

Environmental Law

Expert Analysis

Three New Federal Laws Aid New York's Compliance With Climate Goals

The New York Climate Leadership and Community Protection Act of 2019 (CLCPA) requires total statewide greenhouse gas emissions to be reduced 40% from 1990 levels in 2030 and 85% in 2050, with a goal (aided by offsets) of 100% by 2050. It also requires 70% of electricity demand in 2030 to be met by renewables, and 100% from “zero emissions” sources (meaning renewables plus nuclear) in 2040.

These goals are consistent with the objectives of the Paris Climate Agreement, but all agree that they will be challenging to meet. The Climate Action Council created by the CLCPA issued a draft “scoping plan” on Jan. 1, 2022 to achieve these goals, has held public hearings around the state on the plan, and is due

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to release a final plan by Jan. 1, 2023.

The path has now been eased by three laws signed by President Biden.

These are the Infrastructure Investment and Justice Act (IIJA), signed on Nov. 15, 2021; the Creating Helpful Incentives to Produce Semiconductors Act (CHIPS Act), signed on Aug. 9, 2022; and the Inflation Reduction Act (IRA), signed on Aug. 16, 2022.

IIJA and the CHIPS Act enjoyed bipartisan support in both houses of Congress, but not a single Republican voted for the IRA. It passed the House by a 220-207 vote and the Senate by a 50-50 vote, with Vice President Kamala Harris casting the tie-breaking vote. In order to

attain the votes of Sen. Kyrsten Sinema (D-AZ) and especially Sen. Joe Manchin (D-WV), what had originally been the Build Back Better bill was considerably pared down, but most of its clean energy funding provisions survived.

New York's draft CLCPA scoping plan devotes the greatest attention to three emitting sectors—transportation, electricity and buildings. The three new federal laws, together, provide tremendous financial and other aid for all three. All the work New York has already done on these sectors gives the state a head start in seeking these funds.

Transportation

To meet the emissions goals, New York must transition to zero-emission vehicles. However, vehicle emission levels are set at the federal level. California may set its own stronger standards if the Environmental Protection Agency (EPA) grants a waiver, and if it does, other states may follow suit. About

14 states (including New York) have usually followed the California standard. But when the CLCPA was enacted, President Trump was in office and EPA had revoked California's waiver and frozen the tightening standards that were set under President Obama. Had that stuck, New York could not possibly have met its goals. Under President Biden, EPA is reversing course, extending and strengthening the Obama-era standards, and restoring the California waiver.

California announced on August 25 that it will require all automobiles sold in the state in 2035 to be zero emissions. Last year Gov. Kathy Hochul signed legislation with a similar goal for New York. Several other states are embracing similar requirements. However, this requires EPA to grant California a waiver. Under President Biden, EPA is expected to do so. But if a Republican is elected President in 2024, EPA could well revoke that waiver, as it did during the Trump administration.

EPA's new tighter standards for internal combustion engines are already being challenged in court, and no doubt so will be both the even tighter standards that EPA will probably impose in the future, and the next California waiver. So the complete transition to new electric vehicles is subject to this political and legal gauntlet.

The IRA is making the necessary transition to electric vehicles much more feasible. It provides a \$7,500 credit for the purchase of a new electric car and \$4,000 for the purchase of a used one, without the current quota on the number of eligible vehicles per manufacturer. The credit can be applied directly to the purchase price; buyers do not have to wait until they file their taxes to claim it. Individuals making more than \$150,000 per year or couples making more than \$300,000 per year are not eligible. There is a catch, however: The new vehicle credit is available only if a certain portion of the car's supply chain was located in North America or a country with a free trade agreement with the United States. This provision was designed to prevent China (which is far ahead of the United States in the manufacture and use of electric vehicles) from dominating the U.S. market, and also to spur the emergence of a U.S. electric vehicle manufacturing industry. Factories are already being planned to meet this demand, but it will be a few years before they are up and running. Until then, only a few models for sale in the United States meet the requirements. IIJA provides \$6 billion to process battery materials and build battery manufacturing and recycling facilities, and to several programs for

mapping the presence of critical mineral resources in the United States and for devising the best ways to mine, process and recycle them. IRA has \$60 billion for domestic manufacturing across the clean energy supply chain.

Not only passenger cars are affected. The IRA appropriates \$1 billion for replacing non-zero-emissions heavy duty vehicles with zero-emissions ones, as well as for fueling and charging infrastructure, and for workforce development and technical activities. This is on top of \$5 billion in IIJA for new school buses.

This transition also requires the installation of a large number of electric vehicle charging stations. IIJA provides \$7.5 billion for this.

In addition to making cars cleaner, meeting the CLCPA's emissions goals also requires a reduction in vehicle miles traveled. IIJA contains \$39 billion for public transit and \$66 billion for Amtrak, including upgrading tracks in the Northeast Corridor and building the Gateway rail program, including a new tunnel between New York and New Jersey.

The IRA's Neighborhood Access and Equity Grant Program provides \$3.2 billion for highway removal, remediation, or capping; mitigating local impacts of highways; building or improving "complete streets,

multiuse trails, regional greenways, or active transportation networks”; and providing “affordable access to essential destinations, public spaces, or transportation links and hubs.”

The IIJA includes a \$5 billion “Safe Streets and Roads for All” program to improve safety for pedestrians and bicyclists.

To lower emissions from airplanes, the IRA provides \$291 million for projects to produce, transport, blend or store sustainable aviation fuels, and other projects “relating to low emission aviation technologies.” IIJA includes \$25 billion for airport repairs and related improvements.

Electricity

Meeting the CLCPA’s clean electricity requirements (and also powering all these electric vehicles and electrified buildings) requires the construction of a massive number of new wind and solar farms and the associated storage and transmission. New York is making great strides here, most visibly with offshore wind. The IRA extends important tax credits for wind and solar projects. To qualify for the full credit, projects must pay prevailing wages and meet other labor-related requirements.

One important feature of several of these clean energy tax credits is that they are “direct pay,” meaning that they can go

to entities like states, municipalities, municipal utilities and rural cooperatives that do not pay taxes and therefore do not have tax liability to which they can apply the credit.

Permitting these facilities has often been a challenge. New York adopted a law in 2011 to speed up the siting of renewables, but it was a miserable failure; no project was approved under that law until 2018. In 2020 New York adopted a new law, the Accelerated Renewable Energy Growth and Community Benefit Act. Since its enactment New York has approved 17 new projects. A few took advantage of the new law’s provision that the state did not necessarily need to follow local zoning restrictions.

As part of the deal between Sens. Manchin and Chuck Schumer (D-NY) that led to enactment of the IRA, Sen. Schumer and House Speaker Nancy Pelosi agreed to take up legislation this fall to expedite various federal permitting processes for energy projects. This has become quite controversial, especially among progressive Democrats, and its fate is uncertain. If it is enacted, depending on its shape it is possible that it will speed up the permitting of offshore wind projects, since they are in federal waters. Wind and solar projects on non-federal land would probably not be affected, though transmission

lines might be. Parts of IIJA will ease the siting of transmission lines.

Regardless of what happens with the permitting bill, the IRA provides \$760 million for impact studies, examination of alternative siting corridors, participation in state and federal regulatory proceedings, and “other measures and actions that may improve the chances of, and shorten the time required for, approval” of transmission lines, plus \$2 billion to improve the transmission system itself. IIJA includes \$11 billion for transmission grid improvements.

Under the IRA, rooftop solar and geothermal heating projects can get a 30% tax credit (up from the prior 26%). Home battery units also receive a tax credit.

Buildings

The IRA includes several major programs to help buildings become more energy efficient and reduce their GHG emissions, an important element of the CLCPA.

The IRA appropriates \$4.3 billion for rebates to households and residential building owners for energy efficiency upgrades. A \$4.275 billion program allows individuals, households and other eligible entities to receive rebates for electric heat pumps, heat pump water heaters, stoves, and clothes dryers, and home electrical systems. Homeowners

can claim a tax credit for 30% of the cost of qualified projects. Certain total and per-appliance limits apply. Both of these programs will be routed through state energy offices.

The IRA provides \$1 billion to state and local governments to adopt and implement the latest energy codes and zero-energy stretch codes.

The IRA's Greenhouse Gas Reduction Fund provides \$7 billion to enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies such as rooftop solar. Another \$20 billion is to help communities reduce greenhouse gas and other air pollution.

IIJA includes \$550 million for an energy efficiency and conservation block grant program.

Research and Development

The draft scoping plan for the CLCPA acknowledges that new technologies will need to be developed to meet the 2050 goals. Even with a massive build-out of wind and solar, meeting electricity demand at certain times when the wind is not blowing and the sun is not shining may be challenging. Some other sources of greenhouse gases are difficult to abate with present-day technologies.

IIJA, IRA and the CHIPS Act provide considerable funding for technologies that, if they

can be scaled up in an economically and environmentally sound way, could go a long way to filling the gap. Among them are clean hydrogen; small modular nuclear reactors; carbon capture, utilization and sequestration; and direct air capture. The IRA also extends and increases the 45Q tax credit for carbon capture and direct air capture projects if they meet wage and apprenticeship requirements.

Despite its name, the CHIPS Act is about much more than semiconductors. Of relevance here, it authorizes funding for multiple energy research activities. On August 11, Governor Hochul signed the "Green CHIPS" bill (S.9467/A.10507) to help New York participate in the CHIPS Act programs.

Other Helpful Funding

EPA receives \$5 billion from the IRA to support state and local development and implementation of state climate plans.

The IRA also provides \$27 billion to help capitalize state and local green banks. The NY Green Bank, a division of the New York State Energy Research & Development Authority, describes itself as "a State-sponsored, specialized financial entity working with the private sector to increase investments into New York's clean energy markets, creating a more efficient, reliable and sustainable energy system."

Funds loaned by the green banks can mobilize considerably larger amounts of private money, and when repaid can be used again.

Conclusion

IIJA, IRA and the CHIPS Act appropriate or authorize billions of dollars for such a wide variety of clean energy programs that many could not be mentioned in this article. State and local officials and many in the private sector need to be—and many already are—diving into these laws to explore the full range of possibilities they offer. Together they are designed, among other things, to spur the creation or growth of many manufacturing industries in this country to advance the causes of clean energy, job training and national security.