Air Quality Impacts of the Inflation Reduction Act

Andrew J. DeCandis August 23, 2022



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Background



Inflation Reduction Act of 2022

- Passed Senate on August 7th
- Passed House on August 12th
- Signed into law on August 16th
- Not a comprehensive overview
- Full law includes provisions related to taxes, prescription drugs, and building energy efficiency. None of these topics will be addressed here.



Environmental Justice Support



Environmental and Climate Justice Block Grants – \$3 Billion

• Invests in community led projects in disadvantaged communities to address disproportionate environmental and public health harms related to pollution and climate change.

Neighborhood Access and Equity Grants – \$3 Billion

- Competitive grants to reconnect communities divided by existing infrastructure barriers, mitigate negative impacts of transportation facilities or construction projects on disadvantaged or underserved communities, and support equitable transportation planning and community engagement.
- Clean Energy Technology Accelerator \$27 Billion Supports the deployment of technologies to reduce emissions. 60% focused in disadvantaged communities
 - \$7 billion for zero-emission technology deployment including rooftop and community solar –in low-income and disadvantaged communities.
 - \$8 billion for a general fund making broad investments in reducing greenhouse gas emissions and promoting environmental justice, exclusively allocated to low-income and disadvantaged communities.
 - \$11.97 billion for a similar general fund but available to all Americans and communities.



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Environmental Justice Support (cont.)



Grants to Improve Air Quality at Ports – \$3 Billion

• Funding for grants to install of zero-emission port equipment or technology and development of climate action plans. Focus on ports in nonattainment areas.

Clean Heavy-Duty Vehicles Program – \$1 Billion

• Covers the incremental cost of zero-emission school buses, garbage trucks and transit buses with a specific focus on vehicles serving communities located in nonattainment areas.

Diesel Emissions Reduction Act grants – \$60 Million new funding

 Will address diesel emissions from goods movement facilities – like airports, railyards, and distribution centers – and from vehicles servicing those facilities.

Air Pollution Monitoring – \$236 Million

• New funding for air quality monitoring that will particularly benefit disadvantaged communities in areas with persistent air pollution.

Air Pollution at Schools – \$50 Million

• Funding to monitor and reduce air pollution at public schools in low-income and disadvantaged communities.

Low Emissions Electricity Program – \$87 million

 Support low-income and disadvantaged communities and local/state governments and offer technical assistance to industry to reduce greenhouse gas emissions in electricity production



PLANNING

EV Charging Incentives



Charging incentives for low-income communities

- EVSE incentive increased from \$30,000 to \$100,000. This incentive seems to stack based on installing more than one charging pedestal.
- Increases existing tax credits for building EVSE with the requirement that equipment must be built in poorer communities
- Incentive only available in urban census tracts where the poverty rate is <20% or rural census tracts that make 80% less than the statewide income.



PLANNING

EV Tax Credits



- Federal tax credits for new ZEV vehicles: \$7,500 per vehicle
 - Income cutoffs Individuals: \$150k / Couples \$300k
 - Available for sedans < \$55,000 and SUVs, pickups, and vans < \$80,000
- Federal tax credits for used ZEV vehicles: \$4,000 per vehicle
 - Income cutoffs Individuals: \$75k / Couples \$150k
- Eliminates the existing 200,000 unit credit phase-out
- Incentive continues through 2032.
- Limitations for new ZEV vehicles:
 - \$3,750 is dependent on the country-of-origin of the battery materials. A given vehicle will be eligible if the critical minerals were made in the U.S. or in countries that have a free-trade agreement with the U.S.
 - If the battery does not meet this requirement, this portion of the credit will be reduced by 40% in 2024, increasing to 80% in 2026.
 - \$3,750 is dependent on the vehicle's battery components being manufactured and assembled in North America
 - If the battery does not meet this requirement, this portion of the credit will be reduced by 50% in 2024, increasing to 100% in 2028.
 - Starting in 2024, car buyers can transfer credits to the dealer to directly reduce the purchase price



PLANNING

Renewable Energy



Extension of existing tax credits for renewable energy deployments – \$65 Billion

- Includes: wind, solar, geothermal, biomass, hydropower, municipal waste, and marine and hydrokinetic projects.
- Energy Storage Projects 30% tax credit
- Direct loans for the new electric transmission lines \$2 Billion
 - Additional \$760 million available for grants to facilitate transmission siting
- Clean Hydrogen Tax Credit \$8 Billion
 - New a \$3 per kilogram tax credit to incentivize the production of hydrogen fuel



Cleaner Fuels



Sustainable Aviation Fuel and Low-Emissions Aviation Technology Grant Program – \$297 Million

- New DOT competitive grant program to assist in efforts to transport, blend, or store sustainable aviation fuel, and to develop or apply low-emission aviation technologies.
- Eligible entities include state and local governments, airport sponsors, for-profit companies, research institutions, and nonprofits-to produce,
- Sustainable Aviation Fuel Tax Credit- \$1.25 to \$1.75 per gallon
 - Blenders tax credit to expand the use of sustainable aviation fuel – \$1.25 to \$1.75 per gallon



Clean Manufacturing Incentives

- Grants to retool manufacturing facilities "to manufacture clean vehicles..." – \$2 billion
- Loans to build new clean vehicle manufacturing facilities – \$20 billion
- Production tax credits to accelerate U.S. manufacturing \$30 billion
 - Includes solar panels, wind turbines, batteries, and critical minerals processing



Climate Resilience



Coastal Communities and Climate Resilience – \$2.6 Billion

- Competitive and block grants for coastal states, Tribal governments, academic institutions, non-profits, and state governments to conserve and restore coastal habitats and protect communities that depend on those habitats
- Will fund projects that will support climate resilience of coastal communities to support the planning and construction of projects that use natural infrastructure to address coastal hazards such as sea level rise and address other impacts from climate change.



Questions?

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