



Energy Resources & Federal Update

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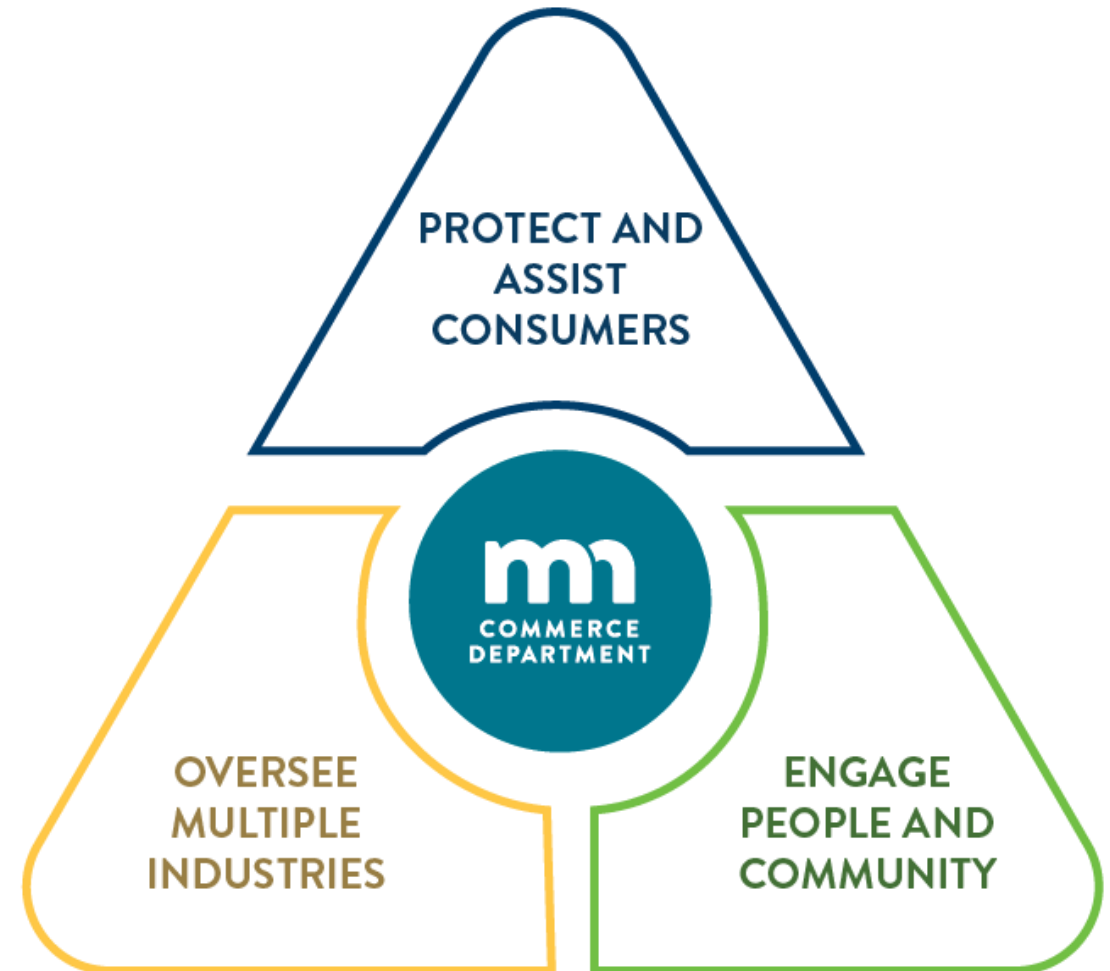
Agenda

Energy Resources & Federal IJA/IRA Update

- About the Division
- Generation Mix Over Time
- Transforming Electric System
- Energy Policy Impacts
- Transmission Planning Efforts
- Federal Update on IJA/IRA Implementation Efforts

Mission

- Protect and assist consumers
- Oversight: 40+ industry areas
- Engagement with all communities



Strategic Priorities

Protect the Public Interest	Protect the public interest through consumer protection, consumer education, assistance to consumers, safety, health, and financial security, and lowering inequities.
Trusted Resource	Serve as a trusted public resource for consumers and businesses by listening and learning from the Minnesotans Commerce serves, being effective stewards of public resources, advocating for Minnesota consumers and developing a policy, programmatic, and regulatory environment that meets their needs.
Reduce Economic Barriers	Reduce economic barriers within Commerce regulatory oversight and reduce disparities within those of all races, ethnicities, religions, economic statuses, gender identities, sexual orientations, (dis)abilities, and zip codes.
Climate Change Resilience	Ensure all, especially historically disadvantaged Minnesotans are resilient to Minnesota's climate and engaged in advancing efforts to mitigate climate change.
Strong, Competitive, Fair Marketplace	Ensure a strong, competitive, and fair marketplace for Minnesotans.

With You Every Day

Commerce is with you every day,
whether you are ...

... Filling up on gas

... Purchasing a home

... Working to reduce your energy use

... Rebuilding after a disaster

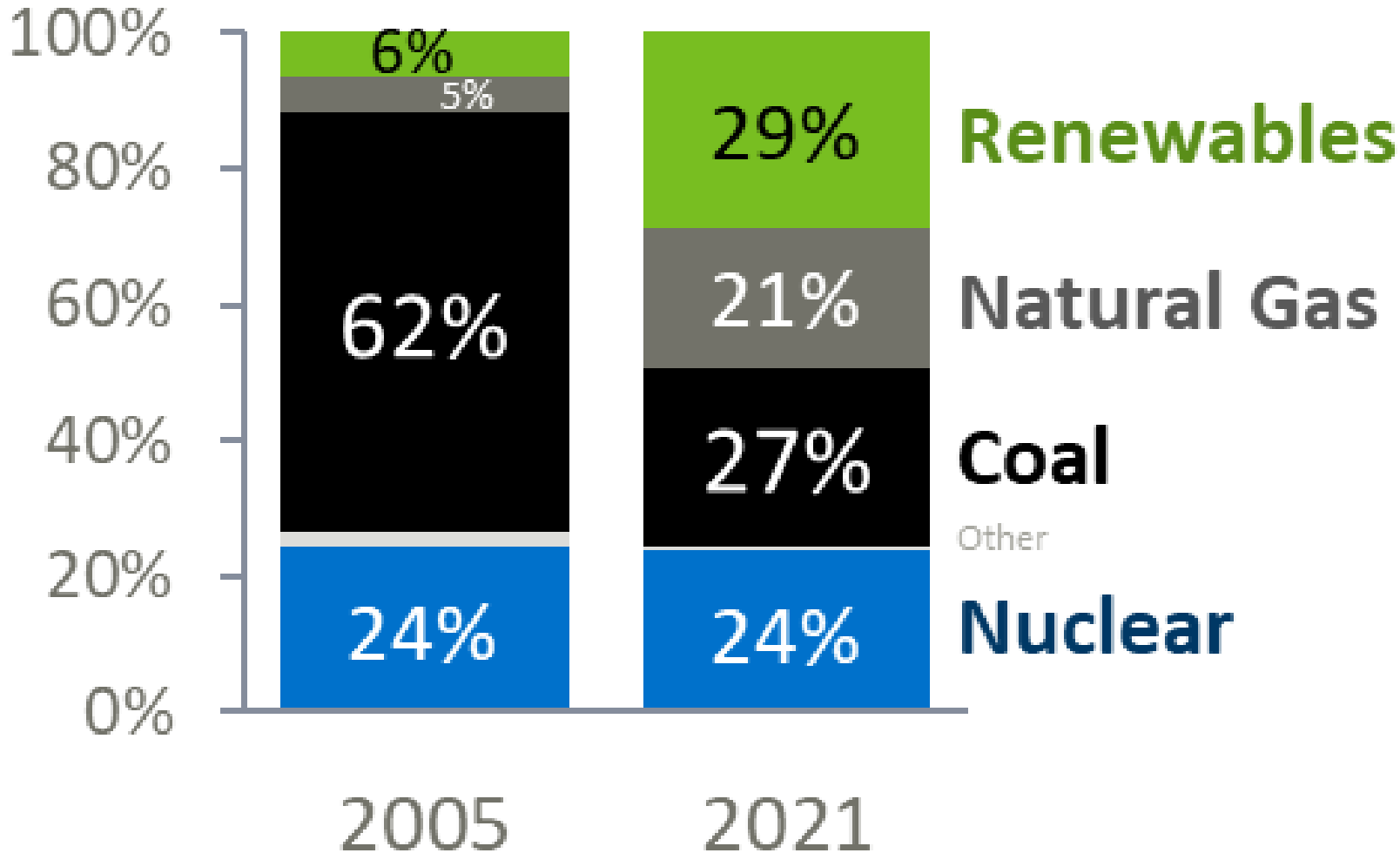


Division of Energy Resources

- Promote clean, reliable, and affordable energy for Minnesota businesses and homes
- Advocate on behalf of consumers and ratepayers in proceedings involving regulated utilities on energy and telecommunications
- Provide environmental review for large-scale energy projects
- Maintain state emergency energy planning and recovery plans
- Oversee MN utilities' Conservation Improvement Program
- Administer Energy Assistance Program, Weatherization Assistance Program, and multiple state (e.g. Solar for Schools) programs
- Host the Energy Information Center & State Energy Office

Electricity Generated in Minnesota

Minnesota's Generation Mix Over Time



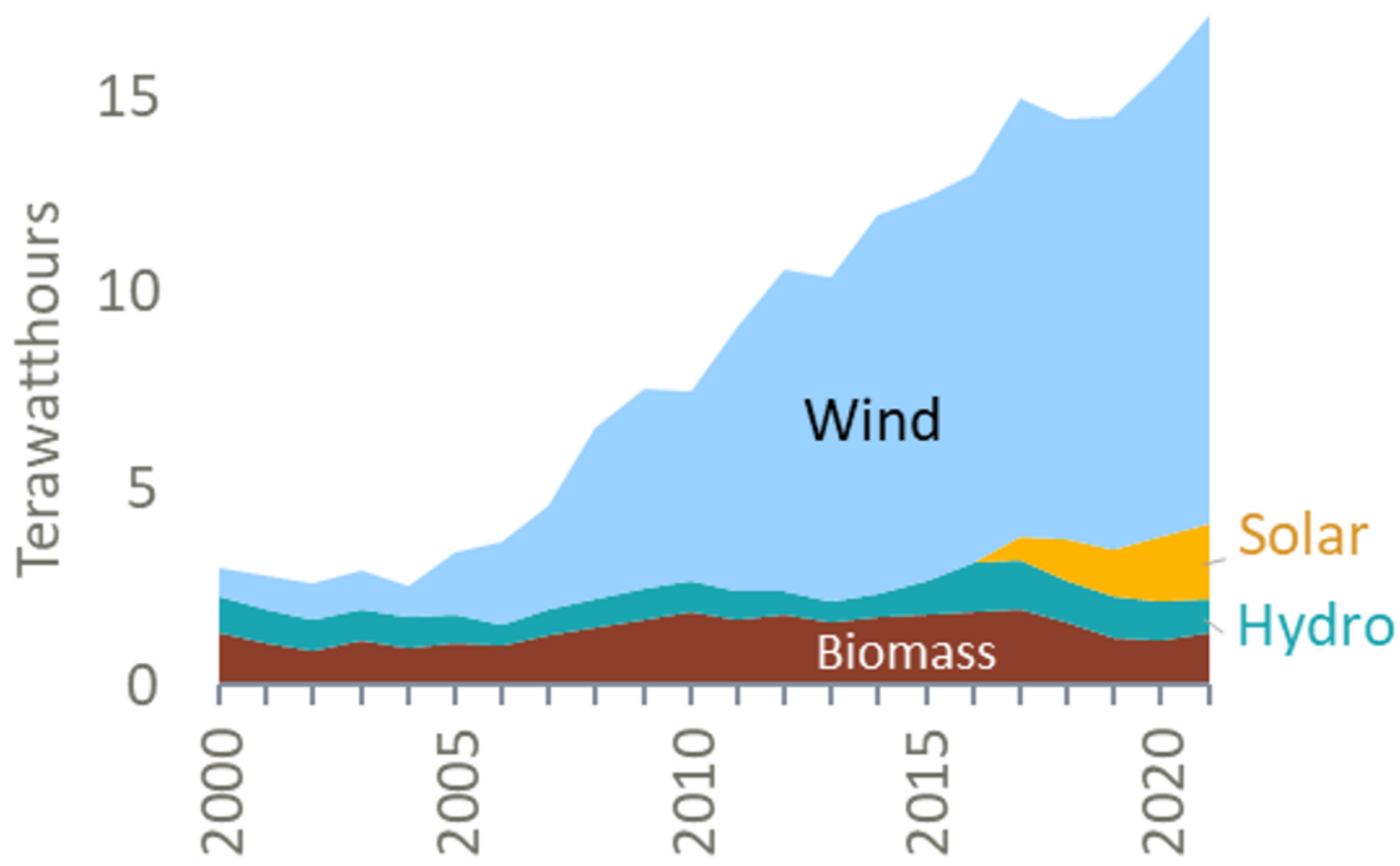
source: U.S. EIA

Minnesota's Transforming Electricity Market



MN Renewable Electricity Generation

source: U.S. EIA



Impact of MN Policy Efforts to Date



Energy Efficiency

Saved
Minnesotans
over **\$6 Billion**



MN Coal Generation

Reduced from
over 60% to
under 25%



Electric Sector CO₂ Emissions

Reduced by **46%**
from 2005
baseline



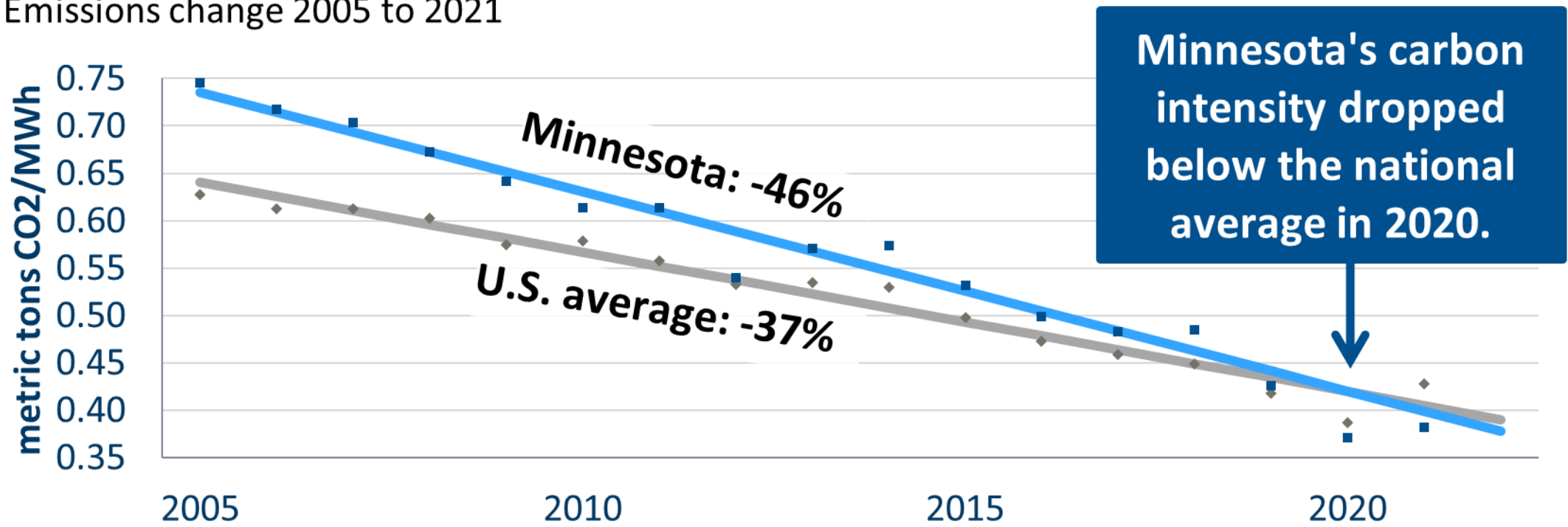
Renewable Energy

Developed nearly
6,000 MW's of
Wind & Solar

Transformation to Date – Reducing Carbon Intensity

Carbon Intensity of Electricity Generated within Minnesota

Emissions change 2005 to 2021



Source: MN Department of Commerce analysis of U.S.EIA data

Identified Needs of MN Transmission

New high-voltage transmission is needed to facilitate wind and solar and maintain grid reliability

Commerce and PUC advocated for long-range transmission planning at MISO

MISO has proposed "Tranche 1" high-voltage lines, shown in map. three projects are in Minnesota

Planning for "Tranche 2" is ongoing



Transmission Support in Federal Funding

Transmission targeted under the Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act (IRA)

- IIJA = \$16.8B in Grid Resilience and Reliability funding
- IRA = \$20B+ in financing, loans and tax credits for transmission strengthening

Energy Update



Infrastructure
Investment &
Jobs Act (IIJA)



Inflation
Reduction
Act (IRA)

Overview of IIJA/IRA

Submitted to date

In development

Other highlights

Requests for Information

Resources



Infrastructure Investment & Jobs Act (IIJA)

Enacted: Nov. 15, 2021

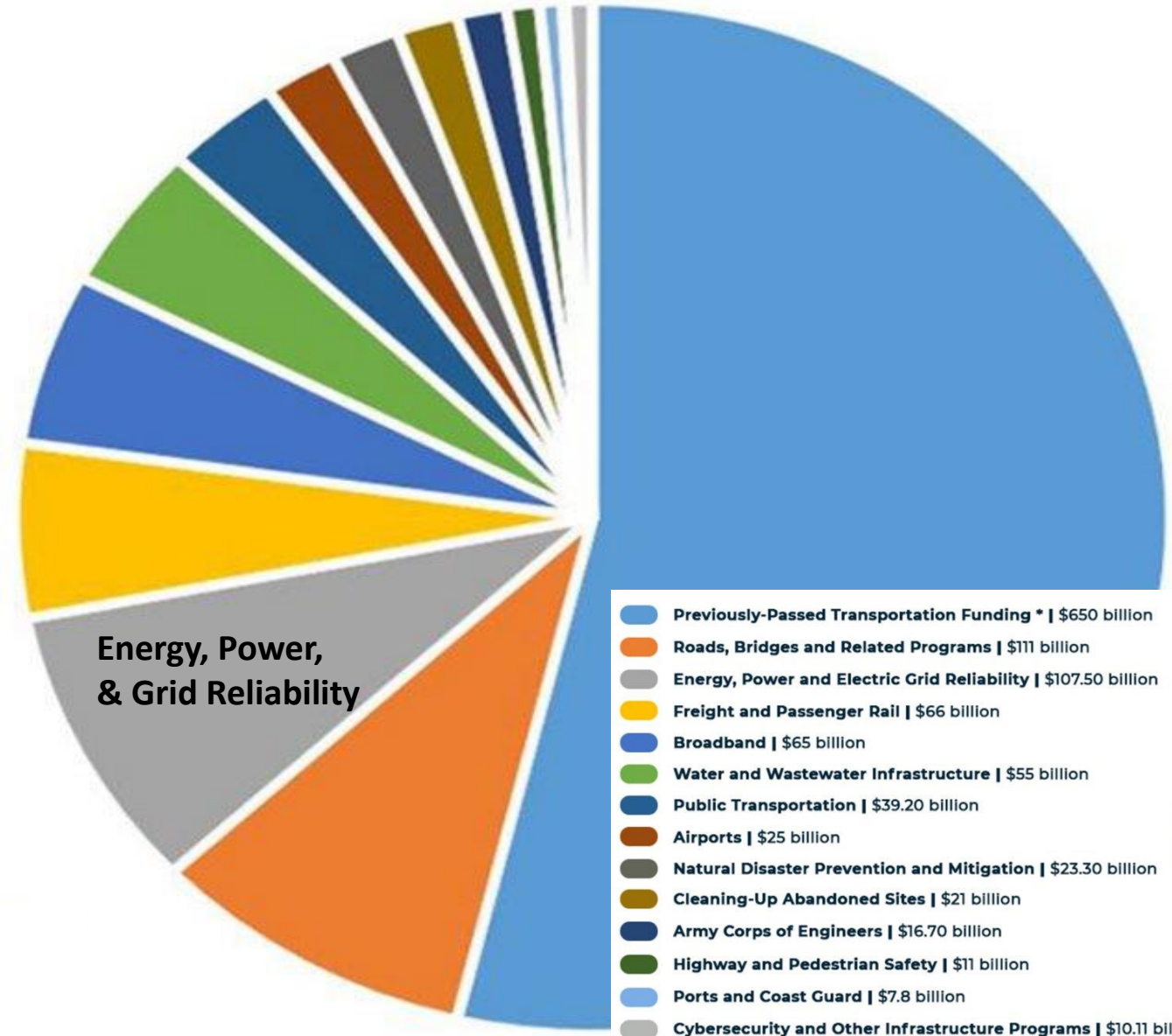
Energy = \$107.5B nationwide

77%+ competitive funding

97 energy opportunities

- 84% require matching \$
- Four formula / 20 competitive for States (\$9.46B/\$15.62B nationwide)
- Focus on disadvantaged communities

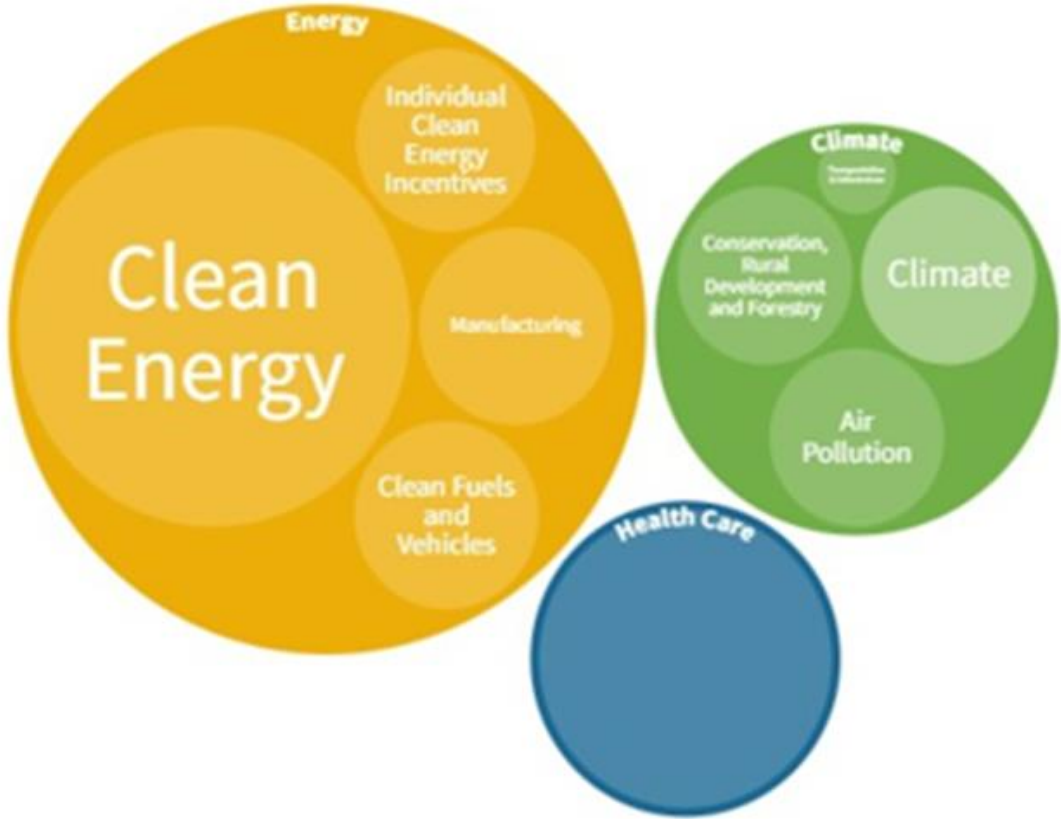
\$118M in formula \$ for MN via DER



Inflation Reduction Act (IRA)



Enacted: August 12, 2022
Climate Change = \$369B nationwide
Forecasts 40% reduction in emissions by 2030
Multiple federal agencies with energy-related
\$148.5M in formula \$ for MN via DER



■ Health Care ■ Energy ■ Climate

Highlights of MN Impacts: Inflation Reduction Act (IRA)



Benefits to MN Residents

- ✓ \$148.5M for home energy upgrades and electrification
- ✓ Tax Credits = 30% for an est. 180,000 MN households to install solar, battery storage systems, & home energy improvements.
- ✓ State/LUG Energy Code Adoption Funding = 9.1% or \$238 annual savings/household
- ✓ Community Solar Tax Credits = 30-50% for residential participants
- ✓ Electric vehicles = \$7,500 for new and \$4,000 for used EVs

Benefits to MN Businesses

- ✓ Large-scale clean power generation & storage tax credits = \$8.5B estimated investment in MN
- ✓ Bonuses to pay prevailing wage
- ✓ \$5/sft. for energy efficiency improvements.
- ✓ 30% tax credits for solar, clean fuels trucks/vans for fleets.

<https://www.whitehouse.gov/wp-content/uploads/2022/08/Minnesota.pdf>



SUBMITTED: IJA Formula Programs

40108: State Energy Security Plan

Required components:

1. Energy sources
2. Energy profile of production, transmission, distribution, and end-use
3. Address potential hazards
4. Provide a risk assessment
5. Provide a risk mitigation approach
6. Coordination of planning & response

**1st year “Draft” Submitted Sept. 30, 2022.
Requires annual revisions for SEP funding.**

40109: State Energy Program

MN priority areas:

1. Energy data access
2. Critical infrastructure
3. Technical and project assistance
4. Community and state energy resilience planning
5. Ongoing State Energy Security Planning

Submitted Dec. 5, 2022

Total allocation (Over 5-yrs) = \$7,734,210



SUBMITTED: IIJA Formula & Non-IIJA Competitive Weatherization

40551: Weatherization Assistance Program

MN Priority Areas:

- Stabilize program funding
- Ensure equitable service
- Expand program services
- Partner & innovate

Submitted September 30, 2022.

Total allocation (Over 5-yrs) = \$76,218,512

Non-IIJA WAP Competitive Grants:

Awarded

Weather Resistant Advanced Prefab (WRAP) Pilot Initiative:
\$626,000

Weatherization Innovation through Roofing and Electrification (WIRE) Access Project: \$2,000,000

Submitted

Community Scale Pilot Project: Minnesota Energy Efficiency for Manufactured Homes (MEEMH)
\$ 405,628

In Progress

SERC: High Performance Window Replacements. \$6,000,000, full application due February 10



IN DEVELOPMENT: IIJA Formula Programs

40552: Energy Efficiency and Conservation Block Grant (EECBG)

Allocations

- State: \$2,248,830
- MN Cities/Counties: \$4,870,320
- MN Tribes: \$131,110

40502: Energy Efficiency Revolving Loan Fund For commercial & residential audits/upgrades

Allocation

- State: \$1,854,610
- Due: April 21, 2023

40101(d): Preventing Outtages and Enhancing the Resilience of the Electric Grid

Allocations

- State (year 1&2): \$11,987,794
- MN Tribes (year 1&2): \$944,192
- 5-year total = \$30M (state); \$2.3M (tribes)
- Annual file due March 31 for 1st two years of funding
- Requires 15% state match
- Subawards require additional 33%-100% match



IIJA Competitive Applications

40103(b): Grid Innovation Program

- Two applications in development
 - Joint Targeted Interconnection Queue Project. To improve long-standing bulk-transmission interconnection-queue backlogs and interregional collaboration. **Total Project Cost: \$1.06 Billion**
 - Midwest Coordinated Regional & Community Resilience Advancement. **Total Project Cost: \$416 Million**
- Cost-share requirement: 50%
- Concept papers due January 13, 2023

40314: Hydrogen Hub

- MN MOU on two teams - Heartland and Midwest
- Concept Papers submitted for each project on November 7, 2022
- Both encouraged for a full submission
- Cost-share required: At least 50%



IN DEVELOPMENT:

IJA/IRA Resilient and Efficient Codes Implementation

40551: IJA Resilient & Efficient Code Implementation

Implementation of more efficient building energy codes to reduce greenhouse gas emissions & more resilient buildings

MN Focus:

1. Commercial code changes
2. Residential code changes for small Multi-family
3. Training for effective implementation

Concept Paper Due Date: January 31, full Application – March 27

50131: IRA Assistance for Latest and Zero-Energy Building Code Adoption

\$330M in code adoption efforts to meet or exceed latest Commercial and Residential International Energy Conservation Codes

\$670M to meet or exceed the zero energy provisions in the 2021 International Energy Conservation Code

Once federal guidance received, efforts around this will build on MN's IJA 40511 submission



OTHER HIGHLIGHTS:

Open Competitive Opportunities

40106: Transmission Facilitation Program

- Grants to support program goals of accelerating development and construction of high voltage transmission lines
- Part 1 due: February 1

40308: Regional Direct Air Capture Hubs

- Up to \$1.236 B to accelerate commercialization of, and demonstrate the processing, transports, secure geologic storage, and/or conversion of carbon dioxide (CO₂) captured from the atmosphere
- Letter of Intent due January 24, Full due March 13

40541: Renew America's Schools

- \$80 M to fund high-impact energy efficiency and health improvements through innovative energy technology packages, and innovative energy technology packages.
- Concept Paper due January 26, Full application due April 21

Decarbonization of Water Resource Recovery Facilities (Non-IIJA, DOE\$)

- \$23 M for innovative R&D to support decarbonization of WRRFs, including innovations around energy recovery from wastewaters and research on production of higher-value products
- Concept Paper due January 27, Full due April 3

OTHER HIGHLIGHTS:

Upcoming IRA Competitive Applications for Transmission



50144: Energy Infrastructure Reinvestment Financing

- \$5B in financial support (through 9.30.2026) to enable low-carbon reinvestments in energy communities.

50141: Funding for the DOE Loan Programs Office

- \$3B to support loan guarantees for projects reducing or sequestering GHG and air pollutants via RE, advanced technologies, efficient generation and transmission and distribution projects

50151: Transmission Facility Financing

- \$2B covering direct loans for construction or modification of electric transmission facilities designated as necessary to national interest

50152: Grants to Facilitate the Siting of Interstate Transmission Lines

- \$760M (through 9.30.2029) to cover studies impact analysis and other costs associated with seeking regulatory approval

22004: USDA Assistance for Rural Cooperatives

- Funds loan-based programs for projects reducing emissions via purchase or deployment of RE, zero-emissions systems, carbon capture and storage systems, and to make EE improvements to generation and transmission systems

OTHER HIGHLIGHTS:

IRA Residential Rebates (upcoming)



50122: High Energy Efficiency Home Rebate Act (HEEHRA)

Rebates for qualified home electrification projects

- \$4.3 via State Energy Offices
 - MN SEO allocation \$ 74,027,440
- \$225 M to Tribal Nations.
- Rebates to cover the costs of building electrification upgrades
- Low-to-middle Income household only (< 150% of Area Median Income)
- DOE guidance forthcoming

50121: Home-Owner Managing Energy Savings (HOMES)

Rebates for Energy Efficiency retrofits

- \$4.3B via State Energy Offices.
- MN allocation \$ 74,459,590
- Rebates levels depend on Savings
- Rebates \$2K per unit up to 50% of project costs
- Rebates double for Low and Mid-Income (LMI), up to 80% of project costs
- DOE guidance forthcoming



Requests for Information

Workforce Development



- Open Requests for Information (RFI) on WFD programs
 - **40503:** IJJA Energy Auditor Program (EAT)
 - \$40 million nationwide
 - SEO only eligible applicant, MN expected ask - \$2M
 - **40513:** IJJA Career Skills Training program (CST)
 - \$10 M Nationwide (until expended)
 - **50123:** IRA State-Based Home Energy Efficiency Contractor Training program
 - \$200 M nationwide until Sep 30, 2031
 - To Support IRA HOMES and HEEHRA rebates

IIJA and IRA Resources



- The White House, [Bipartisan Infrastructure Law Guidebook](#)
- U.S. Department of Energy | [IIJA Homepage](#)
- The White House, [Inflation Reduction Act Guidebook](#)
- The White House, [MN IRA Fact Sheet](#)
- MN Commerce website: [Federal Funding Opportunities](#)
- MN Commerce e-newsletter on Federal Funding Opportunities - [Subscribe](#)
- MNE Commerce email for Federal Funding Questions: fedquestions.commerce@state.mn.us

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Questions?

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