

Louisiana Climate Initiatives Interim Report

February 1, 2021



GOVERNOR'S
OFFICE OF
COASTAL
ACTIVITIES



Governor Edwards,

This summer, just a week and a day after you formally established the Climate Initiatives Task Force, the lives of every person in southwest Louisiana were turned upside down by the strongest hurricane to make landfall in our state in over 160 years. Through storm after storm, the 2020 Hurricane Season brought many other tests and hardships to our coastal communities well into the fall. While these events delayed the start of the Climate Initiative Task Force's work, they also served to remind us all of the importance of the task at hand. There are of course environmental and economic outcomes associated with confronting the challenge of climate change, but first and foremost there are human impacts which remain our primary motivation.

No one who experienced or witnessed the devastation of Hurricane Laura or even the floods of 2016 can deny the power of Mother Nature to destroy and disrupt everything we hold dear. While climate change cannot be solely blamed for each of the storms of 2020 or all of their attributes, it is more undeniable than ever that our state has much to lose if the global community cannot reduce greenhouse gas emissions to avoid the worst impacts of the climate crisis. It is long overdue for Louisiana to examine its own role in this problem and take actions that minimize the negative impacts we ourselves do and will continue to suffer. Yet, you have called us all to do much more than avoid the worst. The Task Force also gathers with a sense of opportunity—to find new ways for the state of Louisiana to grow and diversify economically; to provide our people with new opportunities to earn a family-supporting living; and to build resilience so that as we mitigate against the worst future impacts of climate change, we are also better prepared for the natural disasters of today.

The membership you have gathered as a part of this Task Force is uniquely qualified for this task. The twenty-three-member Task Force includes perspectives from state government, industry, environmental groups, nonprofit organizations, the state university system, a federal scientific agency, and the communities most impacted by climate change. This membership draws from different perspectives, geographies, and expertise, each contributing to the richness of our state in a vital way. Most importantly this Task Force is made up of a group of leaders that are up to the challenge you issued: to develop balanced climate solutions that can feasibly be implemented.

It is important to note that this group is supported by an additional 125 individuals serving emissions-based Sector Committees and Advisory Groups. Through this extensive team of subject matter experts, even more voices are being brought into the conversation about how to best move Louisiana forward thoughtfully and courageously as it confronts its severe vulnerability to climate change and its critical role in providing fuel, chemicals, and goods to the nation.

Over the course of the coming twelve months, the Task Force and its ten supporting groups will be reviewing best practices in emissions reduction from other states and tailoring them to fit the Louisiana context. They will be gathering ideas from the public, and they will be devising entirely new solutions that put Louisiana in command of its own future.



While this interim report does not yet offer solutions to the climate crisis, it does represent the beginnings of progress. In these pages you will see the lengths we have gone to in order to craft a process that is fair to the various stakeholder groups affected by this issue and inclusive of the many different points of view on how we address the problem of climate change. You will see not only that equity, science, finance and economics, and legal concerns are important values in crafting Louisiana's climate policy, but also how we are incorporating those priorities throughout the entire process. You will also hear from leaders in six sectors of the economy who will provide advice on sector-specific actions to reduce greenhouse gases while maintaining or enhancing our economic competitiveness. Finally, this report offers a road map for a very busy 2021 where public input, technical support, careful consideration, and strategic meetings will culminate in a recommended climate strategy for the state of Louisiana in one year from today.

This report is merely the beginning. We offer this structure, process, and timeline as the first steps in a commitment to you and to the people of Louisiana that we will confront the problems we face no matter how difficult they seem. We will use our common vulnerability and common desire for a safe, vibrant future for the next generation to guide us through the conflicts and tough decisions that inevitably arise. And we will drive toward a final strategy that offers a pathway to a transformed state that is more resilient, more prosperous, more equitable, and more sustainable.

Sincerely,

Chip Kline
Executive Assistant to the Governor for Coastal Activities



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Climate Initiatives Task Force Membership List

- **Chip Kline**, Executive Assistant to the Governor for Coastal Activities, Task Force Chair
 - Designee: **Harry Vorhoff**, Deputy Director, Governor's Office of Coastal Activities
- **Dr. Chuck Brown**, Secretary, Louisiana Department of Environmental Quality
 - Designee: **Lourdes Iturralde**, Assistant Secretary, Office of Environmental Compliance
- **Jay Dardenne**, Commissioner of Administration, Division of Administration
 - Designee: **Mark Moses**, Assistant Commissioner, Facility Planning & Control
- **Bren Haase**, Executive Director, Coastal Protection and Restoration Authority
- **Thomas Harris**, Secretary, Louisiana Department of Natural Resources
 - Designee: **Jason Lanclos**, Director, State Energy Office
- **Don Pierson**, Secretary, Louisiana Economic Development
 - Designee: **Brad Lambert**, Deputy Secretary, Louisiana Economic Development
- **Mike Strain**, Commissioner, Louisiana Department of Agriculture and Forestry
 - Designee: **Joey Breaux**, Assistant Commissioner, Office of Soil and Water Conservation
- **Dr. Shawn Wilson**, Secretary, Department of Transportation and Development
 - Designee: **Dr. Eric Kalivoda**, Deputy Secretary, Department of Transportation and Development
- **Timothy Hardy**, Breazeale, Sachse & Wilson, L.L.P., designee for Louisiana Senate President Page Cortez
- **Selby Bush**, BHP Petroleum, designee for the Louisiana Speaker of the House Clay Schexnayder
- **Bill Robertson**, designee of Public Service Commissioner Foster Campbell
- **Tyler Gray**, President and General Counsel, Louisiana Mid-Continent Oil and Gas Association
- **Gregory M. Bowser**, President and CEO, Louisiana Chemical Association
- **Jonathan Bourg**, Director of Resource Planning and Market Operations at Entergy, as a representative of an electric utility
- **Dr. Virginia Burkett**, Chief Scientist for Climate and Land Use Change at the United States Geological Survey, as a nonvoting representative of a federal scientific agency
- **Karen Gautreaux**, Director of Government Relations for Louisiana at the Nature Conservancy, as a member of the environmental nonprofit community



- **Flozell Daniels**, President and CEO of the Foundation for Louisiana, as a member with experience in community development and engagement
- **Dr. Terrence Chambers**, Director of the Energy Efficiency and Sustainable Energy Center at the University of Louisiana at Lafayette, as a member of Louisiana's academic community
- **Colette Pichon Battle**, Executive Director of the Gulf Coast Center for Law and Policy, as a member of the environmental and climate justice community
- **Chief Shirell Parfait-Dardar**, Tribal Chief of the Grand Caillou/Dulac Band of the Biloxi-Chitimacha-Choctaw, as a member of an indigenous tribe, nation, or community
- **Jeff Schwartz**, Director of Economic Development for the City of New Orleans, as a representative of local government perspective
- **Robert Verchick**, Gauthier-St. Martin Eminent Scholar and Chair in Environmental Law at Loyola University New Orleans, as a member with special qualifications and experience in climate change policy
- **Camille Manning-Broome**, President and CEO of the Center for Planning Excellence, as a member at-large



Introduction

Scientific understanding and lived experience have made mitigating greenhouse gas (GHG) emissions that are driving global climate change essential work. Through [Executive Order JBE 2020-18](#), Governor John Bel Edwards has called leaders from across government, industry, and civil society to come together to identify actions Louisiana can take to do its part in this worldwide problem. By articulating the problem being addressed and explaining the science-based decision-making framework guiding the Task Force and its supporting committees and advisory groups, this interim report will show the public how the State is going to go about crafting recommendations on one of the most important issues of the day.

From early November when the Climate Initiatives Task Force was first called to order until today, the Task Force, its committees and advisory groups, and planning team have been working to establish a common understanding of the problem context—the ways in which climate change is today and will in the future affect Louisiana's residents, economy, and natural environment. These groups have also discussed their charges—how their expertise and perspectives can produce effective, implementable climate actions for the state. And most importantly, the 120 plus leaders, bringing a wide range of perspectives and giving their time to this effort, have discussed and helped establish “fundamental objectives,” guideposts developed to help the state maximize the positive outcomes of addressing climate change while minimizing potential negative outcomes in an open and transparent manner. As such, this interim report does not contain first drafts of proposed climate actions for the state of Louisiana, but it does offer insights into the state's impetus for action and the many deeply held values brought to this process by stakeholders from across the state.

In 2021, these groups will begin the process of developing climate actions for inclusion in the final Climate Report. Through the iterative development of these actions, the state will consider and address important and complex characteristics of the climate problem. There is no single solution that will fix the world's climate problems overnight, and many damaging changes to the environment with harmful human consequences will be felt in Louisiana no matter how successful this Task Force is.

Choosing to act in the face of these difficult truths is still incredibly important. Inaction is a choice to pass even more harmful impacts down to the next generation; to make the task of adapting to life on the edge of the Gulf of Mexico even more difficult and costly. Inaction is also the surest way to miss opportunities. Opportunities to improve the lives of the people in our state. To create new economic opportunities in a way that is open and inclusive of everyone in Louisiana. It is a chance to improve health, to enhance the quality of life, and to ensure that this state remains one that our children and children's children want to and can invest in.

Adopting new policies or technologies will be more feasible at first for some industries than others. Transitioning to new ways of doing business will also be a process. Thankfully, Louisiana is not alone in facing these issues. Market forces are driving positive environmental outcomes, business leaders are adopting greenhouse gas emissions goals, other states are pioneering policies and actions that



can be tailored to the Louisiana context, and we have in our DNA the expertise and ingenuity of a state that has had to adapt and innovate in the face of immense challenges. The processes and fundamental objectives established by the Climate Initiatives Task Force and laid out in this report provide the framework for essential conversations to be held across segments of the economy and across party lines. In 2021, these conversations will become recommendations, and those recommendations will set Louisiana's pathway toward a bright future that is better for all of our people because it better sustains the environment that we all depend on.

Charge of the Task Force

BACKGROUND

The disasters of Hurricanes Katrina and Rita in 2005 set the state on a new course to better and more comprehensively understand and address the extreme risks faced by residents of coastal Louisiana from the land loss crisis. With the creation of the Coastal Protection and Restoration Authority Board (CPRA Board) in 2006 and publication of the first Comprehensive Coastal Master Plan for a Sustainable Coast (coastal master plan) in 2007, Louisiana took the lead nationally in adapting to environmental change. With its strong foundation in science, the coastal master plan incorporated information about a changing climate in its models in order to account for potential future scenarios that would affect hurricane intensity and frequency, possible rates of sea level rise, changes to precipitation, and other factors with the intent to develop more robust adaptation strategies and longer-lasting, higher impact restoration and protection projects.

For all the successes of the coastal master plan in guiding state investments along the coast in the intervening years, the plan was not designed or intended to address the greenhouse gas emissions that were fueling many of the environmental changes with which it was contending. The State of Louisiana needs a new, separate plan to meet the challenges of climate change mitigation, one that addresses greenhouse gas emissions head on and lays out the strategy for Louisiana to do its part to avoid the worst impacts of climate change for its people, its environment, and its economy.

Shortly after his inauguration in February of 2020, Governor Edwards held a press conference to announce his second term policy priorities for the coastal program. Flanked by nearly every member of his cabinet, Governor Edwards committed to forming a *Climate Initiatives Task Force* that would develop a set of recommendations to address the state's greenhouse gas emissions. This effort was formalized at the August 2020 CPRA Board meeting when he signed Executive Order JBE 2020-18.

EXECUTIVE ORDER

Referencing the value of Louisiana's coast and the projections for an additional 2,250 to 4,120 square miles of coastal land loss over the next fifty years, Executive Order JBE 2020-18 connects Louisiana's coastal crisis, the catastrophic human costs of natural disasters, and the international scientific consensus that greenhouse gas emissions are causing unprecedented global warming. "To improve



our resilience, sustain our coast, and help avoid the worst impacts of climate change,” the order states, “Louisiana must proactively work to reduce the greenhouse gas emissions that are driving up global temperatures, raising sea levels, and increasing risks that threaten our health and safety, quality of life, economic growth, and vital habitats and ecosystems.” Governor Edwards also clearly articulated his desire for solutions to this problem to be developed in partnership with multiple stakeholders with the ultimate goal of reaching a “balanced” set of strategies that would both help “limit the impacts of climate change that harm our state’s natural and cultural heritage,” and provide ways for us to adapt “to maintain [our] position as a world leader in energy, industry, agriculture, and transportation.”

The Executive Order established a twenty-three-member Task Force, supported by six sector committees and four advisory groups, and called for an updated greenhouse gas emissions inventory, an interim report in February of 2021, and a final climate strategy by February of 2022.

GREENHOUSE GAS EMISSIONS REDUCTION GOALS

Importantly, the Executive Order also established ambitious GHG reduction goals. According to the Executive Order, by 2025, Louisiana should reduce its net greenhouse gas emissions by 26-28% from 2005 levels. It should reduce its net GHG emissions by 50% from 2005 levels by 2030. And, it should aim to be a net zero GHG emitter by 2050. Through its recommendations, the Task Force will identify how Louisiana can reach these GHG emission goals.

These GHG emissions goals raise Louisiana’s efforts in line with commitments made by dozens of other states, the Paris Climate Accord, and businesses operating in multiple sectors internationally, nationally, and within Louisiana. These businesses are from multiple industrial sectors including energy producers, public utilities, chemical manufacturers, technology firms, and finance. More importantly, by setting these goals, Gov. Edwards’ Executive Order focused the work of the Task Force on solutions to meet these goals rather than the goals themselves.

MISSION, VISION, AND VALUES

Governor Edwards’ Executive Order also clearly established a vision for Louisiana: that our state “can and will reduce greenhouse gas emissions to limit the impacts of climate change that harm the state’s natural and cultural heritage while adapting to maintain its position as a world leader in energy, industry, agriculture, and transportation.”

The realization of that vision is the central mission of the Climate Initiatives Task Force. It will investigate and offer recommended actions for the reduction of GHG emissions in Louisiana to achieve the stated GHG emissions reduction goals in order to improve the health and welfare of the people of Louisiana and advance Louisiana’s economic and energy profile. Notably, the Climate Initiatives Task Force exists alongside and builds upon other state efforts such as the Louisiana Watershed Initiative, the Coastal Master Plan, the Adaptive Governance Initiative, and the Resilient Louisiana Commission. Actions to reduce GHG emissions that also build resilience and enhance our ability to adapt to climate change are welcomed and will be particularly important for Louisiana to consider for adoption, but the



Task Force will not hold as one of its central objectives the development of projects or programs to help Louisiana adapt to climate change such as home elevations or specific restoration projects. Rather, the Task Force will seek to amplify and compliment the efforts occurring elsewhere in state government to produce better outcomes for the people.

Recognizing the human, financial, and environmental vulnerabilities of Louisiana to the impacts of climate change as well as the carbon intensity of today's economy, the approach of the Climate Initiatives Task Force allows for the careful balancing of the interests and needs of different stakeholders. This approach is supported by the composition, process, and stated values called for by the Governor in the Executive Order and carried out by the Governor's Office staff and the planning team working for the Task Force.

Utilizing knowledge gained through the coastal master planning process, the Climate Initiatives Task Force decision making process will be founded in scientific accuracy and inclusion of multiple stakeholders and the public in the action development process. Over the course of the first two meetings of the Task Force and the first meeting of the sector committees and advisory groups additional values were also articulated. These values include respect, integrity, transparency, the desire for consensus, and a focus on opportunity rather than loss.

DELIVERABLE TIMELINE

The deliverables outlined in Figure 1 below, with their accompanying timeline, ensure the Task Force is able to present comprehensive and effective strategies for statewide GHG emissions reductions to the Governor by February 1, 2022.

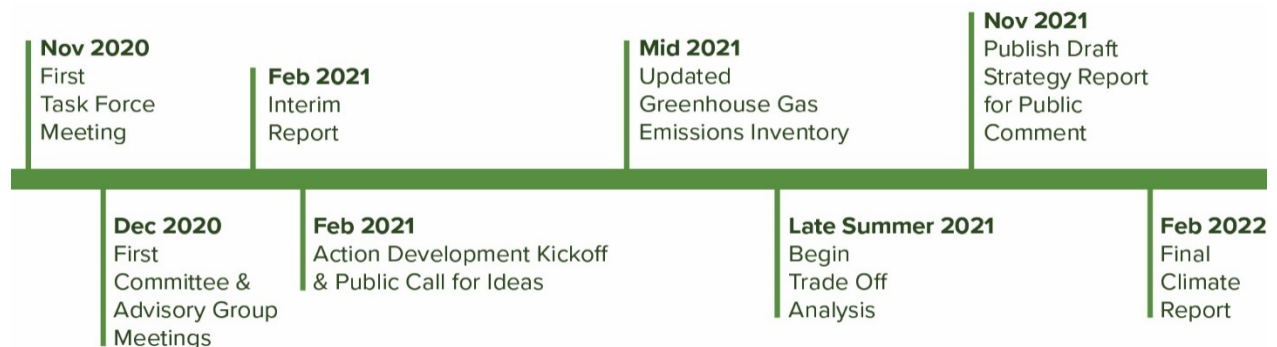


Figure 1 Climate Initiatives Task Force Deliverable Timeline

2020 LOUISIANA EMISSIONS INVENTORY UPDATE

In order to focus and ground the work of the Task Force in the most up-to-date and accurate data regarding Louisiana's sources and sinks for GHGs, the State is updating its statewide GHG emissions inventory. Conducted by LSU's Center for Energy Studies and steered by the Task Force's Science Advisory Group, the 2020 study will rely heavily on the EPA State Inventory Tool as it did in prior



inventories, but additional options are being considered for supplementary ways to enhance the inventory. For example, the sequestration of carbon dioxide by wetland ecosystems was not explicitly captured by earlier inventories, but the Science Advisory Group will ensure coordination with CPRA's effort to quantify the potential of these ecosystems to capture and store carbon dioxide. Options also exist to further break out GHG emissions by industrial sub-sector, which would allow the Task Force to examine the state's largest source of emissions in more detail.

Funding for the Task Force's update to Louisiana's Greenhouse Gas Emissions and Sinks has been made possible through a collaborative effort by Louisiana Economic Development, the Department of Natural Resources, the Department of Environmental Quality, and the Coastal Protection and Restoration Authority. Additional support for updated data on Louisiana's power generation sector was provided by The Nature Conservancy of Louisiana.

As the 2020 Louisiana Greenhouse Gas Inventory is prepared, the Task Force and the Science Advisory Group will take an active role in providing guidance and input on the report. A first, preliminary draft and report is expected three to four months from the start date and a final report and briefing for the Task Force after six months.

A keen understanding of the impacts of climate change affecting Louisiana, the state's role in contributing to greenhouse gas emissions, and the opportunities in taking action make up the problem context for the Climate Initiatives Task Force. The following section will outline the planning process that will be used to navigate and select actions within that context.

Planning Process

Governor Edwards called on the Climate Initiatives Task Force to produce a Final Climate Report that outlines actions to reduce net GHG emissions for all sectors of the economy and to set Louisiana on a path to meet its short-, medium-, and long-term emission reduction targets. Actions and strategies will aim to reduce GHG emissions while achieving other co-benefits for Louisiana's communities, environment, and economy. Achieving this vision and the state's emission reduction goals in a manner that is inclusive and balanced requires a deliberate and transparent planning process.

The Task Force, its Sector Committees, and Advisory Groups comprise over 135 experts from state government, colleges and universities, the private sector, and civil society that will advise and contribute to the development of the Final Climate Report (see Figure 2).

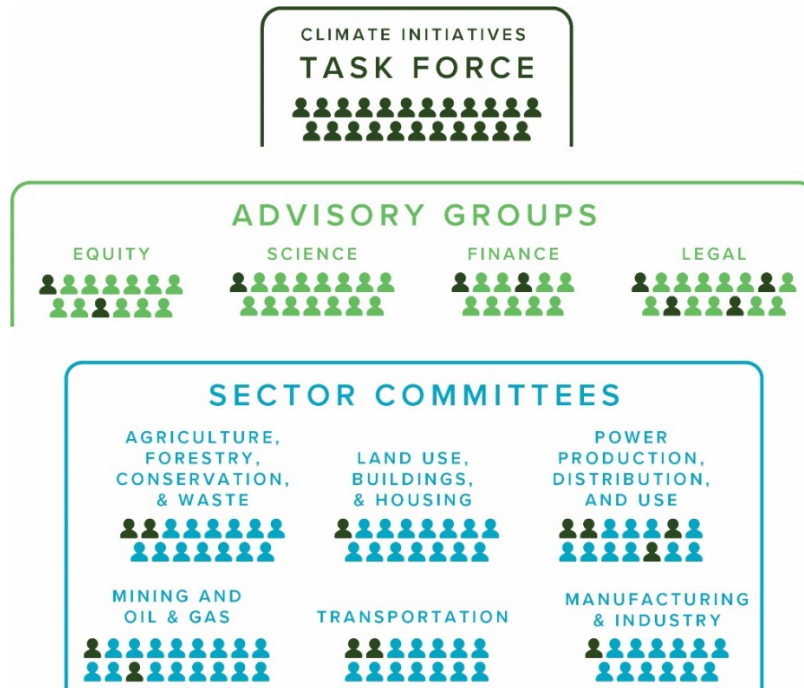


Figure 2 Climate Initiatives Organizational Structure

The Climate Initiatives Task Force is the decision-making body tasked with submitting an Interim and Final Climate Report to Governor Edwards in accordance with the executive order. This twenty-three-member body will set priorities for the overall planning process, weigh trade-offs among approaches, and ultimately decide which strategies are included in the Final Climate Report offered to the Governor.

Four **Advisory Groups** support the Task Force by offering expertise in four areas identified as fundamental tenets of this effort. Advisory Groups will evaluate comprehensive strategies through their respective lenses and work with Sector Committees to refine actions.

Six **Sector Committees** support the Task Force by offering expertise in specific sectors. Committees are charged with developing and evaluating actions and comprehensive strategies to reach short-, medium-, and long-term GHG emission reduction targets.

The Climate Initiatives Task Force is chaired and staffed by the Governor's Office of Coastal Activities (GOCA). Under leadership of the Executive Assistant to the Governor for Coastal Activities, GOCA serves as the staff and managers of the Task Force, Advisory Groups, and Sector Committees in coordination with advisory and committee chairs. As staff of this effort, GOCA also works alongside all members, state agencies, outside stakeholders, and the public to build investment in the process, expand partnerships, and coordinate among all entities. As Louisiana's Innovation and Collaboration Hub, the Water Institute of the Gulf (TWI), is assisting GOCA as it leads the planning process for and development of the Final Climate Report. This Planning Team, comprised of GOCA and TWI, will ensure the Task Force remains on track to meet deliverables within their respective timelines.



STRUCTURED DECISION MAKING

The planning process for developing the Final Climate Report will be grounded in a Structured Decision Making (SDM) approach. In basic terms, SDM is “a formalization of common sense for decision problems which are too complex for informal use of common sense.”¹ SDM is an approach that integrates science and policy to break down complex decisions and identify solutions that achieve the desired ends (referred to as “fundamental objectives” in SDM) in a manner that is explicit and transparent. SDM is not a prescriptive approach to problem solving, but rather it encompasses broad methods that rely on clearly articulating fundamental objectives and analyzing potential impacts to those objectives using data-driven analysis. See Figure 5 for the six steps of the iterative SDM process. The charges to the Sector Committees and Advisory Groups will support the SDM process and will help the Task Force make informed, data-driven decisions on which strategies to pursue to best meet the emission reduction goals and other desired outcomes for Louisiana.

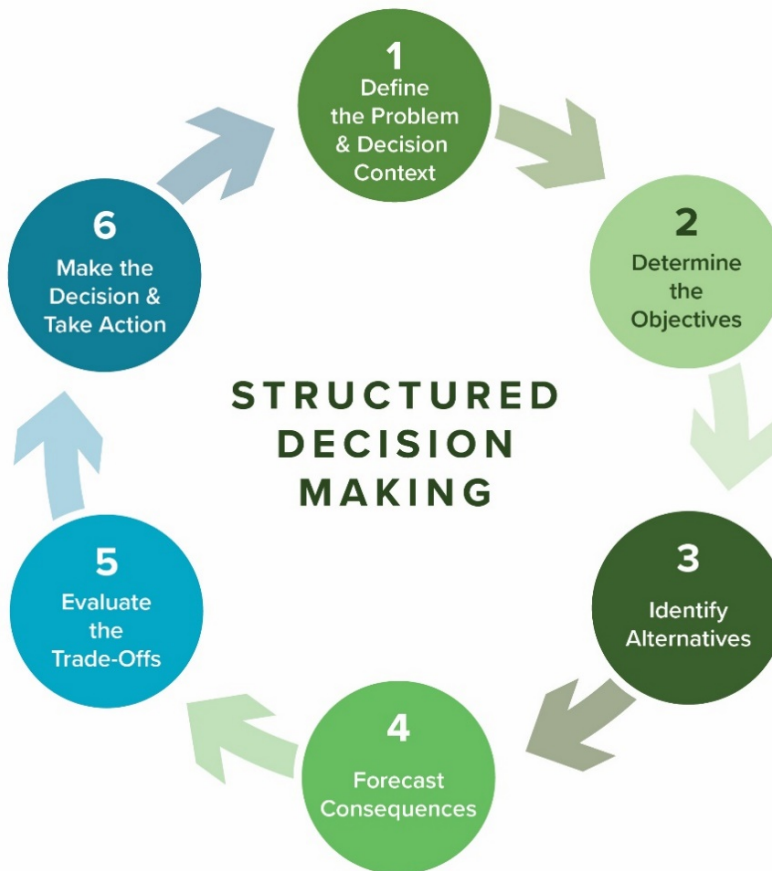


Figure 3 The Six-Step SDM Process

¹ Ralph L. Keeney. (1982.) Decision analysis: An overview. Operations Research 30(5): 803-838. Keeney RL. 2004. Making better decision makers. Decision Analysis 1:193-204.



The following iterative six-step SDM process provides the framework for the development of the Final Climate Report.

- 1. Defining the Problem and Decision Context:** A critical first step is ensuring all parties share a common understanding of the problem that has initiated the process, as outlined in the Executive Order. This Interim Report synthesizes the science on current and future risk to Louisiana posed by climate change that makes the case for reducing GHG emissions. An update to the state's GHG emissions inventory will be delivered in mid-2021 and provide an evidence basis for understanding the state's primary GHG emission sources and sinks.
- 2. Determining the Objectives:** The Task Force has established a set of fundamental objectives that are essential goals of this effort and will guide the development and evaluation of actions and strategies. Fundamental objectives include reduction of net GHG emissions as well as economic and societal goals considered important in how co-benefits and consequences are evaluated. In addition, the Task Force and its committees have begun to identify means objectives, or ways to achieve the fundamental objectives. These means objectives support the identification of potential actions and strategies in step 3.
- 3. Identifying Alternatives:** Proposed Actions (specific policies, programs, or projects) will be developed collaboratively by the Task Force, committees, advisory groups, and GOCA using a common template. A public call for ideas will further inform action development. Action proposals will take into consideration their impact to net GHG emissions and other fundamental objectives, feasibility concerns, implementation pathways, and climate equity considerations. Actions will be combined and organized into higher level strategies. Concurrently, GOCA will begin identifying and modeling alternative emission pathways for comprehensively meeting the net emission reduction targets.
- 4. Forecasting Consequences:** The Advisory Groups and GOCA will evaluate the impact of actions, strategies, and alternative emission pathways on the fundamental objectives and collectively achieving the GHG emission reduction targets.
- 5. Evaluating the Trade-offs:** This analysis will compare portfolios of strategies and actions based on their expected contribution to advancing the fundamental objectives of the Task Force, including reducing net GHG emissions to meet the state goals; maximizing the social, environmental, and economic co-benefits; and minimizing unintended consequences. This trade-off analysis will be presented to the Climate Task Force to inform their decisions about what strategies to pursue, using clear and transparent information.
- 6. Making the Decision and Taking Action:** The Task Force will review the trade-off analysis, make decisions about which strategies within portfolios are to be pursued, and instruct the planning team on the contents of the Draft Final Report by the end of 2021. After incorporation of public comment, the Task Force will finalize the Final Climate Report by February of 2022, in accordance with the task set forth by the Governor.

Additional detail on the timeline, tasks, roles, and meetings associated with this planning process can be found at the end of this document.



Committee and Advisory Group Reports

The seriousness and complexity of formulating actions to accomplish essential climate change emission reduction goals necessitates the inclusion of many voices from many different backgrounds. The structure of the Climate Initiatives Task Force, with its reliance on subject matter experts within Sector Committees and Advisory Groups, is a reflection of Governor Edwards' commitment to meeting that challenge.

Together these groups consist of over 120 members with vast experience in their respective fields who have volunteered to provide guidance to the state as it outlines which strategies will most effectively reduce Louisiana's greenhouse gas emissions.

The benefits of this approach are twofold. First, more effective actions can be developed when informed by subject matter experts. Sector Committees and Advisory Groups each have opportunities to propose actions and refine comprehensive strategies in an iterative process before they are submitted to the Task Force for adoption. The second benefit relates to implementation. By shaping decision making in a transparent, responsive manner that incorporates stakeholder and public input, there can be greater confidence in the ability for effective strategies to have the support needed to be adopted and implemented.

The Sector Committees and Advisory Groups held their first meetings in December. At those meetings, they discussed their charges and brainstormed fundamental objectives for the Task Force to consider. The Sector Committees and Advisory Groups provided status reports on the development of their charges at the December 21, 2020, Task Force meeting. Below are the draft charges reported at the December Task Force meeting, which are still in development.

ADVISORY GROUPS

The four advisory groups are charged with providing technical expertise to the Task Force and committees throughout the process and upon request regarding questions that transcend individual committee scopes. While each of the four advisory areas are reflected in the membership of the Task Force and Sector Committees, specific opportunities to evaluate and improve actions and strategies are necessary to ensure the planning process accounts for equitable impacts, sound science, financial feasibility and economic implications, and legal considerations in each step. Over the course of their first meetings, Advisory Group members reviewed and discussed their draft charges.

EQUITY ADVISORY GROUP

To address disparate impacts of climate change on vulnerable and marginalized populations and to use climate policy as a way to address past injustices and build a stronger future with more equitable outcomes for all Louisianans, the Equity Advisory Group discussed the following draft charge:



- *Define climate equity in the context of Louisiana, climate change, and GHG emissions reduction;*
- *Anticipate opportunities to increase equity and to reduce inequities in the design and implementation of GHG reduction strategies;*
- *Advise committees and the Task Force by identifying how proposed strategies to reduce emissions may mitigate or exacerbate historic or systemic inequities; and*
- *Assist committees in the development and structure of strategies and mechanisms that ensure equitable measures offer new opportunities for marginalized communities and increase equity in our society.*

EQUITY ADVISORY GROUP MEMBERSHIP

- **Colette Pichon Battle**, Gulf Coast Center for Law & Policy (Chair)
- **Charles Allen**, National Audubon Society
- **Jasmine Brown**, Greater New Orleans, Inc.
- **Steve Cochran**, Environmental Defense Fund
- **Dr. Kenny Cole**, Oschner
- **Dr. Craig Colten**, Louisiana State University
- **Chief Shirell Parfait-Dardar**, Grand Caillou/Dulac Band of the Biloxi-Chitimacha-Choctaw
- **Ashleigh Gardere**, Policy Link
- **Jessica Kemp**, Center for Planning Excellence
- **Dr. David Robinson Morris**, Xavier University
- **Liz Williams Russell**, Foundation for Louisiana
- **Larry Sorapuru Jr.**, St. John the Baptist

FINANCE ADVISORY GROUP

To understand and address economic disruptions, opportunities, and implications as well as potential economic tradeoffs of greenhouse gas mitigation actions, the Finance Advisory Group discussed the following components for their draft charge:

- *Evaluate the economic impacts of proposed policy changes, including the potential for growth or development of new economic opportunities related to the adoption of certain policies or technologies;*
- *Consider broader economic and market forces that may be pertinent to policy discussions;*
- *Evaluate options for mitigating or overcoming potential negative economic consequences and/or maximizing the positive economic consequences of implementing certain proposed policies;*
- *Consider workforce implications and opportunities associated with proposed policy directions (including K-12 and higher education considering the long-term nature of this issue);*
- *Offer proactive and overarching financial and economic impact guidance;*
- *Contemplate the cost of not taking action on climate change;*



- *Consider the distribution of costs and benefits of policies for equity purposes (race, class, age, and other) but also geographically across the state and across industries; and*
- *Evaluate opportunities within the financial system to implement proposed solutions.*

FINANCE ADVISORY GROUP MEMBERSHIP

- **Brad Lambert**, Louisiana Economic Development (Chair)
- **Dr. Stephen Barnes**, University of Louisiana Lafayette
- **Camille Conaway**, Louisiana Community and Technical College System
- **Pierre Conner**, Tulane Energy Center
- **Stephanie Ferry**, Raymond James Financial
- **Alejandra Guzman**, New Orleans Business Alliance
- **Michael Jackson**, Bernhard Capital
- **Vic Lafont**, South Louisiana Economic Council
- **Brandon Nelson**, Whitney Bank
- **Dr. Jim Richardson**, Louisiana State University
- **Jeff Schwartz**, City of New Orleans

LEGAL ADVISORY GROUP

Emission reduction actions and strategies may require or be impeded by changes to law or regulation, which necessitates the Legal Advisory Group to address the following components in their draft charge:

- *Anticipate legal hurdles that may arise in the design, implementation, and effect of GHG emission reduction strategies;*
- *Assist committees in the development and modification of most effective mechanisms to implement just and equitable emission reduction strategies; and*
- *Advise committees and the Task Force on supplementary strategies and mechanisms for consideration.*

LEGAL ADVISORY GROUP MEMBERSHIP

- **Rob Verchick**, Loyola Law School (Chair)
- **Harry Vorhoff**, Governor's Office of Coastal Activities
- **Faye Matthews**, National Wildlife Federation
- **Timothy Hardy**, Breazeale, Sachse, & Wilson, LLP
- **Mark Davis**, Tulane Law School
- **Blake Canfield**, Louisiana Department of Natural Resources
- **Courtney Burdette**, Louisiana Department of Environmental Quality
- **Tokesha Collins-Wright**, Louisiana Chemical Association
- **Susan Margaret Floyd**, Entergy
- **Tyler Gray**, Louisiana Mid-Continent Oil & Gas Association
- **Monique Hardin**, Deep South Center for Environmental Justice



- **Karen Sokel**, Loyola Law School
- **Nick Bryner**, Louisiana State University
- **Brandon Frey**, Public Service Commission
- **Erin Spears**, New Orleans City Council

SCIENCE ADVISORY GROUP

The need to base the state's actions on a strong foundation of science is one of the most basic premises of Governor Edwards' approach to the issue of climate change, which led the Science Advisory Group to consider the comprehensive charge offered below:

With regard to the development and review of emissions reduction strategies:

- Provide scientific guidance to GOCA, Sector Committees, and the Task Force in developing strategies that will collectively support the GHG emission targets established in the Executive Order;
- Provide guidance on minimum/medium/maximum technical expectations of GHG emission reduction strategies. At a minimum, guidelines will identify common approaches for communicating uncertainties, units to be utilized, scientific justification, and glossary of terms;
- Advise Task Force and GOCA on core components of net GHG emission reduction strategies for consistency and to ensure that strategies are cumulative across sectors, including all major sources and sinks. Address advantages and hazards associated with emission reduction strategies (and risks and costs of not doing anything), emission reduction capabilities, and co-benefits;
- Coordinate and interact with experts from the Sector Committees to develop GHG emission reduction strategies and offsets that collectively achieve the net GHG emission reduction goals;
- Review proposed strategies developed by the Sector Committees and Task Force for scientific and technical merit based on set minimum technical guidance and core components; and
- Assist Sector Committees in identification of databases and literature related to potential solutions that have a high amount of uncertainty.

With regard to the development of reports and the GHG inventory update:

- Provide scientific guidance on the technical foundation used in the development of the interim and final Task Force reports; and
- Review and provide comments on the methods and science behind the update to the Louisiana GHG emissions inventory.

SCIENCE ADVISORY GROUP MEMBERSHIP

- **Dr. Virginia Burkett**, United States Geological Survey (Co-chair) (Non-Voting Member)
- **Dr. Mark Zappi**, University of Louisiana at Lafayette (Co-chair)
- **Eric Smith**, Tulane University
- **Dr. Carrie Castille**, United States Department of Agriculture
- **Dr. Monica Farris**, University of New Orleans



- **Dr. Kalliat Valsaraj**, Louisiana State University
- **Dr. Jean Fotie**, Southeastern Louisiana University
- **Dr. Raj Boopathy**, Nicholls State University
- **Dr. Camille Stagg**, United States Geological Survey
- **Dr. Alex Kolker**, Louisiana Universities Marine Consortium
- **Dr. Peng “Solomon” Yin**, University of Louisiana Lafayette
- **Dr. Kimberly Foster**, Tulane University
- **Dr. Mehdi Zeidouni**, Louisiana State University
- **Dr. Chang Jeong**, Louisiana State University
- **Dr. Richard Keim**, Louisiana State University

SECTOR COMMITTEES

Greenhouse gas emission sources and sinks are present in all aspects of the Louisiana economy. To acknowledge the progress already being made and discuss the specific opportunities to reduce emissions from a broad range of operations and activities in each sector, the Task Force established six emission sector-based committees. Committees are charged with developing and evaluating implementable emission reduction actions and comprehensive strategies that significantly reduce net greenhouse gas emissions across all aspects of the sector. Committees are reflective of the Governor’s vision to achieve balance through their broad-based composition with representatives from corporate entities, advocacy organizations, regulators, academics, and community representatives. Bringing together a variety of stakeholders with seemingly separate interests and opposing values allows for robust and challenging discussions that ensure the end result of comprehensive strategies that set Louisiana on a path to reach short-, medium-, and long-term greenhouse gas emission reduction goals. The following sections denote membership in each group and explore the need for and draft charge of each group.

AGRICULTURE, FORESTRY, CONSERVATION, AND WASTE

At the December Task Force meeting, the Agriculture, Forestry, Conservation, and Waste Committee reported the following draft charge:

- *Examine opportunities to reduce GHG emissions and increase carbon storage capacity through agriculture and forestry practices, conservation measures that promote natural carbon sinks, blue carbon opportunities, and waste management.*

AGRICULTURE, FORESTRY, CONSERVATION, AND WASTE MEMBERSHIP

- **Joey Breaux**, Louisiana Department of Agriculture and Forestry (Co-chair)
- **Karen Gautreaux**, The Nature Conservancy (Co-chair)
- **Naveen Adusumilli**, LSU AgCenter
- **Kyla Cheynet**, Drax
- **David Daigle**, Farmer, Cattleman, and Forester



- **Ernest Girouard**, State Soil and Waste Conservation District Commission
- **Gregory Grandy**, Coastal Protection and Restoration Authority
- **Ron Harrell**, Louisiana Farm Bureau Federation
- **Fran Harvey**, Global Geospatial Institute
- **Justin Kozak**, Center for Planning Excellence
- **Michael Lindsey**, USDA Natural Resources Conservation Service (Non-voting member)
- **John Pitre**, USDA Natural Resources Conservation Service (Non-voting member)
- **Yolunda Righteous**, Louisiana Department of Environmental Quality
- **Robby Toombs**, Resource Management Service LLC
- **Buck Vandersteen**, Louisiana Forestry Association

LAND USE, BUILDINGS, AND HOUSING SECTOR COMMITTEE

At the December Task Force meeting, the Land Use, Buildings, and Housing Committee reported the following draft charge:

- *Determine what changes to land use patterns and building regulations are needed to reduce GHG emissions and mitigate future risks from climate change impacts;*
- *Identify opportunities for state agencies to guide land use towards smarter growth patterns that not only reduce emissions but also provide multiple community benefits in the areas of transportation, housing, risk reduction, adaptation, public health and economic development;*
- *In the absence of state authority over land use, leverage other areas of state influence and authority to advance land use goals;*
- *Ensure that policies guiding building codes, land use and housing reduce GHG emissions in a manner that is equitable and considers the physical and mental health of all residents;*
- *Determine changes necessary to improve building codes, construction and remodeling practices, and materials to increase energy efficiency and reduce GHG emissions;*
- *Identify opportunities to help make those that have been bearing the brunt of climate change impacts whole again. Ensure that communities and groups that have been disproportionately affected are not left out of the solutions or benefits proposed by this committee;*
- *Identify opportunities to coordinate policy development and solutions across government, nonprofit, and private sectors (transportation, power production, housing, public health, economic development, and others);*
- *Identify policies to incentivize the implementation of green infrastructure and greenspaces as a means of meeting carbon goals and achieving multiple benefits such as reducing heat island effects, improving drainage and water quality, improving public health, neighborhood aesthetics, property values, and others; and*
- *Identify strategies and tools to promote development of climate-resilient housing and sustain community cohesion, culture and viability in the face of increasing climate risk.*



LAND USE, BUILDINGS, AND HOUSING MEMBERSHIP

- **Gina Campo**, Office of Community Development (Co-chair)
- **Camille Manning-Broome**, Center for Planning Excellence (Co-chair)
- **Dr. Fallon Aidoo**, University of New Orleans
- **Camille Pollan**, U.S. Green Buildings Council
- **Dr. Kevin Conrad**, Ochsner
- **Archie Hall**, Siemens Smart Infrastructure
- **Mark Goodson**, CSRS
- **Arthur Johnson**, Lower 9th Ward Center for Sustainable Engagement and Development
- **Kim Marousek**, Capital Region Planning Commission
- **Andreanecia Morris**, Greater New Orleans Housing Alliance
- **Dr. Zhu Ning**, Southern University
- **Louissette Scott**, City of Mandeville
- **Z Smith**, Eskew, Dumez, Ripple
- **Chris Tyson**, Build Baton Rouge
- **Jason Hewitt**, Sustainability Partners

MANUFACTURING AND INDUSTRY SECTOR COMMITTEE

At the December Task Force meeting, the Manufacturing and Industry Committee reported the following draft charge:

- *Examine opportunities to reduce GHG emissions within the manufacturing and industrial sectors, including chemical manufacturing, petrochemical manufacturing, petroleum refining, liquefied natural gas, and other operations within the state; and*
- *This committee will consider opportunities to deploy cleaner sources of energy to fuel operations, enhance efficiencies, reduce unintentional releases, capture and sequester or reuse emissions, offset emissions, and other measures that reduce net emissions from combustion and non-combustion manufacturing and industrial activities in Louisiana.*

MANUFACTURING AND INDUSTRY MEMBERSHIP

- **Jason Meyers**, Department of Environmental Quality (Co-chair)
- **Timothy Hardy**, Breazeale, Sachse, & Wilson, LLP (Co-chair)
- **Tokesha Collins-Wright**, Louisiana Chemical Association
- **Morris Johnson**, CF Industries
- **Gray Stream**, Gulf Coast Sequestration
- **Margo Moss**, L&M Environmental
- **Rhoman Hardy**, Shell
- **Daniel Shantz**, Tulane Engineering
- **Nathan McBride**, Louisiana Mid-Continental Oil and Gas Association
- **Zen Saunders**, Dow Chemical



- **Hunter Johnson**, Lake Charles Methanol
- **Marylee Orr**, Louisiana Environmental Action Network
- **Scott Anderson**, Environmental Defense Fund

MINING, OIL, AND GAS SECTOR COMMITTEE

At the December Task Force meeting, the Mining, Oil, and Gas Committee reported the following draft charge:

- *Examine opportunities to reduce greenhouse gas emissions throughout the mining, extraction, production, and transportation of oil and gas. This committee will consider carbon capture and sequestration, opportunities to enhance efficiencies and eliminate fugitive emissions, and other measures related to active and inactive elements of this sector.*

MINING, OIL, AND GAS MEMBERSHIP

- **Jason Lanclos**, Louisiana Department of Natural Resources (Co-chair)
- **Brent Campbell**, Louisiana Department of Natural Resource Office of Conservation (Co-chair)
- **Lori LeBlanc**, Louisiana Mid-Continental Oil and Gas Association
- **Bryan Johnston**, Louisiana Department of Environmental Quality
- **William Daniel**, Gulf Coast Testing
- **Selby Bush**, BHP
- **Kristi Trail**, Pontchartrain Conservancy
- **Dr. Richard Hughes**, Louisiana State University
- **Al Collins**, Occidental Petroleum
- **Donelson Caffrey**, Landowners Association
- **Adam Peltz**, Environmental Defense Fund
- **Tom Broom**, Danos
- **Mark Gebbia**, Williams
- **Glen Lyons**, ExxonMobil
- **John Sparling**, Aethon Energy
- **Wynn Radford**, British Petroleum
- **Andy Jacoby**, Attorney
- **Stacy Methvin**, Pioneer

POWER PRODUCTION, DISTRIBUTION, AND USE

At the December Task Force meeting, the Power Production, Distribution, and Use Committee reported the following draft charge:

- *Capture and evaluate how the already announced proposals and plans to reduce emissions by Louisiana's utilities will bring us closer to the statewide climate goals;*



- *Explore ways to create additional greenhouse gas emissions reductions that can produce results in the near-term and pave the way for improvements in other sectors;*
- *Encourage the growth of renewable energy adoption by Louisiana's utilities and end-use consumers;*
- *Promote energy efficiency to reduce energy waste across all sectors, including buildings and industry.*
- *Investigate opportunities to increase efficiency and reduce emissions at existing power generation facilities and through the development of more efficient generation, including cogeneration;*
- *Consider how increasing market demands for renewable energy and the electrification of more aspects of the economy will need to be accounted for;*
- *Explore utilization of, and limitations to, transmission networks necessary to broaden access to renewable energy to Louisiana users and potentially facilitate the export of renewable energy produced in Louisiana to out-of-state customers;*
- *Consider how changes to energy use, demand, load distribution, and greater reliance on renewables will impact utility operation or plans;*
- *Consider how reliability, affordability and price competitiveness of energy can be maintained and improved for customers today and in the future including long-term resilience to natural disasters; and*
- *Explore additional opportunities for carbon capture and sequestration to reduce emissions, whether by technological or natural applications.*

POWER PRODUCTION, DISTRIBUTION, AND USE MEMBERSHIP

- **Jonathan Bourg**, Entergy (co-chair)
- **Bill Robertson**, Public Service Commission (co-chair)
- **Jeff Arnold**, Association of Louisiana Electric Cooperatives
- **Logan Atkinson-Burke**, Alliance for Affordable Energy
- **Brian Bond**, SWEPCO
- **Ethan Case**, Heelstone Energy
- **Dr. Terrence Chambers**, University of Louisiana Lafayette
- **David Guerry**, Midcontinent Independent System Operator
- **Robbie Laborde**, CLECO
- **Katherine King**, Kean Miller
- **Simon Mahan**, Southern Renewable Energy Association
- **Kim Talus**, Tulane Energy Law
- **Rob Verchick**, Loyola University
- **Matt White**, Drax



TRANSPORTATION SECTOR COMMITTEE

At the December Task Force meeting, the Transportation Committee reported the following draft charge:

- *Examine opportunities to lower greenhouse gas emissions from highway and non-highway mobile emission sources. Opportunities to promote alternative and renewable fuels, idle-reduction measures, fuel economy improvements, new transportation technology, and cleaner modes of transportation will all be considered.*

TRANSPORTATION MEMBERSHIP

- **Flozell Daniels**, Foundation for Louisiana (Co-chair)
- **Dr. Eric Kalivoda**, Department of Transportation and Development (Co-chair)
- **Vivian Johnson**, Louisiana Department of Environmental Quality
- **Dr. Bethany Stich**, UNO Transportation Institute
- **Dr. Vijaya Gopu**, Louisiana Transportation Research Center
- **Chett Chiasson**, Port Fourchon
- **Scott Gammel**, Alexandria International Airport
- **Wyly Gifloil**, Lake Providence Port Commission
- **Kent Rogers**, Northwest Louisiana Council of Governments
- **Dinero Washington**, SPORTRAN Transit
- **Jessica Kemp**, Center for Planning Excellence
- **Ann Vail**, LA Clean Fuels
- **Joe Annotti**, Gladstein, Neandross & Associates
- **Alex Posorske**, Ride New Orleans

Work Plan and Meeting Schedule

On the following pages, please find a detailed work plan with identified roles and responsibilities and a full meeting schedule for the Climate Initiatives Task Force, Sector Committees, and Advisory Groups.