groups to submit AML and AMD projects and apply for funding open through January 13.



Legacy Pollution



Abandoned Oil and Gas Well Plugging

- Between 305,000 and 395,000 oil and gas wells have been drilled in Pennsylvania
- IIJA could provide up to **\$400 million** to PA to plug abandoned and orphan wells through September 30, 2030
- **\$330 million** total in formula funding
- **\$25 million** in initial formula funding approved by Interior in September
- **Five** bids were posted on Sept 30: will plug 79 wells
- Finalizing **five** additional bid packages: will plug 176 wells



Legacy Pollution

Brownfields and Superfund



- **\$1.5 billion** nationwide for brownfields
 - BECB was awarded **\$1.5 million** under EPA's 128a CERCLA State and Tribal Response Program Grant
 - **\$300,000** will be used to create brownfields inventories for small to medium-sized disadvantaged and EJ communities
 - DEP applying for additional competitive grants for community-wide assessments
 - DCED applying for competitive revolving loan program
- **\$3.5 billion** nationwide for Hazardous Substance Superfund sites



Clean Water in Pennsylvania

State Revolving Loan Fund (PENNVEST)

- Clean Water SRF IIJA Supplemental- **\$441 million**
- Clean Water SRF Emerging Contaminants - **\$3.7 million**
- Drinking Water SRF IIJA Supplemental- **\$343 million**
- Drinking Water SRF Lead Service Lines - **\$439 million**
- Drinking Water SRF Emerging Contaminants - **\$117 million**
- Notified by EPA on 9/20 that all five IIJA SRF applications were approved for **\$240 million** for FY 2022
- Governor Wolf and PENNVEST announced \$236 million for 23 drinking water, wastewater, stormwater, and nonpoint source projects across 15 counties on Oct. 20



Clean Water in Pennsylvania



Chesapeake Bay

- **\$238 million** total, with **~\$5.6 million** for PA
- **\$1.8 million** awarded in September for FY 2022
- Of that, \$800,000 must be put toward any of the four pilot counties (Adams, Franklin, York, and Lancaster)
- The remaining must be allocated to projects in “most effective basins” with focus on disadvantaged communities



Clean Energy Programs

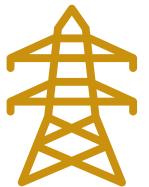
Federal Department of Energy is setting up **60** new programs

IJA provides **\$186 million** for Weatherization Programs in Pennsylvania



The State Energy Office anticipates applying for:

- **\$14 million** for the State Energy Program
- **\$3.7 million** for the Energy Efficiency Loan Capitalization Grant
- **\$3 million** for Building Codes Implementation for Efficiency and Resilience
- **\$4.7 million** for Energy Efficiency and Conservation Block Grant
- **Over \$40 million** for building a more resilient electricity grid in PA (**\$8.1 million** annually)



Inflation Reduction Act (IRA) - Overview

Largest Investment into addressing climate change in history

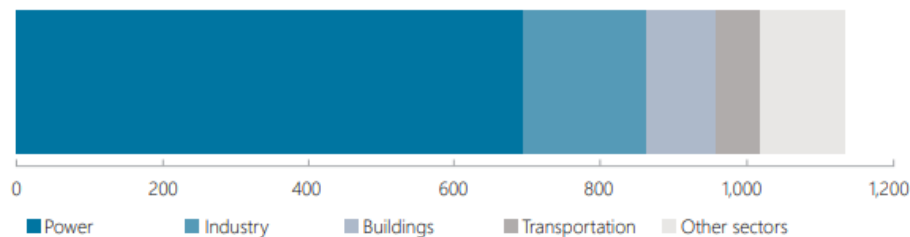
Provides **\$369 billion** in spending on energy and climate change

A launching pad for long-term reductions

Investments in new technologies will drive emissions toward **net-zero by 2050**

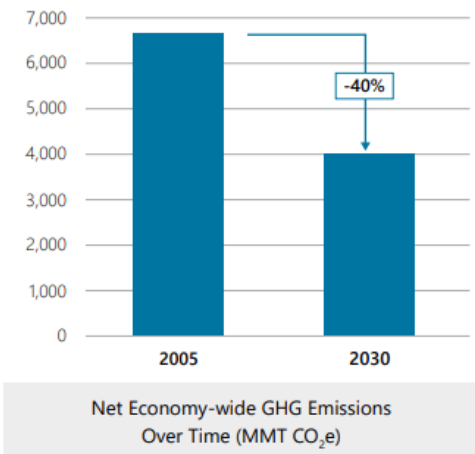
Projected to reduce GHG emissions to 40% below 2005 levels by 2030

IRA and IIJA together could reduce emissions by 1,000 million metric tons or about a gigaton



Estimated Emissions Reductions in 2030 from *Inflation Reduction Act* and *Bipartisan Infrastructure Law* (2030, MMT CO₂e)

Source: US Department of Energy



Source: US Department of Energy

IRA – Major Projects and Areas of Investment

Transportation

- Tax credits and grant programs for ZEVs and infrastructure
 - **\$7,500 credit per new vehicle**
 - Previously-owned vehicle credit (**\$4,000** or 30% of the cost of the sale price, whichever is less)
 - **Up to \$40,000** credit through Qualified Commercial Clean Vehicles Program
- Support for states to adopt and implement GHG and ZEV standards under Section 177 of the Clean Air Act
- **\$1 billion** for new Clean Heavy-Duty Vehicle grant and rebate program (EPA)
- **\$3 billion** to USPS for ZEV delivery vehicles and infrastructure
- **\$3.2 billion** for Neighborhood Access and Equity Grants
- **\$500 million** for a new Biofuel Infrastructure and Agriculture Product Market Expansion Grant



IRA – Major Projects and Areas of Investment

Buildings

- **\$4.3 billion** for the Home Energy Performance-Based, Whole-House Rebate program (HOME Rebates) – **PA's share is \$129,980,360 (10 years)**
 - EE retrofits: \$2,000-\$4,000 individual households; up to \$400,000 for multi-family buildings depending on amount of energy reduced
 - Maximum rebates double for low- and moderate-income homes.
- **\$4.275 billion** for a High-Efficiency Electric Home Rebate Program
 - Include point-of-sale rebates – **PA's share is \$129,226,380 (10 years)**
 - Means-tested – will provide 50% of the cost for incomes 80 to 150% of area median income, 100% of the cost for incomes 80% of area median income and below.
 - \$14,000 cap per household, \$8,000 cap for heat pump costs, \$1,750 cap for heat pump water heaters, \$4,000 for panel/service upgrade, \$840 max for electric stoves/range/oven and dryers, \$1,600 max for insulation/air sealing, \$2,500 cap for electric wiring,
 - Maximum total rebate of \$14,000



IRA – Major Projects and Areas of Investment

Buildings

\$1 billion for state and local governments to adopt building energy codes

\$1 billion for improving energy and water efficiency and climate resilience of affordable housing



Tax credits:

- Extension, increase, and modifications of nonbusiness energy property credit
- Residential clean energy credit
- EE commercial building deduction
- Extension, increase, and modification of new energy efficiency home credit
- Increase in energy credit for solar and wind facilities placed in service in connection with low-income communities



IRA – Major Projects and Areas of Investment

Energy

\$100 million for offshore wind

\$2 billion for transmission financing in DOE Loan Program Office

\$27 billion for the Greenhouse Gas Reduction Fund

- **\$7 billion** to states, municipalities, and tribes
- **\$8 billion** targeted to low-income and vulnerable communities

\$9.7 billion in financial assistance for rural electric co-ops for emission reductions

Tax Credits:

- Extension and modification of the Production Tax Credit
- Extension and modification of the Investment Tax Credit
- Zero-emission nuclear power production credit
- Cost recovery for qualified facilities, qualified property, and grid improvement property
- Elective payment for energy property and electricity produced from certain renewables



IRA – Major Projects and Areas of Investment

Other

Forestry, Public Lands and Conservation Investments

- **\$2.2 billion** for state and private forestry conservation programs



Agricultural Conservation and Technical Assistance

- **\$8.45 billion** for Environmental Quality Incentives Program (EQIP)

\$5 billion for Energy Infrastructure Reinvestment Financing

- Low carbon reinvestments in energy communities

\$3 billion for Environmental and Climate Justice Block Grants

- Community-led air monitoring, prevention and remediation; workforce development
- Mitigating urban heat islands
- Reducing indoor air pollution
- Facilitating engagement



Environmental Finance Centers (EFCs)

- On Nov. 4 EPA announced 29 EFCs to help communities access federal funding for infrastructure projects.
- Provide “targeted technical assistance” to local governments, states, tribes and NGOs to protect public health, environment, and advance environmental justice.
- Providers will:
 - Help communities to develop and submit project proposals
 - Support underserved communities with TA to identified sustainable infrastructure solutions
- Category 1 – Regional Multi-Environmental Media
- Category 2 – Regional Water Infrastructure
- Category 3 – National Water Infrastructure



Implementation Priorities

- Equitable access for participation in funding opportunities
 - Justice 40 initiative (Executive Order 14008 – Tackling the Climate Crisis at Home and Abroad)
 - Grantmaking principles
- Equitable access for job opportunities for workforce participants
- Build America, Buy America
- Davis-Bacon Wage Requirements



Thank you!

For questions –

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