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# Electricity Sector Emissions Impacts of the Inflation Reduction Act: U.S. Environmental Protection Agency Assessment of Projected CO2 Emission Reductions/Changes in Electricity Generation/Use

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The United States Environmental Protection Agency (“EPA”) announced on September 12th the issuance of a September 2023 report titled:

*Electricity Sector Emissions Impacts of the Inflation Reduction Act: Assessment of Projected CO2 Emission Reductions from Changes in Electricity Generation and Use (“Report”)*

See EPA 430-R-23-004.

Section 60107(5) of the Inflation Reduction Act (“IRA”) required that EPA:

... assess ... the reductions in greenhouse gas emissions that result from changes in domestic electricity generation and use that are anticipated to occur on an annual basis through the fiscal year 2031.

See P.L. 117-169 (August 16, 2022).

EPA characterizes the IRA as representing a:

... significant legislative commitment to transform energy production and consumption, reduce the risks of climate change, improve environmental quality, and simultaneously spur investments that create economic opportunities.

The stated intent of the IRA is to reduce greenhouse gas (“GHG”) emissions by encouraging the:

... generation of low-cost, low-emission electricity and the efficient use of clean energy in buildings, transportation, and industry.

The *Report* is stated to provide results from what it describes as a “state-of-the-art multi-sector and electric sector models” to assess how the IRA’s provisions reduce CO2 emissions. The focus is CO2 emissions because of the predominance of direct electric sector GHG emissions derived from fossil fuel combustion. The increased use of clean electricity is stated to primarily offset fossil fuel use in end-use sectors.

Projected CO2 emission reductions are modeled through two scenarios:

- An IRA scenario that incorporates the effect of that statute's incentives
- A no-IRA scenario

The *Report* does not reflect rules and regulations that are currently be developed or finalized.

Examples of findings related to the IRA put forth by EPA in the *Report* include:

- Lowers economy-wide CO2 emissions, which include electricity generation and use, by 35 to 43 percent below 2005 levels in 2030.
- Spurs CO2 emissions reductions from the electric power sector of 49 to 83 percent below 2005 levels in 2030.
- Reduces CO2 emissions in all end-use sectors, most significantly in residential and commercial buildings followed by industry and transportation.

Key chapters address:

- Electricity
- Transportation
- Buildings
- Industry

A copy of the *Report* can be downloaded [here](#).