

Powering Illinois' Future

Aspiration: Illinois as the Midwest's leader in clean energy

The transition to a clean energy economy is underway, and Illinois is uniquely positioned to demonstrate to the nation what a fair, equitable, and effective transition can look like. The new administration should create a shared vision for clean energy investments that value and protect Illinois' land, water, and air quality while building upon the state's recent energy advancements. The state should commit to 100 percent clean and renewable energy and ensure a just transition to that goal, so that rural and black and brown communities are not burdened by new policies and left behind in the transition to a clean energy economy. The new administration should invest in clean water infrastructure, expand energy efficiency and energy storage efforts, and electrify the state's public transportation sector.

Illinois has the opportunity to utilize clean energy to advance economic development, improve public health, and create good-paying jobs. The new administration should lead by example by partnering with local union labor to provide enhanced support for state-of-the-art energy efficiency measures at state-owned facilities, including offices and schools, where there has been insufficient investment driving energy efficiency adoption. The new administration should continue to successfully bridge energy, labor, and environmental stakeholders by focusing on shared goals around capital, infrastructure, and energy investments that respect state environmental priorities.

The new administration should consider recommendations across water infrastructure and climate resiliency, electrification, and energy efficiency, all in the context of proposals that are appropriate to include in a capital plan.

Illinois today: An energy leader in need of bold, equitable clean energy advancements

The Prairie State is home to forests, farmland, prairies, and wetlands. It borders Lake Michigan and draws energy from a variety of sources. Illinois is home to leading national research laboratories and is one of the country's leaders in energy storage research and development. Education institutions are leading on clean energy across the state. The state will soon begin pilot programs to replace diesel engines with cleaner alternatives like electric transit, cleaner-burning buses, and electric car charging stations.ⁱ

Illinois has a diverse electricity generation mix. The state draws its power from coal-fired plants, natural gas plants, six nuclear power plants, and renewable resources, like wind and solar.ⁱⁱ Our state is first in the nation for nuclear power generation, fifth for wind generation, and a leader in recoverable coal reserves and ethanol production.ⁱⁱⁱ Illinois generates more energy than it consumes,^{iv} and our current energy market has promoted opportunities for clean energy innovation. Illinois is a central transportation hub for natural gas and crude oil moving throughout the country.^v

Our state is on the precipice of widespread economic growth and innovation in clean energy development. With the passage of the Future Energy Jobs Act (FEJA), the state has one of the top energy efficiency programs in the nation and is on track to meet Paris Agreement targets.

Through this law, ComEd and Ameren are working toward the goal of 25 percent of their energy from renewable energy sources by 2025. FEJA's community solar program allows consumers to benefit from solar energy,^{vi} while FEJA as a whole commits money for low-income communities, is creating tens of thousands of jobs, and has positioned Illinois as a leader in zero-carbon electricity.^{vii} Additionally, communities across the state are taking even more aggressive climate actions by targeting carbon neutrality and using renewable energy to power buildings.

The state has a ready supply of highly skilled local union labor who can do the work required to transition Illinois to a clean energy economy. Illinois is home to 119,377 clean energy jobs and leads the Midwest in energy efficiency jobs with 86,916.^{viii} Union apprenticeship programs present opportunities to train the future workforce in renewables jobs like solar panel installation.

Meanwhile, Illinoisans still suffer from pollution, lead in water, and a lack of environmental leadership. The budget crisis defunded state agencies dedicated to the protection of our environment. The Illinois Department of Natural Resources and Environmental Protection Agency have witnessed a decrease in staff and expertise. Aquatic invasive species like Asian Carp are moving up the Mississippi and Illinois rivers and threaten to invade the Great Lakes and destabilize Illinois' marine economy.^{ix} Historically coal-dependent communities struggle with plant closures and the question of how to protect jobs amidst the transition to a clean energy economy, and communities of color are disproportionately suffering the effects of climate change and pollution.

The presence of lead pipes and Legionella pose public health threats for households with children and seniors, and Chicago's worsening air quality is putting residents at risk for lung-related diseases like asthma.^x These problems are exacerbated by a federal abdication of environmental and energy leadership. Denial of climate science, withdrawal from the Paris Agreement, and active plans to weaken limits on pollution threaten environmental safeguards and the health of Illinoisans, forcing the state to take even more aggressive action to transition to a clean energy economy.

The state needs bold leadership to advance toward a clean energy economy that works for everyone from Galena to Cairo. Illinoisans deserve clean air, clean water, and a safe environment where all communities can thrive. The new administration has the capacity to innovate around clean energy and leverage opportunities like a capital bill to make advancements. The state can simultaneously create jobs and protect the health and well-being of all Illinoisans through clean energy and strong environmental governance.

Principles for clean energy projects

The new administration should prioritize clean energy projects in a state capital bill. The committee recommends focusing on two primary project areas:

- Improve the health and safety of the state through equitable, responsible environmental capital investments.
- Catalyze clean energy expansion.

The committee outlines our central recommendations below.

Theme 1: Improve the Health and Safety of the State Through Equitable, Responsible Environmental Capital Investments

The new administration should utilize clean energy projects to address environmental health threats and invest in infrastructure and property improvements that increase the state's resiliency to climate change. Specific recommendations include:

Address Legionella and other waterborne pathogens in the state water system

The state should work with local union labor to initiate testing, identification, and remediation of Legionella and other waterborne pathogens. This would include upgrading aged plumbing and piping to address the public health needs of people working and living in state-run facilities and decrease susceptibility to Legionella and other waterborne pathogens for children, seniors, and low-income populations. The new administration could also create a maintenance program to consistently review water quality across state-run facilities, perform additional upgrades, and prevent future outbreaks. The state could also work with local municipalities, communities, and semi-private facilities to transfer lessons learned to other non-state, aging facilities.

Prioritize lead pipe replacement in critical areas

The new administration should explore ways, including cost-sharing, to replace lead service lines across the state in order to address public health issues associated with lead contamination in drinking water. The state should test water supplies across the state to determine exposure to lead and then work with local union labor to prioritize replacements in low-income residences and facilities serving children, which have increased exposure to lead pipes and require state-level assistance in remediation efforts. The state could also develop and enforce a set of construction codes that require lead piping, when found during road or utility work, to be replaced.

Prevent Asian Carp migration by supporting Army Corps recommendations

In order to address the threat posed by Asian Carp to Illinois' boating industry, fisheries, wetlands, and marine ecosystem, the new administration should consider deterrent measures at Brandon Road Lock and Dam as outlined by the Army Corps of Engineers and should utilize local union labor for the measures.^{xi} The new administration should work to gain financial commitments from neighboring Great Lakes partners for the non-federal sponsor 35 percent share of the costs associated with the project.

Improve storm and wastewater management systems

The new administration should invest in storm and wastewater infrastructure projects that help protect against property damage, limit soil erosion, and improve climate resiliency, particularly in communities that disproportionately suffer from the impacts of climate change. The state should also ensure there is an equitable distribution of funds across environmental justice communities. The state could leverage State Revolving Loan Funds for these efforts. There are two types of infrastructure projects that the state should prioritize:

- Gray infrastructure projects: improve stormwater and wastewater treatment plants to remove nitrogen and phosphorus.
- Green infrastructure projects: implement the Illinois Nutrient Loss Reduction Strategy, work with conservation districts to drive on-the-ground projects, cost share with conservation entities on edge-of-field practices, and use existing state funds to purchase land for conservation.

Make housing stock ready for energy efficiency upgrades

The new administration should work with local union labor to address fundamental deficiencies in housing stock, such as public health and safety violations that make energy efficiency upgrades difficult. This initiative should prioritize older housing stock in low-income communities that might be left out of energy efficiency and clean energy upgrades. This program could be administered alongside existing income-eligible energy efficiency programs, like Solar for All.

Create community clean energy empowerment zones

The new administration should prioritize the creation of clean energy empowerment zones in rural communities, transitioning communities, and communities of color to ensure all communities share in the economic and environmental benefits of Illinois' shift to a clean energy economy. Through these zones, the state could provide community empowerment grants to facilitate locally-designed, community-directed clean energy initiatives, such as electric transit, wind and solar, and clean energy workforce development.

Theme 2: Catalyze clean energy expansion

Expand electric vehicle charging infrastructure

In order to address the leading source of carbon pollution in Illinois – the transportation sector – the new administration should expand access to electric vehicle (EV) charging infrastructure installed by qualified local union labor. The state should authorize funding for this infrastructure and support for electric distribution infrastructure to meet EV grid demands. The state could provide incentives for conversion of public transit and school buses, offer special rates to school districts that adopt EV buses, and encourage utilities to build out make-ready work as called for and provide EV supply equipment in communities without access. The new administration could expand this initiative by leveraging capital funds available through the VW settlement and reallocating those funds to clean technologies.

Expand Illinois' energy storage leadership

Energy storage is key to a future where the world is powered by renewable energy. The new administration should leverage Illinois' position as a leader in energy storage and help facilitate incubation of energy storage-related businesses growing out of research conducted across the state. The state could integrate R&D efforts with business creation and compete for federal and private sector clean energy storage investments in Illinois. The state could also incentivize projects that propose locating at retired or soon-to-be retired coal plants in order to spur economic development in those transitioning communities.

Support shovel ready solar projects for schools and state-owned properties

The new administration should implement the Solar for All program by initiating an additional 100 projects at publicly-owned properties in low-income communities. This would bring an additional 200MW of community solar to Illinois, create local union labor jobs, and generate electricity savings for buildings like public schools.

Conclusion: Guiding Illinois toward a clean energy economy

The state has opportunities to protect the health of Illinoisans, invest in infrastructure upgrades, kickstart expansion of clean energy in all areas of the state, and lead in workforce development to encourage increased focus on job training. These recommendations should be considered top priorities to include in a state capital plan. Near-term priorities include:

- Address Legionella and other waterborne pathogens in the state water system
- Prioritize lead pipe replacement in critical areas
- Prevent Asian Carp migration through state investment in the Brandon Road Lock and Dam
- Expand public electric vehicle charging infrastructure by leveraging funds available through the VW settlement

Illinois can lead the Midwest on clean energy by protecting the health and property of state residents and supporting innovative projects that capitalize on the transition to a clean energy economy.

ⁱ <https://news.wttw.com/2018/12/04/vw-settlement-illinois-awards-19m-cleaner-bus-and-train-engines>

ⁱⁱ <https://www.eia.gov/state/analysis.php?sid=IL#24>

ⁱⁱⁱ <https://ilenviro.org/energy/>

^{iv} <https://ilenviro.org/energy/>

^v <https://www.eia.gov/state/analysis.php?sid=IL#5>

^{vi} <https://citizensutilityboard.org/future-energy-jobs-act/>

^{vii} <https://www.futureenergyjobsact.com/about>

^{viii} <https://www.cleanjobsmidwest.com/state/illinois>

^{ix} <https://chicago.suntimes.com/opinion/asian-carp-illinois-brandon-road-joliet/>

^x <https://news.wttw.com/2018/04/20/chicago-gets-f-grade-2018-air-pollution-report>

^{xi} http://glmris.anl.gov/documents/docs/glmrisreport/GLMRIS_Report.pdf