THORN RUN PARTNERS
GOVERNMENT RELATIONS

Special Report

August 15, 2022

Timeline of the IRA Hydrogen, Biogas, Solar, and Energy Storage Provisions

Executive Summary

On August 12, House Democrats passed their long-sought budget reconciliation bill, sending the legislation to President Joe Biden's desk for signature. The Inflation Reduction Act (IRA) contains dozens of climate and clean energy-related provisions, many of which were reflected in the original "Build Back Better" agenda. Some of these provisions will provide a series of benefits to the development and deployment of hydrogen, biogas, solar, and energy storage technologies. In order to better understand the timelines of these respective programs, this TRP special report clearly lays out the establishments, extensions, and other time-related stipulations within the IRA.

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Hydrogen and Direct Pay

There are several provisions in the IRA that are directly relevant to hydrogen. This timeline covers: (1) the direct pay exception; (2) the clean hydrogen production tax credit (PTC) and investment tax credit (ITC); (3) the domestic manufacturing conversion grants; (4) the residential clean energy credit; (5) the electric vehicle (EV) tax credit; (6) the tax credit for qualified commercial clean vehicles; and (7) the alternative fuel refueling property credit.

2022 | 2023 — 2024 | 2025 — 2026 | 2027 — 2028 | 2029 — 2030 | 2031 — 2032 | 2033 — 2034 | 2035

Beyond 2022

The **direct pay election** for the hydrogen PTC and ITC will become available for tax years after 2022 for facilities placed in service after 2022.

2022 — 2032

The **25D residential clean energy** credit rate is applied at the rate of 30 percent for properties placed in service between 2022 to 2032.

2032

The IRA will extend the **EV tax credit** and the **alternative refueling property** credit through 2032.

Sept 30, 2031

The $2 trillion in **domestic manufacturing conversion grants** will remain available through September 30, 2031.

Beyond 2033

The **clean hydrogen PTC and ITC** will be available for the first 10 years of operation for **facilities that commence construction before 2033**, meaning many of the credits could last beyond until 2043.

2033

The **residential clean energy** credit is 26 percent in 2033. The new tax credit for **qualified commercial clean vehicles** will last through 2033. The **direct pay election** will no longer be available in 2033.

2034

The IRA will extend the 25D tax credit through 2034 for investments in **residential clean energy**, where the credit rate is 22 percent for the year.

Biogas

The IRA also extends, modifies, or creates incentives for biogas, including: (1) the energy ITC; (2) the second-generation biofuel incentives; (3) the biofuel infrastructure and agriculture product market expansion; (4) incentives for biodiesel, renewable diesel, and alternative fuels; (5) the sustainable aviation fuel credit; and (6) the nonbusiness energy property credit.

2022 | 2023 — 2024 | 2025 — 2026 | 2027 — 2028 | 2029 — 2030 | 2031 — 2032 | 2033 — 2034 | 2035

Beyond 2022

The **Section 48 energy ITC** will apply to facilities placed in service in 2022 and beyond.

2024

The incentives for **second-generation biofuels** and the **sustainable aviation fuel credit** will be extended through 2024. The IRA will also extend the incentives for **biodiesel, renewable diesel, and alternative fuels** through 2024.

Sept 30, 2031

The $500 million in grants for **biofuel infrastructure and agriculture product market expansion** will remain available until September 30, 2031.

2032

The IRA will extend the **nonbusiness energy property credit** through 2032.

2035

The IRA will extend the **Section 48 energy ITC** through 2035, as well as including biogas as ITC-eligible property.

SOLAR

The IRA will provide incentives to renewable energy sources, including solar. This timeline covers: (1) the PTC for electricity produced from certain renewable resources; (2) the energy ITC; (3) the energy credit for solar and wind facilities placed in service in connection with low-income communities; and (4) the residential clean energy credit.

BEYOND 2022

The **Section 48 energy ITC** will apply to facilities placed in service in 2022 and beyond.

2025

The IRA will extend the **Section 45 PTC for renewable energy** to cover facilities that begin construction before 2025.

2035

The IRA will extend the **Section 48 energy ITC** through 2035.

2022 | 2023 — 2024 | 2025 — 2026 | 2027 — 2028 | 2029 — 2030 | 2031 — 2032 | 2033 — 2034 | 2035

2023 — 2024

The **incentives for solar facilities in connection to low-income communities** will establish an annual capacity limitation of 1.8 gigawatts for 2023 and 2024. However, the IRA allows unused allocations to be carried over to the following year to increase the capacity limit.

2022 — 2032

The **residential clean energy** credit rate is applied to the cost of such property at the rate of 30 percent for property placed in service between 2022 to 2032.

2033

The **residential clean energy** credit is 26 percent in 2033.

2034

The IRA will extend the 25D tax credit through 2034 for investments in **residential clean energy**, where the credit rate is 22 percent for the year.

Energy Storage

There are couple provisions in the IRA that will benefit energy storage, including the: (1) the energy ITC; and (2) the advanced energy project credit.

2022 | 2023 · 2024 | 2025 · 2026 | 2027 · 2028 | 2029 · 2030 | 2031 · 2032 | 2033 · 2034 | 2035

Beyond 2022

The **Section 48 energy ITC** will apply to facilities placed in service in 2022 and beyond.

2023

180 days after enactment of the IRA, the Treasury Department must implement a program to grant certification to applications by **advanced energy credit** project sponsors. After implementation of this program, sponsors will have two years from the time of their application submission to prove that the eligibility requirements have been met.

Beyond 2025

After certification of the credits, project sponsors will have two years to publicly service the project.

2030 — 2033

The **advanced energy credit** will be reduced by 25 percent per year between 2030 and 2033, after which the credit becomes completely phased out.

2035

The IRA will extend the **Section 48 energy ITC** through 2035 and is being expanded to include standalone energy storage facilities and microgrid controllers as ITC-eligible property.