

What does the Inflation Reduction Act mean for utilities?

By Jesse Hitchcock

August 18, 2022

On August 7, 2022, the US Senate passed the <u>Inflation Reduction Act</u> (IRA), a bill that proposes \$369 billion for clean energy and climate programs. The bill is slated to reduce greenhouse gas emissions to 37%–40% below 2005 levels by 2030. And analysis by Rhodium Group, a research institute, found that <u>the IRA could lower</u> <u>household energy costs by \$730-\$1,135</u> by the same date.

So what does this mean for utilities?

How E Source can help with transportation electrification

Fill out this short form to start a conversation about your needs and how we can help.

The rebates and credits in the IRA will likely spur greater adoption of energy efficiency improvements in homes and businesses, as well as boost the adoption of EVs. This means that utilities are likely to see a substantial impact on demand in these sectors and will need to be prepared to support customers who are transitioning to efficient, electrified technologies. The IRA also contains loans and tax credits for clean energy that can support new clean energy projects and transmission infrastructure.

The House of Representatives passed the IRA on Friday, August 12, and the bill is now on its way to President Biden for his signature. While we wait for the IRA to be signed into law, we've summarized some highlights from the current version of the IRA that relate to transportation, buildings, and utility business operations more broadly.

Transportation electrification

Clean heavy-duty vehicles. Section 60101 of the IRA (PDF) contains \$1 billion for investment in zeroemissions heavy-duty vehicles, associated infrastructure, and workforce development. Almost half of the funds (\$400 million) will be given to communities that don't meet air quality standards. The program will provide grants and rebates for up to 100% of the incremental costs for:

- Replacing a gas or diesel vehicle with a zero-emissions vehicle
- Purchasing, installing, operating, and maintaining associated infrastructure
- Training to support the operation of vehicles
- Planning to support the adoption and deployment of zero-emissions vehicles

This program applies to Class 6 and 7 heavy-duty vehicles. Qualified recipients include states, municipalities, Indigenous tribes, and nonprofit school transportation associations. With increased demand and adoption of heavy-duty EVs, utilities will be tasked with developing strategies to supply the required charging infrastructure and manage the associated grid impacts.

The rebates and credits in the IRA will likely spur greater adoption of energy efficiency improvements in homes and businesses, as well as boost the adoption of EVs.

EV tax credits. <u>Section 13401 of the IRA</u> (PDF) provides consumer tax credits to allow qualified individuals to receive up to \$7,500 off the purchase of a new EV or \$4,000 off a used vehicle. Low- and middle-income earners are prioritized for this tax credit.

For new vehicles, the credit is limited to couples making less than \$300,000 annually and individuals making less than \$150,000. For used vehicles, the limits are \$150,000 for couples and \$75,000 for individuals. The credit can't be used to purchase vans, SUVs, pickup trucks over \$80,000, or any other vehicles retailing over \$55,000. The tax credits will also prioritize domestic sourcing of critical minerals for batteries, starting with 40% of materials being extracted or processed domestically and increasing to 80% by 2027.

For more on how the IRA could affect the battery industry, see our blog post <u>Navigating the unknowns of the</u> <u>battery market through forecasting</u>. One of the biggest tasks for utilities in response to this section of the bill will be supporting the increased demand for EV charging. Utilities can also consider establishing partnerships with dealerships and other industry stakeholders to educate customers and get them signed up for <u>EV-specific</u> <u>rates</u> and programs at the point of purchase.

Building efficiency

High-efficiency electric home rebate program. Section 50122 of the IRA (PDF) includes \$4.5 billion to

provide state energy offices and Indigenous tribes with grants to develop and implement a rebate program for income-eligible households. This program consists of the following measures and maximum rebate values:

- Heat-pump water heater—\$1,750
- Heat pump—\$8,000
- Electric stove, cooktop, range, or oven—\$840
- Electric heat-pump clothes dryer—\$840
- Load service center upgrade—\$4,000
- Insulation, air sealing, and ventilation—\$1,600
- Electric wiring—\$2,500

Households with annual incomes less than 80% of the area median income are qualified for 100% of project costs. Households with annual incomes between 80% and 150% of the area median income are qualified for 50% of the project costs. Multifamily dwellings are also qualified under this program. The maximum combined rebate is \$14,000. Many of these measures are already incentivized in existing utility programs, so it will be imperative to connect with your local state energy office to understand how these new measures will impact existing utility offerings and cost-effectiveness. In addition, utilities should be prepared to model and manage the grid impacts of increased uptake of home electrification measures in your service territory.

Home energy performance-based, whole-house (HOMES) rebates. Section 50121 of the IRA (PDF)

provides \$4.3 billion to state energy offices to implement a HOMES program that models whole-home energy consumption before and after an energy efficiency retrofit. The rebates in this program range from \$2,000 to \$4,000 depending on the energy savings achieved (20%–35% or more). Expanded rebate levels are available for multifamily dwellings and low-income households, though HOMES rebates can't be combined with other programs. Programs that require before/after energy modeling have several moving parts and can be more complicated for customers. Utilities should work with the local state energy office to make sure the processes for accessing these rebates are clear for all parties involved.

Tax credits. The IRA also includes a series of long-term (10 or more years) tax credits for individuals who would provide up to 30% of project costs back at tax time. Some sectors and measures that will benefit from tax incentives include:

- Residential energy efficiency
- Commercial buildings
- New homes
- Residential solar
- Home energy storage

With the increased uptake of distributed energy resources such as residential solar and battery storage, utilities must prepare to manage the interconnection processes if applicable. Utilities can also consider how these distributed technologies might be used to support the grid during peak periods or to add more local renewables to the energy mix.

Utility operations

Electric transmission. Part 5 of the IRA (PDF) provides \$2.86 billion for transmission infrastructure. That includes:

- \$2 billion in loans for the construction or modification of electric transmission facilities
- \$760 million in grants to states to analyze siting options and participate in regulatory proceedings
- \$100 million for interregional and offshore transmission planning

Loans for rural cooperatives. For rural cooperative utilities, <u>section 22004 of the IRA</u> (PDF) provides \$9.7 billion in US Department of Agriculture loans to deploy renewables and other associated clean energy technologies.

Tax credits for energy producers. Section 13701 of the IRA (PDF) outlines long-term (10-year) tax credits to produce electricity using solar, wind, hydro, geothermal, and other forms of emissions-free electricity. The production tax credit is based on the kilowatt-hour produced, with adders for meeting domestic manufacturing criteria or prioritizing disadvantaged communities. This tax credit will last for 10 years or until the electric industry meets its emissions target.

 $\ensuremath{\mathbb C}$ 2008 - 2025 E Source Companies LLC. All rights reserved. Distribution outside subscribing organizations limited by license.