

DRAFT Annual Report

LOUISIANA CLIMATE INITIATIVES TASK FORCE

DECEMBER 1, 2022



STATE OF LOUISIANA
GOVERNOR JOHN BEL EDWARDS

Letter from the Governor

Text to be included in the final version

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Introduction: Commitment to Action

Increased impacts from climate change and extreme weather, like more intense rainstorms and hurricanes or rapid fluctuations between drought and flooding, have necessitated continuous adaptation to a changing environment for Louisianans. The state has long set a strong vision for adaptation beginning with its Coastal Master Plan in 2017 and followed through with the Louisiana Watershed Initiative and the Adaptive Governance Initiative. However, Louisiana's 2022 Climate Action Plan serves as the first step for Louisiana and the Gulf South to proactively mitigate the root cause of climate change. By providing a path to reduce greenhouse gas emissions to net zero by 2050, the Climate Action Plan complements ongoing adaptation efforts by providing a comprehensive, statewide approach to climate action. Even since the Climate Action Plan was adopted on February 1, 2022, the landscape for climate action has changed nationally and steps forward in action have taken place within Louisiana.

First, the economic case for the energy transition is stronger than ever. Renewable energy is cost competitive, and federal support for technologies like clean hydrogen, battery storage, and electric vehicles increase the likelihood of newer technologies becoming cost competitive as well. Job opportunities in renewable energy, industrial hydrogen, and the retrofitting of manufacturing facilities throughout the state are immense. The growth of new energy industries and increased demand for domestic production also buffers against the employment fluctuations in the fossil energy industry and provide new opportunities for manufacturing in Louisiana.

Second, the benefits of undertaking this transition compound across Louisiana landscapes from the state's urban centers and rural communities to its roads and natural lands. Climate investments provide multiple co-benefits for health, quality of life, equity, the natural environment, and adaptation. For example, energy efficient homes and buildings are better able to withstand hurricane winds while reducing energy burdens in disadvantaged communities. Wetland restoration projects increase carbon sequestration while improving wildlife habitat, mitigating coastal land loss, and preserving cultural heritage. Electrification projects from renewable energy can reduce pollution as well as reduce greenhouse gas emissions, generate new markets, and support new jobs and businesses.

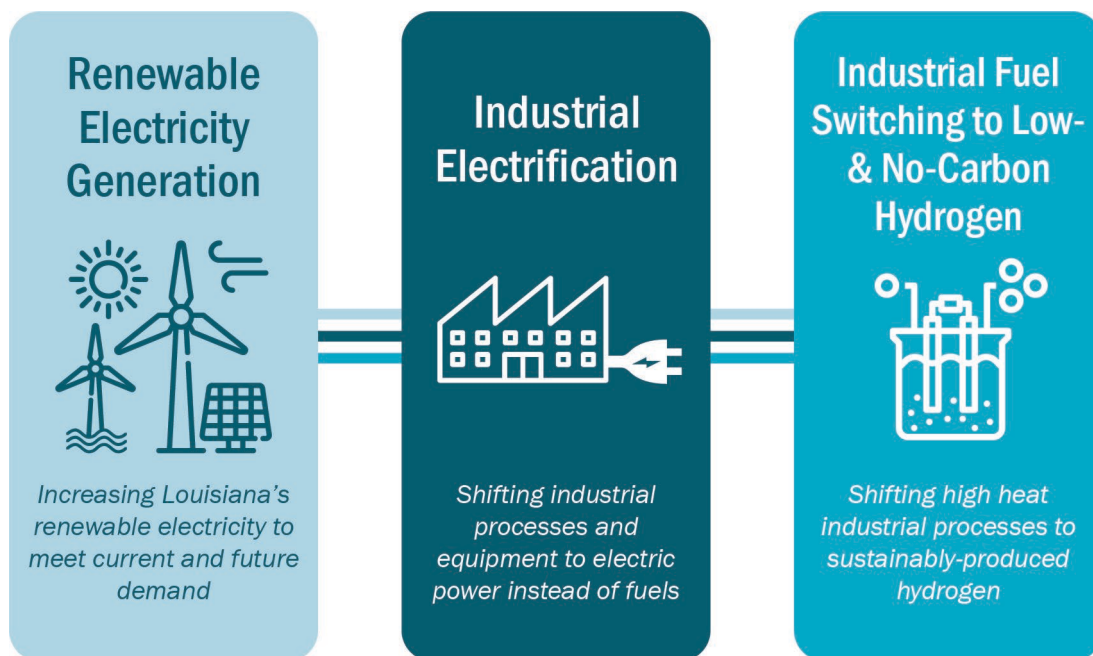
Finally, climate action helps ensure a resilient future for Louisiana, one with a diversified economy with more education, training, and job opportunities for Louisianans; stronger and modernized power infrastructure; more efficient homes and buildings; transportation systems with fewer emissions and more choices; and natural and working lands that sequester carbon while upholding Louisiana's unique culture and heritage.

To accompany these sweeping changes in the landscape, Louisiana has taken concrete steps towards meaningful implementation of the 84 policy-specific actions in the Climate Action Plan. Implementation of the

plan is not done by the state alone, but in collaboration with partners across all sectors who are leading the way through their work, the investment of their time and capital, and through their support in educational and grassroots efforts. Partnerships are referenced throughout the entirety of this report and their importance for catalyzing climate action cannot be overstated. This draft report overviews the extensive efforts underway to implement climate action in the first year of the 2022 Climate Action Plan from February through November of 2022. Since published, action continues to advance and this report may contain outdated information.

LOUISIANA'S PATH TO NET ZERO

Louisiana's unique emissions profile means that the state's path to net zero will not be the same as any other state. The Climate Action Plan lays out three policy pillars for Louisiana to reach net zero greenhouse gas emissions by 2050: **Renewable Electricity Generation, Industrial Electrification, and Industrial Fuel Switching to Low- and No-Carbon Hydrogen.**



Without these three pillars, Louisiana cannot significantly reduce its greenhouse gas emissions, two-thirds of which are associated with the industrial sector, primarily from chemicals production and petroleum refining. Shifting those industrial processes to electricity, where possible, and hydrogen, where high heat is needed, is critical. However, that electricity must be powered by renewable energy, to prevent a shifting of emissions rather than a reduction. Synergized implementation of the three pillars is crucial for success.

Though significant, heavy industry is not the only sector of emissions in Louisiana; the state must also reduce emissions from oil and gas infrastructure, agriculture, buildings, and transportation. Seven sets of fundamental objectives demonstrate that it also matters how Louisiana reduces emissions. Since there is no single path to net zero, the energy transition must intentionally prioritize Louisiana workers, businesses, communities, and environment to ensure climate action improves health and quality of life, creates greater equity, strengthens the economy and workforce, conserves natural resources, adapts to a changing climate, and manages for short- and long-term success.

CLIMATE ACTION PLAN STRATEGIES

The Climate Action Plan contains eight sections: five sector-based and three crosscutting sections. Each section contains high-level strategies and policy-specific actions to address climate action of the section.

Clean Energy Transition	<p>Strategy 1: Shift towards a clean, renewable, and resilient power grid</p> <p>Strategy 2: Increase access to and deployment of distributed energy resources</p>
Industrial Decarbonization	<p>Strategy 3: Monitor, inventory, certify, and support industrial decarbonization</p> <p>Strategy 4: Improve efficiencies in and modernization of industrial processes and facilities</p> <p>Strategy 5: Accelerate industrial electrification, switching to low- or no-carbon fuels and low- or no-carbon feedstocks</p> <p>Strategy 6: Promote reduced-carbon materials</p>
Actively Managed Methane Emissions	<p>Strategy 7: Increase and mobilize resources for decommissioning legacy oil and gas infrastructure</p> <p>Strategy 8: Monitor and regulate methane emissions</p>
Transportation, Development, and the Built Environment	<p>Strategy 9: Accelerate adoption and accessibility of low- and zero-emission vehicles and fuels</p> <p>Strategy 10: Reduce vehicle miles traveled and increase transportation efficiencies</p> <p>Strategy 11: Increase urban, rural, and regional public transit service</p> <p>Strategy 12: Coordinate land use planning to reduce sprawl and support healthy and resilient communities</p> <p>Strategy 13: Improve the efficiency and resilience of homes and non-residential buildings</p>
Natural and Working Lands and Wetlands	<p>Strategy 14: Preserve and expand natural lands and urban green spaces to maximize climate mitigation and adaptation goals</p> <p>Strategy 15: Restore and conserve Louisiana’s coastal wetlands to maximize climate mitigation and adaptation goals</p> <p>Strategy 16: Support the sustainable management and conservation of working agricultural and forestry lands</p>
An Inclusive, Low-Carbon Economy	<p>Strategy 17: Build a more inclusive and resilient economy for all Louisiana residents</p> <p>Strategy 18: Strengthen climate education, research, and innovation as a focus of Louisiana’s energy transition</p> <p>Strategy 19: Prioritize Louisiana workers and businesses in the transition to a low-carbon economy</p>
Collaboration and Partnership to Ensure Successful Implementation	<p>Strategy 20: Ensure Louisiana is prepared to maximize potential federal funding opportunities</p> <p>Strategy 21: Position Louisiana as a climate leader by engaging in national and regional dialogues and planning</p> <p>Strategy 22: Align climate action approaches across state government</p> <p>Strategy 23: Coordinate action with local governments</p> <p>Strategy 24: Call upon the private sector to align their practices and play a leading role in climate action</p> <p>Strategy 25: Improve engagement with and track progress on outcomes for disadvantaged communities and Indigenous peoples</p>
Accountability and Adaptability to Ensure Lasting Success	<p>Strategy 26: Advance an equitable, efficient, and sustainable siting and permitting process for new energy and infrastructure projects</p> <p>Strategy 27: Ensure that Climate Action Plan strategies are effectively and transparently implemented</p> <p>Strategy 28: Track progress in reducing net GHG emissions reductions and adapt the approaches taken as needed</p>

This first Annual Report for the Climate Action Plan shows how Louisiana is making progress on climate action at the local, regional, and state levels. Actions in every section of the plan are in progress and preparatory work is being done to unlock future action. This report will provide an overview of the importance of each section, a few highlights and wins from the past year, and a look forward at what is to come. While there is a lot of work to be done for Louisiana to reach net zero by 2050, this report demonstrates that there is statewide commitment and progress to address climate action.

Year 1 Highlights

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Positioning Louisiana for Federal Funding

Recent federal legislation is unprecedented investment in climate action and offers a variety of mechanisms to fund new decarbonization technology development, wide-scale deployment of renewables, and economic opportunity for disadvantaged communities and less-resourced applicants. In particular, two pieces of legislation the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA), provide hundreds of billions of dollars in formula funds, competitive grant opportunities, tax credits, and project loans with a generational opportunity to invest in the strategies and actions of the Climate Action Plan. Enacted in November 2021, the IIJA invests in traditional transportation infrastructure projects, such as roads and bridges, alongside more innovative infrastructure needed in the energy transition, such as power reliability and energy resilience, holistic community transportation planning, oil and gas legacy pollution, electric vehicle charging infrastructure. Enacted in August 2022, the IRA offers wide range of tax incentives to support community access to energy efficiency measures, electric vehicles, and distributed solar, while also to support large-scale production and investment in clean hydrogen, zero-emission nuclear, and utility-scale renewables.

Over the past year, Louisiana’s commitment to climate action has placed the state in a strong position for new federal funding opportunities coming from the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA). Investment opportunities provide a generational opportunity to implement the strategies and actions of the Climate Action Plan. Further, the seven objectives of the Climate Action Plan align with the Biden Administration’s implementation objectives for reducing greenhouse gas emissions, creating high-quality jobs and investing in disadvantaged communities to create greater equity. Importantly, the majority of provisions in both the IIJA and IRA are covered by the Biden Administration’s Justice40 initiative, which states that 40% of benefits of federal investments from covered programs must benefit disadvantaged communities who are “marginalized, underserved, and overburdened by pollution,” as defined by the White House. In the one year since IIJA was enacted into law, \$4 billion in funding has been announced for over 120 projects across Louisiana, from infrastructure upgrades like bridge repairs to climate-aligned projects like electric vehicle charging infrastructure and component manufacturing.¹

This infusion of capital has the potential to be followed by even more funding. Select upcoming opportunities available within the IIJA include:

- \$53.6 billion for clean fuels and technology
- \$14 billion for grid infrastructure reliability and resilience
- \$8.6 billion for supply chains for clean energy
- \$6.5 billion for energy efficiency and building infrastructure
- \$8.6 billion for flood mitigation and management
- \$5.9 billion for watershed health, maintenance, and restoration

The IRA builds on these investments by making a historic federal investment in wide scale deployment of technologies that will mitigate greenhouse gas emissions. Over \$177B in clean energy, \$39B in clean fuels and vehicles, \$43B in manufacturing, and more are complemented by over \$60B in community investments, including environmental justice block grants, equity grants for reconnecting communities, and investments in monitoring and reduction of air pollution. The IRA also includes over \$30.6B in investments in climate-smart agriculture, rural energy, coastal habitats, and forests.

To make the most of these opportunities, Governor Edwards designated an Infrastructure Coordinator to lead interagency implementation and represent Louisiana federally on the IJA. The Infrastructure Coordinator has established six interagency work groups that meet monthly to discuss progress and hurdles of implementation. Additionally, the Center for Planning Excellence hosted a two-day workshop with Governor Edwards and his cabinet in March 2022 to debrief state leadership on the breadth of opportunities in the IJA, its alignment with the Climate Action Plan, and the necessary steps to make Louisiana successful and competitive. Most recently, Governor Edwards issued Executive Order JBE-2022-19 in November 2022, aiming to increase access to these federally-funded or supported projects for small businesses and businesses that are owned by women, minorities, veterans, or are disadvantaged.² Additional work to capitalize on these opportunities is detailed throughout this annual report.

Clean Energy Transition

WHY THIS IS IMPORTANT

Clean energy generation is one of the pillars of Louisiana’s Climate Action Plan. Without clean electricity, work to electrify buildings, vehicles, and industrial processes will remain reliant on power that produces GHG emissions. The Climate Action Plan projects a four-fold increase in electricity demand over the next three decades, so increasing Louisiana’s clean energy generation will become more necessary not only to support decarbonization goals but also to meet demand on the power grid. For Louisiana to produce enough electricity to power this increase in demand, as well as to potentially export power to the national grid, clean power deployment must continue to increase rapidly. The Climate Action Plan has two strategies in this section: one targeting the grid and utilities, and the other targeting end users by deploying distributed energy resources. Alongside utility generation, distributed energy availability, such as microgrids plus battery storage, are critical resilience strategies to provide continued power during extended outages and weather events. Power grid expansion, modernization, and resilience will be a key focus to accompany the buildout of clean generation and to provide power reliability and security.

FIRST YEAR PROGRESS

Louisiana has made advancements towards a clean, renewable, and resilient power grid.

Price fluctuations in the global natural gas market, increased demand from large energy users, and cost-competitive prices for solar have facilitated greater demand for utility-scale renewable electricity generation in Louisiana. Of the three investor-owned utilities in Louisiana, all have made major announcements for solar development in 2022. Offshore wind continues to gain momentum, as utilities, manufacturers, and federal regulators are aligned towards building wind energy off the coast of Louisiana. Entergy New Orleans recently signed a Memorandum of Understanding with Diamond Wind to explore the transmission needs to develop offshore wind in the Gulf of Mexico. Concurrently, the Bureau of Ocean Energy Management is preparing for the first offshore wind lease sale in the Gulf of Mexico in June 2023, which will include lease areas south of Lake Charles, and the Louisiana Department of Natural Resources (LDNR) is updating its regulations for offshore wind leasing and operations in state waters. To support a comprehensive state approach to energy resilience, the State Energy Office submitted a preliminary revision to its the State Energy Security Plan in September 2022, with a final to be submitted September of 2023. ³ In collaboration with the Governor’s Office of Homeland Security and Emergency Preparedness (GOHSEP), this plan overlays Louisiana’s energy profile with physical and cyber threats and vulnerabilities; the Climate Action Plan is highlighted as an approach to address these risks. Louisiana also received technical assistance support from Argonne National Laboratory to host a workshop with all state agencies and partners to strengthen its unified approach to energy security.

Case Study: Microgrids for Resilient Communities

Get Lit Stay Lit is an initiative of the Krewe of Red Beans partnering with Glass Half Full to help neighborhood restaurants transition to solar-powered microgrids with battery storage. Inspired by the experiences after Hurricane Ida, restaurants with these microgrids can provide energy, shelter, and food to their community after disasters. Get Lit Stay Lit was awarded \$200,000 from the US Department of Energy as part of the American Made Inclusive Energy Innovation Prize in July 2022. The first “Stay Lit” project was installed at Queen Trini Lisa, a Caribbean restaurant in New Orleans. ([Link](#))

Renewable Energy Generation Announcements

- Entergy Louisiana was approved by the PSC to develop 475 MW of solar power, tripling its existing renewable capacity. ([Link](#))
- Ventress Solar, the largest solar farm in Louisiana at 345 MW, is under construction in Pointe Coupee Parish. ([Link](#)) Parish President Major Thibaut calls this the largest economic development project in the area in 30 years. The farm will help power McDonald's and eBay, who have signed PPAs with the operating company.
- Amazon is planning two solar farms, a 100 MW farm in St. Landry Parish and a 200 MW farm in Morehouse Parish. ([Link](#))
- SWEPCO will add 72.5 MW of solar from the Shreveport area near Hosston. ([Link](#))
- Entergy Louisiana, Entergy New Orleans, and Diamond Offshore Wind signed an MOU to evaluate the offshore wind potential in the Gulf of Mexico. ([Link](#))
- Cleco contracted a PPA for 240 MW of solar on the site of their retired Dolet Hills coal-powered plant, enabling a green tariff for large customers. They are also optioning sites for an additional 50-200MW of solar in their territory. ([Link](#))

Louisiana communities are making progress in distributed energy and microgrids.

Increased societal reliance on electricity combined with threats to reliability of the power grid from increased climate impacts have facilitated a new market for distributed energy resources, known as DERs. DERs include the broad category of microgrids, intended to provide power to a specific community or facility in an outage because it is islanded from the power grid. Microgrids can be placed on critical facilities such as hospitals, on community centers such as churches, or on community focal points such as restaurants. Localized, distributed power allows the facility to maintain power and serve as a resilience hub for the community in a post-disaster event. When powered by solar plus battery storage, microgrids provide multiple benefits from reduced emissions to increased resilience and reduced energy burdens.

Efforts like the Krewe of Red Beans' Get Lit Stay Lit, in New Orleans, and Community Lighthouse, a statewide effort by Together Louisiana, are building community resilience hubs with solar power and battery storage to better provide

energy, shelter, and food during disruptions and disasters.⁴ University of Louisiana will also be designing and installing a microgrid test facility for Cleco to simulate the impact of emerging technologies on the grid. This microgrid test facility will also enable UL to research the use of solar and biomass power to produce green hydrogen from electrolysis, with \$4M in federal funding. The City of New Orleans was selected by the Department of Energy to participate in the Community LEAP (Local Energy Action Program).⁵ This grant will provide technical assistance to access federal resources like those recently passed in the IRA and IIJA. They will pursue strategies for planning and investment in energy efficiency, clean energy development, clean transportation, and resilient microgrids.

At the state level, Louisiana has submitted a \$9.2M annual grant to the Department of Energy for investments in grid resilience improvements that proposes investment in multiple types of solar plus storage microgrids alongside vegetation management. Upon approval from the Department of Energy, the state will manage a subgrant awarding process. Further opportunities of the IIJA and IRA, including tax credits for solar and low-cost financing for rooftop solar, will draw down costs and support widescale deployment of distributed energy.

WHERE WE GO NEXT

Increase pathways to clean energy installations. Currently, policy barriers impede fast deployment of clean energy. For community-scale generation, state and local governments have to set rules for the permitting and siting of solar installations.⁶ For example, in the 2022 Regular Legislative session, the Louisiana Legislature passed House Bill 655, which directed DNR to establish decommissioning regulations for utility-scale solar projects, including permitting fees and a collateral bond.⁷ To supplement decommissioning regulations,

the Center for Planning Excellence (CPEX) is partnering with DNR to develop a model solar ordinance for parishes and municipalities to address siting concerns, rural character, and other issues that have arisen as solar farms expand in the state.⁸ Implementation of this model ordinance will support jurisdictions to make informed decisions about permitting and siting of clean energy installation. For industrial-scale transition, future implementation will involve dockets at the Public Service Commission, such as the Customer-Centered Options Docket (R-35462) which directs staff to open rulemaking to review the potential to provide an optional pilot industrial solar tariff that can support power needs and objectives of Louisiana's largest industrial customers, and to benefit low- and moderate-income residents in parishes where participating industries are located. Additional rulemaking is happening at LDNR and the State Mineral and Energy Board for protocols for leasing of State water-bottoms for wind power generation.

Leverage federal investment for clean energy deployment. The IJA includes competitive grant opportunities to fund improvements, modernization, and expansion in power grid infrastructure as well as to invest in solar plus storage microgrids as resilience measures. Further, the IRA establishes new and augments existing tax incentives for production and investment in solar and wind energy resources, accompanied by a \$27 billion bundle of competitive funds for the installation of distributed energy resources. With such unprecedented resources available, the state must build partnership across its agencies as well as across major energy providers, such as the investor-owned utilities, cooperative utilities, and the municipal utilities, and the major energy users, such as residential communities, commercial users, and industrial users. As the impacts of climate change become more apparent on power infrastructure, competition will be fierce, necessitating stronger statewide collaboration on proposals, education on the need for stronger utility-scale and distributed-scale resources, and technical analyses for the most strategic investments.

Industrial Decarbonization

WHY THIS IS IMPORTANT

With two-thirds of Louisiana's emissions coming from the industrial sector, continual progress in this section is critical to advance the state's net zero goals. Industrial decarbonization involves the use of alternate components, fuels, and feedstocks to avoid combustion of fossil fuels in industrial processes. Further accelerating industrial decarbonization is global demand for products and materials with lower carbon intensity through circular economy and "buy clean" policies. The Climate Action Plan's four strategies in this section address the multiple ways to reduce industrial emissions: improved monitoring and inventorying of existing emissions and decarbonization projects, improving efficiencies of processes and facilities, switching to electricity where possible, switching to low- or no-carbon fuels and feedstocks, and promoting reduced carbon materials.

Global energy price volatility in 2022 has exposed the importance of energy diversification to ensure that the state is not reliant on one energy source and has flexibility for supply chain redundancies. Through the Build America Buy America Act of 2021, federal investment in domestic manufacturing for clean energy components offers tremendous potential for Louisiana to lead national manufacturing. Further, corporate demand for clean energy sources combined with market demand for reduced carbon intensive materials has created extensive investment in industrial decarbonization in Louisiana.

FIRST YEAR PROGRESS

Louisiana's industries are investing in decarbonization. Since 2020, over \$21 billion in new and expanded industrial projects have been announced to advance decarbonization, as highlighted in the callout box above. Projects include new manufacturing in the electric vehicle supply chain, alternative fuels production, carbon capture and storage, clean ammonia, and clean hydrogen. These announcements demonstrate clear interest and buy-in from industry to decarbonize, and federal support through the IIJA and IRA have furthered reduced barriers for industrials to decarbonize.

Additional to project announcements, Louisiana was awarded a \$50 million grant, matched by \$25 million in state funds, to develop a comprehensive clean hydrogen energy hub in a project called H₂theFuture. This project has five core areas, including research testing facilities at several state colleges and universities; NEXUS, a physical and programmatic hub housed at the University of New Orleans for collaboration, coordination, and inclusive entrepreneurship; business development initiatives to work with new, existing, and disadvantaged businesses; a workforce development program aimed at displaced energy sector workers and rural residents; and a public-private partnership with the Port of South Louisiana to develop a hydrogen fueling barge.⁹ H₂theFuture includes over 25 partners across south Louisiana, and is designed to produce clean hydrogen and accelerate the workforce and accompanying infrastructure needed for success. Since Louisiana consumes 30% of all US industrial hydrogen for high heat industrial processes, the state is uniquely positioned as a leader in the transition to clean hydrogen.

Partners are supporting in a comprehensive approach to decarbonization.

Additional to project announcements, the launch of the Baton Rouge-based Carbon Reduction Alliance, a collaborative effort of industrial companies, state agencies, universities, economic development organizations, and other interested entities, provides an opportunity to link university research to industrial application. The Alliance plans to serve as the hub for decarbonizing the Baton Rouge Area’s industrial corridor. Similarly, the C1 Extension Service recently launched by the University of Louisiana provides industrial companies, policymakers, and businesses interested in decarbonization with technological expertise. C1 aims to develop innovative technologies and associated policies as well as train future professionals to operate decarbonized systems.

WHERE WE GO NEXT

Expanding Louisiana’s clean hydrogen supply and demand.

The clean hydrogen economy in Louisiana has potential to mitigate intensive emissions from industrial fuels and feedstocks while creating high-quality jobs for Louisiana workers. As industrial facilities increasingly grapple with how to meet their environmental, social, and governance goals, low- and no-carbon hydrogen offer strong alternatives for maintaining jobs, reducing pollution, and supporting a growing economy. Alongside downward pressure from corporate goals and the state’s emission reduction goals, federal investment further incentivizes hydrogen. The IIJA launched a regional clean hydrogen hub competitive program through the Department of Energy, and the IRA modifies and develops new incentives for the production of low- and no-carbon hydrogen. Particular to the IIJA, Louisiana is pursuing a regional clean hydrogen hub across Louisiana, Arkansas, and Oklahoma in a project known as the H₂ALO (“HALO”). Of the \$8 billion program, this proposal could draw down up to \$1 billion in funding to support clean hydrogen production through end-use technologies and systems. Maximizing the hubs opportunity and the influx of incentives require continued partnerships across state agencies, industries, businesses, and communities to develop this new economy. Further, collaboration is needed to ensure the state’s siting and permitting procedures reduce barriers while creating meaningful emission reduction and community benefits.

Advancing analysis on industrial decarbonization pathways. Through a philanthropic grant, the Governor’s Office commissioned an Industrial Electrification Analysis, which will assess electrification potential of industrial components on a facility-by-facility basis. A high-level map and detailed methodology report is anticipated in the spring of 2023 to support policymakers and industrials in advancing industrial-scale electrification. Through the C1 Extension Service and other academic efforts, facility-by-facility and industrial

Industrial Announcements

Some of the decarbonization, low-carbon products, and low-carbon process announcements from the last two years include:

Reduced-Carbon Materials:

- Arbor Renewable Gas (Port Allen)
- Origin Materials (Ascension Parish)
- Delta Biofuel (Jeanerette)
- Chalmette Refining Renewable Diesel (Chalmette)
- Louisiana Green Fuels Renewable Diesel (Caldwell Parish)
- Gron Fuels (Port of Baton Rouge)
- Arq Fuel (St. Charles Parish)
- Renewable Energy Group (Geismar)
- Diamond Green Diesel Expansion (Norco)

Electric Vehicle Supply Chains:

- Syrah Technologies Graphite Processing (Vidalia)
- Syrah Technologies Active Anode Material (Vidalia)
- Koura Lithium Hexafluoridephosphate (St. Gabriel)

Hydrogen and Ammonia:

- Plug Power and Olin Corp Green Hydrogen Joint Venture (St. Gabriel)
- Gron Fuels Green Hydrogen (Port of Baton Rouge)
- Air Products Blue Hydrogen (Ascension Parish)
- CF Industries Blue Ammonia
- CF Industries Carbon Capture
- CF Industries Green Ammonia

cluster analyses are needed to provide tailored recommendations and pathways for the most comprehensive and cost-effective approaches to emissions reduction.

Actively Managed Methane Emissions

WHY THIS IS IMPORTANT

Methane is a greenhouse gas approximately 25 times more potent than carbon dioxide but with a shorter lifespan in the atmosphere. Actively mitigating the most potent sources of methane is critical to reach net zero greenhouse gas emissions. Though methane is present in many parts of the state's economy, it is addressed separately in this section to emphasize the potential to mitigate oil and gas infrastructure emissions through short-term action. New federal resources are available to begin mitigating 'orphaned wells,' which are nonproducing oil and gas wells that are abandoned by operators. Because this kind of legacy infrastructure often has no clear legal owner, state and federal action to plug and cap these wells will be necessary to address methane leaks. This section of the Climate Action Plan has two strategies: increase and mobilize resources for decommissioning legacy oil and gas infrastructure, and monitor and regulate methane emissions.

FIRST YEAR PROGRESS

Louisiana is leveraging significant federal investment for orphaned wells: The issue of orphaned wells received federal attention in the IJA, with \$4.7 billion over the next nine years available for states and tribes to repair a portion of the country's 130,000 documented orphaned wells, of which approximately 4,600 are in Louisiana. LDNR received an initial \$25 million grant through this Orphaned Well Site Plugging, Remediation, and Restoration program to fund the plugging of between 250 and 900 documented abandoned wells, prioritizing those near low-income communities and providing opportunities for displaced energy sector workers to be trained for this workforce.¹⁰

LDNR is using a portion of this funding to develop procedures to measure and track contamination of groundwater and surface water, and to deploy methane monitoring stations. These monitoring stations will be calibrated so that predictive data analytics can identify which wells are most likely to leak methane. Integration of this monitoring technology will help the state prioritize which wells should be plugged most urgently.

The initial \$25 million from the IJA will soon be followed by more funding from the same program. In the 2021 Legislative Regular Session, the Louisiana Legislature passed Senate Bill 245 to give LDNR more flexibility in how much it can spend to plug and restore abandoned wells, which will enable them to address a greater quantity of abandoned wells for restoration. The legislation makes it more likely that the state will receive an additional \$150 to \$200 million from this IJA program.

The federal investment in plugging and restoring orphaned wells is a necessary infusion of capital for methane emissions reduction. The state's Oilfield Site Restoration fund receives money each year for this work, but it is not enough to address the known and unknown orphaned wells that may be leaking methane. The monitoring and predictive tools in development will support prioritization of future investments and location of the wells with the greatest leaks.

WHERE WE GO NEXT

Strengthening operator accountability and tightening loopholes: While plugging and restoring orphaned wells is important to address Louisiana's legacy infrastructure, it is equally important to stop orphaning new wells. Strengthening financial security requirements and reducing exemptions for future utility designations both can hold operators responsible and accountable for inactive wells. Colorado successfully passed new financial security rules this year, which are considered the strictest in the country.¹¹ Three states have also banned venting and flaring of oil and gas from facilities to reduce methane comprehensively. This prohibition on

venting and flaring also provide a concrete mechanism to curtail methane emissions from industrial operations. Further, the EPA draft rules on industrial methane releases were released in November 2022 and are expected to be finalized in 2023.¹² When finalized, Louisiana will have to undergo state rulemaking to adopt these standards set by EPA and can also adapt them for a local context as long as they are equally strong.

Transportation, Development, and the Built Environment

WHY THIS IS IMPORTANT

This wide-ranging section of the Climate Action Plan contains five strategies that address all modes of transportation, land use, and buildings. Actions encompass efficiencies and decarbonization for all modes of transit, including freight, ports, aviation, passenger vehicles, and heavy-duty trucking. Land use actions highlight the benefit of more accessible public and regional transit, cross-governmental collaboration for strategic land use, and proactive transportation planning. Buildings actions offer pathways to reduce energy usage in buildings through electrification, weatherization, and efficiency measures.

The IJA supports investment in traditional infrastructure, such as roads and bridges, as well as in innovative infrastructure, such as reconnecting communities, Complete Streets policies, low-carbon project materials, electric vehicle charging infrastructure, and more. This unparalleled opportunity has facilitated greater partnership and engagement across cities and regions of Louisiana.

FIRST YEAR PROGRESS

Buildout of the state's electric vehicle charging network is underway. To position Louisiana for funds from the federal Department of Transportation, the Federal Highway Administration approved the state's National Electric Vehicle Infrastructure ("NEVI") Plan in September 2022.¹³ Building on the state's Alternative Fuel Corridors, this plan identifies electric vehicle charging facilities to be located across Louisiana, no farther than 50 miles apart and located within one mile of the interstate. Over the next five years, \$73 million will be deployed through DOTD for interested parties to own, install, and operate EV charging stations and build out this corridor across Louisiana. The Drive Electric Louisiana project continues to raise awareness for and increase adoption of electric vehicles through hosting eight events in 2022, and they engage with dealers, state and local officials, utilities, and regulators to deploy electric vehicles.¹⁴

Louisiana is establishing a framework for statewide planning. Louisiana was awarded a state planning grant through the American Rescue Plan Act (ARPA) in 2021, allowing for the establishment of the Office of State Planning within the Division of Administration. This new office will provide the framework and implementation roadmap for planning, policy, development, and technological capacity to coordinate and align state agencies and local jurisdictions and to implement long-term resilience and planning. The first state planning manager was hired in the summer of 2022.

Urban and rural communities are increasing connectivity through transit options. In Central Louisiana, the Alexandria-Pineville Bicycle and Pedestrian Study program of improvements is fully funded through a partnership between their metropolitan planning organization and Cleco, and began construction in fall 2022 with remaining phases to be completed by 2026. The Rapides Area Planning Commission is also working to improve transit service in the region by implementing improvements to ATRANS and piloting a Natchitoches and Grant Parishes rural curb-to-curb transit service.

Additionally, five Louisiana projects received \$63 million from the Rebuilding American Infrastructure with Sustainability and Equity ("RAISE") grant program, formerly known as the BUILD and TIGER discretionary grant programs, which includes \$20 million towards the future Baton Rouge to New Orleans Inter-City Rail Service.¹⁵

Additional projects in Shreveport and Natchitoches will provide much-needed improvements for bus service, pedestrian facilities, protected bicycle lanes, and better drainage. The Kings Highway corridor in Shreveport will benefit from a \$22 million RAISE grant, connecting healthcare institutions like BRF, Ochsner LSU Health

Shreveport, LSU Health Shreveport, Shriners Hospital for Children, and Willis-Knighton Health.¹⁶ This project will reconstruct the roadway to include bus pull-outs and streetscaping, bus rapid transit improvements using battery-electric buses, improved pedestrian and bicycle facilities, street lighting, and ADA access. Similarly, in Natchitoches, a \$17 million RAISE grant will support the Texas Street business corridor, install sidewalks and lighting, and implement bicycle and pedestrian routes throughout the city.¹⁷

Case Study: Proving the effectiveness of energy efficiency at scale

The Ernest N. Morial Convention Center in New Orleans completed one of the largest energy efficiency upgrades in the region in 2022, including changing 5000 fixtures to LEDs in the Exhibit Hall space and upgrading chiller and cooling towers. This upgrade also included pursuing LEED certification, benchmarking the facility energy use in Energy Star Portfolio Manager for future tracking. As part of the LEED certification process, the Convention Center eliminated CFC refrigerants, installed EV charging stations in a public parking lot, installed 87 water bottle filling stations, and planted 200 trees. This project demonstrates the technologies and techniques available for similarly sized buildings to pursue improved energy efficiency.

Louisiana's ports are reducing emissions: Louisiana's ports are working to install shore power options to allow vessels to use grid electricity instead of additional marine diesel while in dock. Following a 2020 shore power installation at Port Fourchon, Entergy recently completed a project at the Port of Lake Charles with Crowley to power their tugboats. This project is estimated to reduce carbon dioxide emissions by 500 metric tons per year.

WHERE WE GO NEXT

Increasing consumer options for climate action:

Alongside the IIJA increases to the Weatherization Assistance Program and the Conservation Block Grant Program, the IRA offers incredibly opportunity to invest in energy efficiency at the home- and business-owner scale. \$9 billion for consumer home energy provides rebates for energy efficiency retrofits and electric appliances, and 10 years of consumer tax credits will be available for home efficiency measures, such as heat pumps, rooftop solar, electric HVAC, and water heaters. Further, a \$1 billion grant program will directly support efficiency measures in affordable housing. To increase investment in energy efficiency using these funds, the state and partners must address barriers to ensure widespread use. For example, federal funding to improve energy efficiency in residential buildings relies on a set of criteria that

include structural soundness, but many homes in Louisiana still have structural damage from recent hurricanes and may not be eligible for funding.

The IRA further unlocks opportunity for electric vehicle deployment through a \$4000 consumer tax credit for used clean vehicles and up to a \$7500 tax credit for new clean vehicles. This incentive intends to increase access to zero-emission technologies for low- to moderate-income individuals, and Louisiana will need to support communities in leveraging credits through education and resources.

Strengthening building and energy efficiency codes. Improving the efficiency of buildings to reduce energy demand starts with strong codes. Act 635 of the Louisiana Legislature directed the Louisiana State Uniform Construction Code Council to create an Energy Code Commission and to update the Louisiana Construction Code with the International Energy Conservation Code and the State Building Energy Conservation Code. As of November 2022, the Louisiana State Uniform Construction Code Council (LSUCCC) is currently reviewing the latest energy efficiency codes. These codes should take effect in early 2023; the updated codes will address structural elements like wind standards for roofs, as well as other elements addressing efficiency based on climate conditions.

Natural and Working Lands and Wetlands

WHY THIS IS IMPORTANT

Louisiana's natural and working lands from its forests and fields to the coastal marshes are important not only for biodiversity and recreation but also for their cultural heritage. This section of the Climate Action Plan includes three strategies to maximize the carbon sequestration potential of Louisiana's lands in three broad areas: conservation, regenerative agriculture, and wetland restoration. Preservation and conservation of natural lands and urban green spaces increases the overall sequestration value and flood risk reduction potential of urban and rural landscapes. Regenerative and sustainable agriculture practices for working lands seek to reduce emissions and enhance sustainability of farming, ranching, and forestry lands. Louisiana's Coastal Master Plan and other wetland restoration projects increase the sequestration potential of the state's coastal wetlands. Additionally, all three strategies aim to address adaptation goals as well as mitigation goals. Reducing flood risk and improving community resilience can be co-benefits in how Louisiana protects land for carbon sequestration.

FIRST YEAR PROGRESS

Louisiana is investing in the conservation of its natural lands. Louisiana's natural lands have a new source of conservation funding this year with the establishment of the Louisiana Outdoors Forever Program and Fund. Act 714 of the Louisiana Legislature established this dedicated conservation funding program with \$10 million to seed first year funding with LDWF as the administrative and fiscal agent of the program. Dedicated funding for land conservation will help unlock millions in federal funds and partnerships for more extensive conservation efforts.

Through resources in the IJA, the EPA will fund nutrient reduction and water quality improvement measures in the Mississippi River/Gulf of Mexico Watershed Nutrient Task Force's Gulf Hypoxia Action Plan for the next five years, totaling \$60 million for all states. Louisiana will receive approximately \$1 million for each of the next five years to implement nutrient reduction measures. In its first two years of funding, Louisiana will leverage for greater implementation of on-farm conservation programs in watersheds with the highest concentration of nutrient loading. These efforts will reduce nutrient loading while also providing flood risk reduction and carbon sequestration value.

Louisiana is advancing coastal protection and restoration science and projects. The state's Coastal Master Plan, a \$50 billion, 50-year plan to restore and protect Louisiana's coast, is undergoing its scheduled six-year update for 2023. The current plan, approved in 2017, continues to implement flood risk reduction measures and wetland restoration projects. In 2022, 13.9 miles of levees were improved, 28.3 million cubic yards of sediment were dredged, and 4,272 acres of marsh benefited from the projects outlined in the plan. Also in the past year, 11 projects started construction at \$407 million total value and 8 projects completed construction at \$741 million total value including the largest marsh creation projects in history. These land-building projects are key to storing additional carbon in Louisiana's wetland environments, as well as the risk-reduction projects to protect vulnerable coastal communities from rising sea levels.

Agriculture practitioners and farmers are getting climate-smart across the state. SPROUT, an organization based in New Orleans, trains new farmers through public programs while helping existing farmers transition to more climate-smart agriculture; it also partners with federal agencies to conduct outreach and improve access to conservation programs. In 2022, SPROUT held field days with farmers to offer free cover crop seeds to farmers statewide, which will serve to increase cover crops that reduce fertilizer demand and increase carbon sequestration of soils. In 2023, SPROUT plans to launch a statewide climate-smart agriculture cohort that will support financial assistance and loan procurement for farmers to climate-smart agriculture.

The Louisiana Department of Agriculture and Fisheries (LDAF) continues to connect farmers to conservation formula programs like EQIP (Environmental Quality Incentives Program) and CSP (Conservation Stewardship Program). Though these programs historically have received inadequate funding, the IJA and IRA reinvigorate sustainable farming and forestry through wide scale deployment of the EQIP and CSP. There are many active landowners and high participation in these programs, with over half a million acres covered. Additional watershed scale programs through the Natural Resources Conservation Service (NRCS) are receiving new funding through the IJA, unlocking new resources for Louisiana's local Soil and Water Conservation Districts to complete planned projects. Lastly, Louisiana submitted fourteen proposals under the first tranche of the Climate Smart Commodities Competition of the USDA. Louisiana submissions span cotton, timber and forest products, livestock, rice, vegetables, and others, totaling a proposed investment of \$659.5 million in climate-smart agriculture for Louisiana. The USDA will work with applicants to refine and finalize proposals in the coming months. Climate Smart Commodities alongside other recurring and new sources of funding bring a unique opportunity to invest in farmers and support sustainable management of working lands.

Additionally, urban reforestation is increasingly important to manage heat, stormwater, air quality, and more. In New Orleans, the organization Sustaining Our Urban Landscape (SOUL) initiated a planning process for a Reforestation Master Plan in summer 2022, holding meetings with professional landscape architects, arborists, municipal departments, nonprofits, and residents. SOUL has contracted with Spackman Mossop Michaels to write the plan.

WHERE WE GO NEXT

Ensuring continued natural sequestration investments: The 2023 Coastal Master Plan will be up for approval in the 2023 Legislative Session. Continuing to fund and implement coastal restoration projects is critical – not just for carbon sequestration, but for flood protection, water quality, wildlife and fisheries habitat, and the protection of Louisiana's communities and cultural heritage. Further opportunity to invest in natural sequestration is anticipated through increased biofuel production and demand as well as increased funding for traditional conservation programs of the USDA. Further, Congress has begun negotiations on the 2023 Farm Bill with a renewed push for climate-smart agriculture through two mechanisms: support for farmers confronting extreme weather and incentives for the agriculture sector to fight climate change. Local farmers have the opportunity to advance these new priorities and leverage unparalleled investment for Louisiana.

Leading blue carbon analysis to unlock carbon sequestration markets. The capacity of wetlands to store carbon, sometimes known as “coastal carbon” or “blue carbon,” is being studied by the Water Institute of the Gulf, CPRA, university partners, and other coastal ecologists. This scientific research can demonstrate a defensible methodology for wetland restoration projects to be part of global carbon offset markets, since carbon offsets are usually used to construct or preserve forests. However, Louisiana's abundant wetlands also have tremendous capacity for natural carbon storage as well as providing multiple co-benefits for surrounding communities and ecosystems. Research is also needed to develop the procedures, verification method, and accountability of users in a carbon market as well as establish a managing agency to lead this effort. With the scientific and policy analysis in place, the blue carbon market could provide a critical source of funding for continued implementation of Coastal Master Plan projects in the future.

An Inclusive, Low-Carbon Economy

WHY THIS IS IMPORTANT

While it matters that Louisiana reduces the quantity of greenhouse gas emissions reduction, it also matters how Louisiana accomplishes these reductions. In developing the Climate Action Plan, the Task Force established fundamental objectives for how climate action should be developed and implemented, as mentioned in prior sections of the report. One of these objective categories aims to strengthen the economy and workforce, which is the primary focus of this section. The three strategies in this section detail key components of an inclusive, low-carbon economy that support and promote clean energy development and transition, centering Louisiana workers and businesses in the transition through accessible training and resources. Education, research, and innovation at Louisiana's colleges and universities are also a focus in this section.

FIRST YEAR PROGRESS

Clean energy buildout and industrial decarbonization projects are major sources of new jobs in Louisiana. The US Energy & Employment Report in 2021 showed that solar electric generation was the largest source of electric power jobs nationwide, with over 3,400 people employed in the solar industry in Louisiana.¹⁸ Solar expansion will continue to offer a large source of employment growth for Louisiana, and the state's colleges and technical training programs are preparing for this growth. For example, a new market for clean hydrogen will generate job growth, both to develop new technologies and to install infrastructure that facilitates wide scale deployment. Offshore wind will generate a new industry for Louisiana's coast, employing much of the existing offshore oil and gas infrastructure and providing opportunities for transition from traditional offshore jobs. Increased demand for electric vehicles, renewable energy, clean hydrogen, and carbon capture poses the opportunity not only for direct job creation but also for an indirect workforce in Louisiana through manufacturing. As an existing manufacturing hub for the nation, Louisiana can serve as a leader for manufacturing clean and renewable technologies as well as deploying clean manufacturing techniques to decarbonize facilities.

Louisiana's colleges and universities are preparing for the energy transition. Louisiana universities and colleges are developing programs that not only train workers in clean energy jobs but also build local, academic expertise in energy transition technologies. For example, the University of Louisiana houses the Louisiana Solar Energy Lab, complete with a new laboratory and classroom building. They offer both academic concentrations, like a minor in Renewable Energy and a Sustainable Energy Systems concentration, as well as certificate programs and non-credit workforce development programs through the university's Continuing Education department. Over 2,500 K-12 students, companies, and public officials have toured UL's solar facilities just in 2022.

The H₂Workforce program, led by the Louisiana Community and Technical College System, will have an equity focus, working with displaced energy workers, rural residents, minority and Indigenous Louisianans, re-entry, and underrepresented communities looking to transition into hydrogen and green energy careers. An additional program, H₂Testbeds, will support four university research areas: carbon capture at LSU, green hydrogen at UL, the Maritime Center at UNO, and the Institute for Engineering Technology at Nicholls State University. Finally, the New Energy Center of the US, called H₂NeXuS, project plans to be the physical and programmatic hub for the green hydrogen cluster. Located at UNO's Research and Technology Park, called "The Beach," NEXUS will offer an entrepreneurship accelerator focused on hydrogen, as well as connecting new energy specializations at the region's Historically Black Colleges and Universities (HBCUs).

Additionally, UNO's "The Beach" will host the Louisiana Wind Energy Hub, building on the strengths of UNO's leading naval architecture and marine engineering program. The hub will include startup incubation support and services, wind innovation programming, seed technology commercialization grants, a Wind Scholars program, and certificates for offshore wind through the university's Professional and Continuing Education division. LSU, with a \$27.5 million gift from Shell, is establishing the Institute for Energy Innovation, building on the petroleum engineering program and expanding to carbon capture and hydrogen technologies. These university specializations will help connect research to application as Louisiana's energy transition grows.

WHERE WE GO NEXT

Expanding the availability and awareness of training opportunities. The work done in 2022 to secure funding for programming, projects, and institutional capacity is a great start to the energy transition workforce. These investments not only create new jobs but also support increased demand for the energy transition technologies and new research opportunities for Louisiana academic institutions. Further benefits from job growth should be seen in quality of jobs and the communities uplifted by opportunities. Many programs of the IIJA require applicants to develop community benefits agreements that detail how disadvantaged communities will benefit from investment, how underrepresented communities will be engaged in the new workforce, and quantify metrics that will track this approach in implementation. Further, many incentives of the IRA require or provide a bonus credit for projects with apprenticeship requirements in construction and the first ten years of operation. Federal workforce requirements should incentivize states, industries, and stakeholders to similarly prioritize a workforce that provides high-quality jobs and includes previously underrepresented communities.

Collaboration and Partnership to Ensure Successful Implementation

WHY THIS IS IMPORTANT

Continued partnership across state and local governments, utilities, industry, nonprofits, academia, and communities is essential for strategic and coordinated implementation of the Climate Action Plan as well as for the landmark federal opportunities now available. Hundreds of billions of dollars of direct investment, tax credits for individuals and businesses, and technical assistance are available in IIJA and IRA programs. Through support from the Center for Planning Excellence, the Governor and the Commissioner of Administration hosted a two-day workshop in March of 2022 to share knowledge, collaborate on approaches with federal agencies, and align on priorities for Louisiana's implementation of the IIJA. This workshop engendered strong alignment across state agencies and with external partners on advancement of state priorities, particularly the Climate Action Plan.

This section of the Climate Action Plan contains six strategies which broadly outline the alignment and coordination necessary for meaningful progress towards emission reduction targets. The strategies focus on ensuring Louisiana is prepared to maximize federal funding, positioning Louisiana as a climate leader regionally, aligning action approaches across state government, coordinating with local governments, calling upon the private sector to play a leading role, and improving engagement with and tracking progress on outcomes for disadvantaged communities and Indigenous peoples.

FIRST YEAR PROGRESS

Louisiana is an active partner of the Biden Administration in jump-starting the energy transition. Many goals of the Climate Action Plan align with the goals of the Biden Administration, providing a unique opportunity for partnership between the State of Louisiana and the White House. State agency leaders heard from Shalanda Young, Director of the White House Office of Management and Budget, on how the state could use the infrastructure bill to accelerate a just, equitable energy transition. In early April, Chair Brenda Mallory, from the White House Council of Environmental Quality and Executive Director Christine Harada from Federal Permitting Improvement Steering Council visited the state to discuss ways to move key Louisiana projects forward and how to best support infrastructure initiatives outlined in the Climate Plan. During the visit, they toured key infrastructure projects, met with environmental justice and energy transition leaders, and engaged with the Governor and his Cabinet as well as New Orleans Mayor Latoya Cantrell. Also in April, Secretary of the Interior Deb Haaland visited the expansion of Bayou Sauvage Urban National Wildlife Refuge and highlighted the administration's ongoing efforts to conserve, protect, and restore the country's land and waters. And in May, Secretary of Energy Jennifer Granholm visited Louisiana for the first time and toured Bayou Choctaw Strategic Petroleum Reserve and met with state's leaders to discuss the administration's effort to shift to cleaner energy. Dr. Rick Spinrad, the National Oceanic and Atmospheric Administration (NOAA) Administrator, toured the shipbuilding facilities in Houma, Louisiana, where Louisiana workers are constructing research class vessels for the NOAA to explore the ocean and gather crucial climate and oceanic data.

Local communities are leading on climate action planning. Urban and rural communities are taking the lead to plan for climate action, providing an example for other municipalities in Louisiana. The City of Gonzales established a Climate Action Committee in 2021, recognizing the importance of mitigating greenhouse gas emissions on a local level. The Committee developed a community GHG inventory and a High Impact Action Analysis summary report, identifying sectors and developing strategies to reduce emissions. CPEX, in partnership with ICLEI, is currently engaging with the public and working with the Climate Action Committee to develop specific strategies and actions at the city government level that will help Gonzales contribute to the state's goal

of net zero emissions by 2050. Additionally, the City of New Orleans is releasing an update to its 2017 Climate Action Plan that further builds on their previous resilience work and reflects new priorities. The plan demonstrates climate action accomplished and in progress by the City in collaboration with residents, businesses, nonprofits, and advocacy groups. Further, the City adjusts their interim goal to reduce emissions by 50% by 2035 in alignment with the state's Climate Plan.

For Louisiana to be a climate leader, opportunity must be shared broadly across all parts of the state, including frontline communities that have been left out of previous environmental planning efforts. New educational and job opportunities are important but must be accessible. The intentional inclusion of minority and disadvantaged communities by the H₂theFuture project should be replicated across other implementation projects to ensure that the energy transition brings shared prosperity to the state's communities. Organizations like Taproot Earth, Gulf South for a Green New Deal, and the Alliance for Affordable Energy are working to educate and engage communities on climate action, including public education sessions, advocacy opportunities, and discussions of potential community benefits.

Governor's Office Outreach: Governor Edwards, his staff, and state agency leaders have spoken at the following events about climate action in 2022.

- Louisiana Association of Conservation Districts Conference
- Environmental and Health Council of Louisiana Conference
- The Gulf of Mexico Conference
- New Orleans River Fest
- The Louisiana Resilience Summit
- ResCon International
- Tulane Coastal Law Seminar
- Tulane Energy Law Conference
- Tulane Environmental Law Summit
- National Governors Association Energy Resilience Learning Lab
- The National Energy and Utility Affordability Conference
- The National Association of Regulated Utility Commissioners Annual Conference
- Young Energy Law Professionals Conference
- Gulf Coast Power Association Conference
- Industrial Innovation Initiative
- Carbon Capture Coalition
- Carbon Management Action Network Launch
- Global Clean Energy Action Forum
- Hydrogen Americas Summit
- United State Climate Alliance Semi-Annual Governors' Office Meetings

WHERE WE GO NEXT

Locking in longevity of climate action.

Durability of the Climate Action Plan depends on the breadth and strength of partnerships built beyond a single federal or state Administration. Though progress has been made to advance all strategies of this section, further action and commitment is needed to foster collaboration with a range of stakeholders and Louisiana communities. Of particular importance is stronger engagement with local governments and disadvantaged communities to ensure that federal resources are accessible and provide realized benefits. Often, well-resourced communities perpetuate a cycle of receiving greater resources, while underserved communities do not have the resources or capacity to compete for funds. Through the establishment of the Louisiana Infrastructure Technical Assistance Corporation (LITAC), the state seeks to break this cycle by supporting local governments in grant writing, technical assistance, and non-federal grant matches. The State Legislature provided \$20 million in funding to the Louisiana Municipal Association and the Louisiana Police Jury Association for formation of the LITAC in the 2022 Legislative Session. This corporation offers a unique opportunity to support locals and establish a model as to how the state can support its political subdivisions and communities.

Accountability and Adaptability to Ensure Lasting Success

WHY THIS IS IMPORTANT

Implementing climate action is an ongoing process that will not be fully realized in one year. Changes in political administrations, funding opportunities, technological breakthroughs, and macroeconomic conditions can all necessitate changes in planning and the actions deployed to meet demand of the transition. This section of the Climate Action Plan contains three strategies to ensure the long-term success of climate action. The first is to advance an equitable, efficient, and sustainable siting and permitting process for new energy and infrastructure projects. The second two strategies ensure that climate action is effectively and transparently implemented through tracking progress in emissions reductions and adapting the approaches taken as needed. With these strategies in place, the GHG Inventory and Climate Action Plan can be updated on a regular basis to ensure decisions are informed by the most updated action and science.

FIRST YEAR PROGRESS

Louisiana is committed to climate action. When Governor Edwards signed the executive order committing Louisiana to net zero by 2050 and establishing the Climate Initiatives Task Force, the executive order set an imperative for the Task Force to meet at least annually and submit an annual report to the Governor on the status of climate action implementation. Since approval of the Climate Action Plan in February, the Task Force has met quarterly to receive and share updates as well as to coordinate work throughout state government, the private sector, and communities. Quarterly meetings further advance the Task Force mission of transparency and continued public engagement, alongside biannual workshops hosted by the Governor's Office. Since February, a spring and a fall workshop have been held to educate, engage, and coordinate across the Task Force, Committee and Advisory Group members, and participants of the public in implementation of the Climate Action Plan as well as the IIJA and IRA.

Alongside regular and transparent engagement through the Task Force, Governor Edwards continues to promote and advance the climate action priorities of Louisiana. He participated in many panels and events during COP26 in Glasgow, Scotland, putting Louisiana on a world stage for climate action, and he has attended numerous events speaking about statewide climate efforts. The Governor and his staff are also active members of the United State Climate Alliance, an alliance of 24 Governors that provides policy guidance and resources for taking impactful climate actions to address greenhouse gas emissions.

Metrics will lead in tracking and accountability of climate action. Advisory Groups of the Task Force identified metrics as an effective mechanism to ensure accountability and transparency in implementation of climate action and fundamental objectives in the Climate Action Plan over time. With support from the Data Center of the Southeast, the Governor's Office is leading a multi-stakeholder effort to develop metrics that track how climate action implementation impacts equity over time. Building on the three equity fundamental objectives, this project seeks to hold the wide range of implementers accountable to unified and clear indicators that represent Louisiana-specific needs and opportunities to create greater equity. The first phase of this effort seeks to uncover and represent the select indicators of choice, and subsequent phases will seek to build a singular platform or process for assessing equity in implementation.

WHERE WE GO NEXT

Advancing state leadership through agency action. As noted in the Implementation Matrix of the Climate Action Plan, many climate actions depend on state agency leadership to advance implementation, whether through legislation, regulations, or guidance policies that close loopholes, establish new programs, or

reduce barriers to site and permit clean energy. Since March of 2022, the Governor’s Office has met regularly with implementing agencies to consider and evaluate how the state can most effectively implement actions in the plan. Near-term policy levers employed by the state can provide longevity of climate priorities across future state Administrations. Initial outputs from this interagency partnership are anticipated in the beginning of 2023.

Action Tracking

Due to a constantly changing political, economic, and technical landscape, particularly in climate mitigation, actions and plans may quickly become outdated as new funds, administrations, and technologies become available and as new policies are adopted. For example, much has changed since approval of the Climate Action Plan in February 2022, including extensive federal investment, increased incentives for clean energy deployment, lower prices in renewable energy, new corporate goals, and increased community engagement. Tracking progress of individual actions may not represent preparatory work being done to unlock future climate action and investment. For example, implementation of renewables deployment and industrial electrification rely on increased power infrastructure and grid modernization, which must be addressed meaningfully before at-scale renewables to reduce barriers.

Measuring progress in this environment must be flexible – looking at not just what was prescribed, but what related things have happened or are in progress. However, with all of this in mind, **actions in every section of the Climate Action Plan are in progress, by state, local, private, academic, and nonprofit partners.**

Clean Energy Transition	5 of 12 in progress 2 of 12 with preparatory work underway
Industrial Decarbonization	4 of 13 in progress 1 of 13 with preparatory work underway
Actively Managed Methane Emissions	3 of 7 in progress
Transportation, Development, and the Built Environment	12 of 23 in progress 2 of 23 with preparatory work underway
Natural and Working Lands and Wetlands	5 of 12 in progress 1 of 12 with preparatory work underway
An Inclusive, Low-Carbon Economy	1 of 8 in progress 2 of 8 with preparatory work underway
Collaboration and Partnership to Ensure Successful Implementation	6 of 6 in progress
Accountability and Adaptability to Ensure Lasting Success	1 of 9 in progress 1 of 9 with preparatory work underway

Conclusion

Text to be included in the final version

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