

→ Federal Inflation Reduction Act – Opportunities for DSM, Electrification, and DERs

Prepared for the Michigan Energy Waste Reduction Collaborative
Presented by Erica Larson, Manager of Regulatory Affairs and Market Development
October 18, 2022



Mechanisms for Funding Clean Energy Investment

Tax Credits & Deductions

- + Immediate and near-term impacts
- + New or increased credits and deductions are generally in effect beginning Jan. 1, 2023

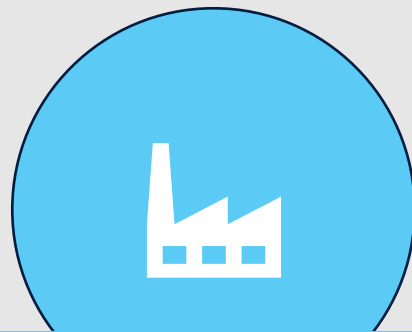
Funded Grant, Loan, and Rebate Programs

- + Medium- to long-term impacts
- + IRA-funded programs available in 2023, but do not expect rebates / dollars available to customers until Q4 2023 / 2024

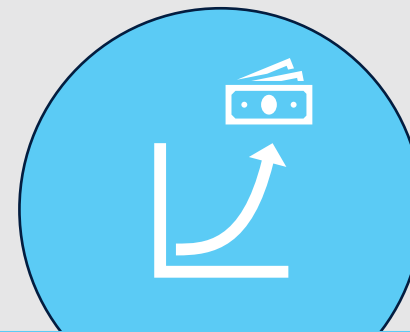
IRA Funding Requirements Have Common Themes



Community Impact



N.A. Manufacturing

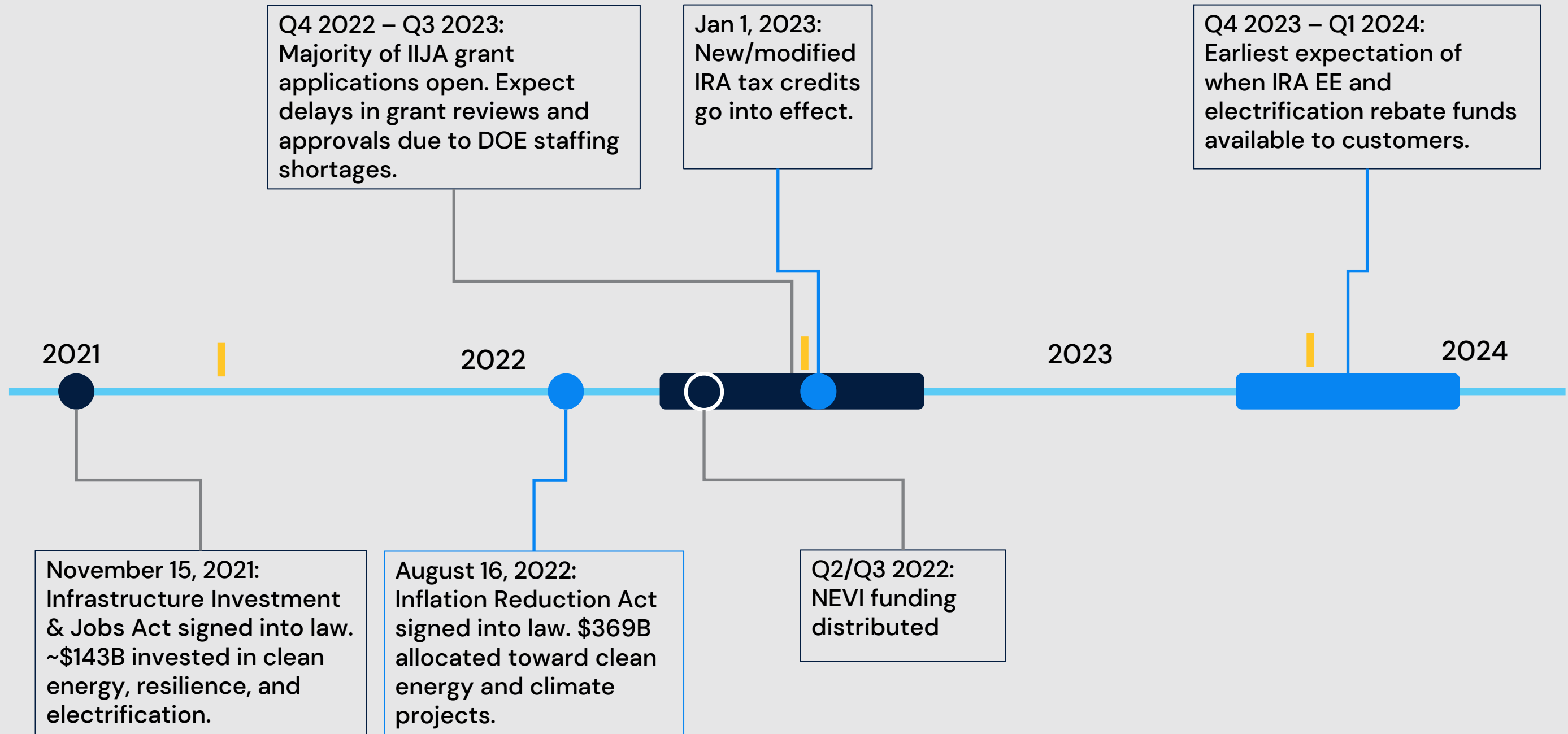


GHG Scaling



Labor Requirements

Timeline IJA & IRA



Tax Credits & Deductions

- + Refreshes existing tax credits (increases maximums, new technology)
- + Creates new tax credits (used and commercial EV tax credits)

- + Refreshes homeowner EE upgrade tax credit to \$1,200 or \$3,200 with heat pump installation
- + Increases maximum tax credit for new efficient homes to \$5,000
- + Nearly triples existing commercial energy efficiency tax deduction from \$1.80/sq. ft. to \$5/sq. ft. and extends to retrofits

- + Extends tax credits for small-scale renewable generation (e.g., rooftop solar, fuel cells, geothermal heat pumps, small wind)



Electric Vehicles



Energy Efficiency



Building Electrification



Distributed Energy Resources

Funded Grant, Loan, and Rebate Programs

- + \$1B allocated to EPA to administer to states, local government, tribal government, and school transportation associations to replace heavy duty vehicles

- + \$4.3B allocated to DOE and state energy offices for whole home rebates
- + \$1B allocated to HUD for affordable housing clean energy projects
- + \$1B allocated to DOE and state/local governments for advanced building codes
- + \$1B to USDA for Rural Energy for America that provides grants and funding for energy efficiency and renewable energy improvements and audits

- + \$4.3B allocated to DOE to administer to state energy offices and tribal governments for residential electrification rebate programs
- + \$150M to Bureau of Indian Affairs to administer to tribal governments to electrify unelectrified homes and transition electrified homes to renewable energy systems

Other Grants/Loans that Could Support All of the Above

- + \$27B EPA administered to states, local governments, and non-profits to support zero emissions projects
- + \$3.6B DOE administered loan guarantees for innovative GHG reduction projects
- + \$4.75B EPA administered grants to states, municipalities, and tribes for GHG planning and implementation grants

HOMES Program: Home Energy Efficiency Upgrade Rebates

\$129M

To DOE for administration



\$4.3B



\$26.3M

For EGLE to administer the program over ~8 years



\$107M

Customer Incentives for Michiganders over ~8 years

- + Funding allocated to states based on 2022 State Energy Program Formulas
- + Sort-of deadline of August 2024 for states to submit plans
- + State Energy Offices must establish capabilities to:
 - + Quantify home energy consumption reductions calibrated to historical energy use + consistent with BPI 2400
 - + Use open-source advanced M&V software to document pre- and post-weather normalized consumption
 - + Value savings based on time, location, or GHG reductions
 - + Certify work performed, including contractor or third-party certification, work details (including projected energy savings)
 - + \$200 rebate for contractors performing work in disadvantaged communities
- + DOE Secretary to publish guidelines for states on sharing electric and natural gas data
- + Single-family Homes
 - + Achieve modeled savings of 20% - 35%, lesser of \$2,000 or 50% of the project cost
 - + Achieve modeled savings of >35%, lesser of \$4,000 or 50% of project cost
 - + Achieve measured savings of >15%, pay per kWh
- + Multifamily Building Owners
 - + Achieve modeled savings > 20%, \$2,000/unit up to \$200,000/building
 - + Achieve modeled savings > 35%, \$4,000/unit up to \$400,000/building
 - + Achieve measured savings of >15%, pay per kWh
- + Funding is double for LMI households (< 80% AMI)
- + No doubling up with residential electrification rebates

Residential Electrification Rebate

\$129M
To DOE for
administration



\$4.3B



\$225M
To Tribal
Governments

\$24.8M
For EGLE to
administer the
program over
~8 years



\$99.5M
Customer Incentives for
Michiganders over ~8 years

- + Funding allocated to states based on 2022 State Energy Program Formulas
 - + Sort-of deadline of August 2024 for states to submit plans
 - + State Energy Offices must establish capabilities to:
 - + Verify income eligibility of recipients
 - + Allow rebates for qualified projects at point of sale that ensures income eligibility
 - + DOE Secretary to publish guidelines for point-of-sale rebates
-
- + Appliance Upgrades
 - + < \$1,750 for heat pump water heater
 - + < \$8,000 for heat pump for space heating or cooling
 - + < \$840 for electric stove, cooktop range or oven; electric heat pump clothes dryer
 - + Non-Appliance Upgrades
 - + < \$4,000 for electric load service center upgrade
 - + < \$1,600 for insulation, air sealing, and ventilation
 - + < \$2,500 for electric wiring
 - + Maximum rebate of \$14,000 per home
 - + Cannot exceed:
 - + 50% of the cost of project if income between 80% and 150% AMI
 - + 100% of the project for household with less than 80% AMI
 - + No doubling up with HOMES rebates



Grid
Modernization

- + Expected to accelerate intermittent renewable generation on grid (large- or small-scale)
- + AMI deployment now an imperative
- + Distribution system planning can uncover areas for investment
- + Acceptance / adoption of residential dynamic rates
- + Commercialize DER pilots and strategies



Electrify
the Grid

- + Potential for 1–28 TWh of incremental energy generation placed on the grid by 2030¹
- + Managed EV Charging – and getting customers to adopt EV rates – increasingly important
- + Utility EV programs should benefit from IRA – e.g., fleet electrification.
- + Questions loom over how DOE will execute its \$4.3B residential electrification rebate program



Energy
Efficiency

- + Potential impacts to program delivery (e.g., commercial EE retrofit / new construction requirements)
- + Midstream channel can be used to reduce confusion and/or stack incentives
- + Potential impacts to program metrics (kWh, NTG, potential studies)
- + Questions for how Michigan should roll out federal rebate program

1. Department of Energy. "Summary Report on EVs at Scale and U.S. Electric Power System."
Prepared by US Drive: Driving Research and Innovation for Vehicle Efficiency and Sustainability.
November 2019.





Get in touch with us:
Erica Larson

Manager, Regulatory Affairs
& Market Development
502.424.4035
Erica.Larson@icf.com

icf.com

 [linkedin.com/company/icf-international/](https://www.linkedin.com/company/icf-international/)

 twitter.com/icf

 <https://www.facebook.com/ThisIsICF/>

About ICF

ICF (NASDAQ:ICFI) is a global consulting and digital services company with over 7,000 full- and part-time employees, but we are not your typical consultants. At ICF, business analysts and policy specialists work together with digital strategists, data scientists and creatives. We combine unmatched industry expertise with cutting-edge engagement capabilities to help organizations solve their most complex challenges. Since 1969, public and private sector clients have worked with ICF to navigate change and shape the future.