RESILIENT NEW ORLEANS
FINANCE PLAN

FINANCE NEW ORLEANS

CONTENTS

1. FOREWORD...01

2. PURPOSE...03

3. CLIMATE CHANGE CONTEXT................06

4. GREEN FINANCE FRAMEWORK............12

5. CASE STUDIES..24

6. APPENDIX A: NEW ORLEANS GREEN BOND FRAMEWORK..................................28

7. APPENDIX B: RESILIENT NEW ORLEANS FINANCE WORKING GROUP MEMBERS..33

8. REFERENCES..34

June 2021

1. FOREWORD

Dear Friends,

It is well known that New Orleans is on the frontlines of the climate emergency. Since Hurricane Katrina and the federal infrastructure failure that flooded 80% of the city in 2005, we have experienced more hurricanes, increased tornados, a series of heavy rain and flood events, the Great Recession and, most recently, the devastating COVID-19 global pandemic.

We have invested in multiple lines of defense to ward against future disasters with the $14 billion federal investment in new storm surge and levee protection, the $144 million federal national disaster resilience grant to build the Gentilly resilience district and develop green infrastructure as a more robust tool for the region, and coordinating work for coastal management under the Coastal Protection and Restoration Authority (CPRA). As a community, we have assessed our risks and an array of actions to mitigate them with the 2015 Resilient New Orleans strategy, 2017 Climate Action strategy, 2019 Climate Change and Equity recommendations, 2020 Hazard Mitigation update and the current work underway to develop a state climate action plan and refresh the City's climate action priorities.

Our city's challenges come from both the shocks of hurricanes, floods, and pandemics, and the stresses of American structural racism, globalization, and a local economy that is too dependent on extractive businesses and low-wage service and tourism jobs. Sustained, consistent investment is needed to diversify our economy, and we believe that by focusing on innovative affordable housing, climate action, and economic development, we can build our city's resilience and enable more opportunities for more New Orleanians to share in the benefits of the new climate action and equity economy.

Starting during the pandemic, with the help of C40 Cities, we convened several public agencies to establish this financing framework - the Resilient New Orleans Finance Plan - to bring innovative climate resilience infrastructure projects to life. This financing framework will be used to physically transform the city, create new economic opportunities, and educate the community on steps to aid in making New Orleans resilient.

As we look to the future, this framework can help the City of New Orleans take a quantum leap forward by inspiring innovation and proactively using public funding to stimulate private investment. The Resilient New Orleans Finance Plan will serve as the foundation for a new green economy that will lead our COVID-19 recovery and transform our jobs. We aim to continuously build on this financing framework to create more opportunities for New Orleanians, now and in the future.

New Orleans is a city of resilient people rich with history, culture, and tradition. The foundation that we build today will ensure that our city, our community, and our culture continue for another 100 years and more. Although the city's environment will continue to change and our infrastructure and use of resources must adapt, we know that the spirit of our great city will endure, and our community can prosper.

Sincerely,
Resilient New Orleans Finance Working Group

2. PURPOSE

Achieving the necessary transformation and investment needed to help the City of New Orleans prosper in the future cannot be funded by public investment alone. The Resilient New Orleans Finance Plan is a framework to focus coordinated effort on the mobilization of steady, reliable financial flows from private and public funds that are economically viable and produce social, resilience, and pollution-reducing benefits and jobs.

The Resilient New Orleans Finance Plan aims to engage a wide and inclusive array of stakeholders from the public and private sectors to realize co-benefits and resilience dividends from its investments, and help put the city on a sustainable development path that mitigates future risks and harnesses opportunities. The framework recognizes the need for private sector involvement that is consistent with city's overall targets and objectives.

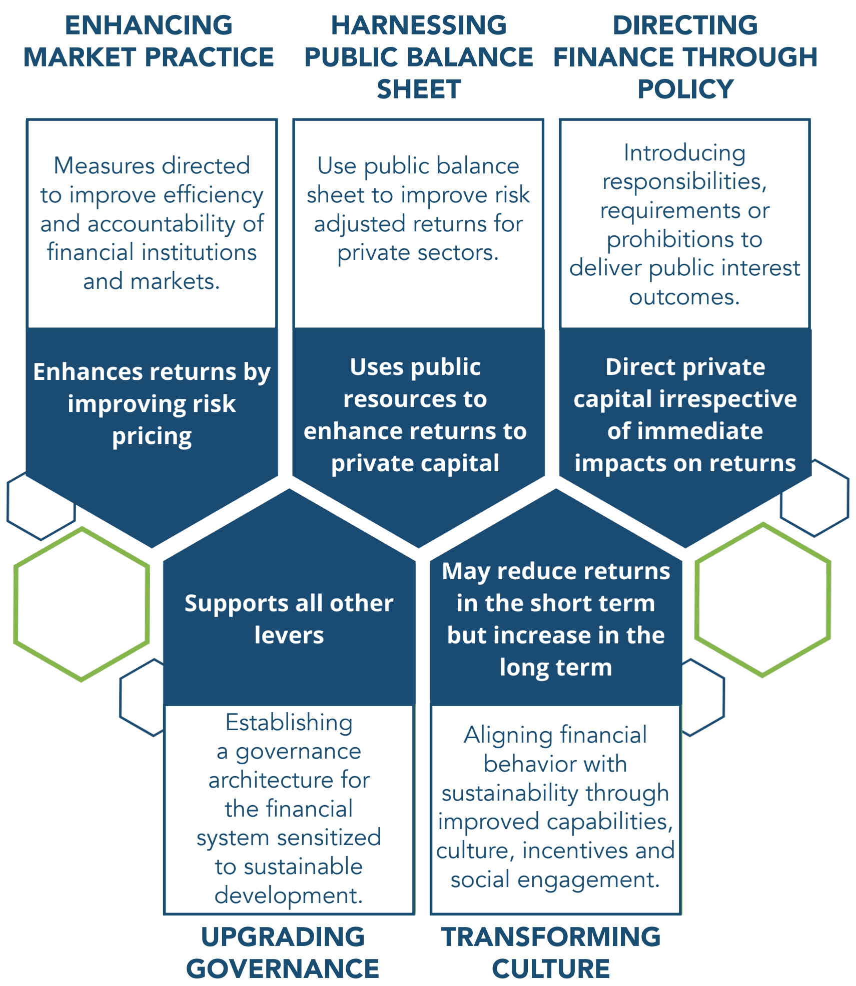


Figure 1: Framework of a Sustainable Financial System (adapted from UNEP Inquiry into the Sustainable Financial System, 2015).

Figure 2: Key themes to be integrated into the vision of the Resilient New Orleans Finance Plan.

This document is framed around a concept of a "sustainable financial system" developed under the United Nations Environment Programme (UNEP) Inquiry as this was deemed to possess a long-term view to financial stability. A sustainable finance system has five focus areas, including: transforming culture; harnessing the public balance sheet; directing finance through policy; enhancing market practice; and, upgrading governance (Figure 1). The Resilient New Orleans Finance Plan will focus on servicing the real economy drawing on the lessons of the past, while creating new business opportunities for public and private actors.

The vision of the Resilient New Orleans Finance Plan is to provide a financial framework to catalyze investment in green projects that will promote outcomes related to the following key themes (Figure 2):
1) Climate action;
2) Green economic development;
3) Sustainability in the built environment; and,
4) Social equity/economic justice.

The Resilient New Orleans Finance Plan can support projects to help New Orleans achieve the City's climate action goals, such as those related to carbon reduction, waste reduction, reduced energy costs, water management, flood prevention, alternative energy sources and reduced energy consumption.

With respect to green economic development, the plan is expected to support the creation of blue and green business and job opportunities, as well as investment and economic opportunities for residents and businesses. The Resilient New Orleans Finance Plan can underpin work with private capital support to help diversify the local economy and transition workers to burgeoning sectors, such as from the hospitality industry to the green economy. This will be supported by the growing integration of sustainability into the built environment with new structures developed and old structure retrofitted to be resilient and affordable.

Economic justice and social equity can also be highlighted, with projects catalyzed by the plan to promote environmental justice based on where they are located, the communities they serve and the residents and businesses they employ. There is a need to marry "green" to social and economic objectives as new jobs created need to be inclusive of those most vulnerable to the impacts of climate change.

The objectives of the Resilient New Orleans Finance Working Group include:

- Ensuring that the Resilient New Orleans Finance Plan is implemented in a coherent and transparent manner that generates buy-in from the necessary stakeholders;
- Crowding in of the appropriate public and private actors when necessary;
- Strengthening existing green finance initiatives to ensure that gains are maintained while exploring new approaches that are viable and effective in delivering the outcomes envisioned;
- Coordinating capacity building, research, and development to ensure the evolution of the Resilient New Orleans Finance Plan over time;
- Undertaking regular amendments of the Resilient New Orleans Finance Plan to ensure that the 2030 vision of the City is kept on track; and,
- Validating and measuring the impacts of the Resilient New Orleans Finance Plan through appropriate reporting and validation processes.

3. CLIMATE CHANGE CONTEXT

Emissions Profile

According to the 2017 greenhouse gas (GHG) inventory conducted by the City of New Orleans, total current emissions are equivalent to 3.5 million metric tons of carbon dioxide equivalent (tCO2e). The City of New Orleans and state of Louisiana are each aiming to reduce emissions to net zero by 2050 in partnership with residents, businesses, community-based organizations, and the federal government. In New Orleans, 51% of emissions are the result of heating and cooling buildings and energy used for infrastructure like streetlights and pumping water. An additional 43% is from transportation, mostly cars and trucks on the road. Just 6% comes from organic waste. About half of the energy emissions are from the commercial and institutional sector and 40% is from energy use in residences.

Climate Risks

New Orleans faces significant climate risks with hurricanes, sea-level rise, air quality issues, flooding and extreme heat and cold blasts becoming more common. New Orleans has identified five primary climate risks that are likely to affect the City under future climate scenarios:

- Rising temperatures and an increase in extreme heat days;
- Changes in annual precipitation with more extreme precipitation events;
- Sea level rise;
- An increase in vectors; and,
- A decrease in air quality.

Several agencies have noted the exposure of New Orleans to rising seas and subsidence issues. According the National Oceanic and Atmospheric Administration (NOAA), a net rise of 4.3ft in mean sea levels is expected in Southeast Louisiana by the end of the 21st century while sea-level rise estimates in New Orleans are expected to be between 3.4 and 11.6ft (NOLA Climate Strategy, 2017) (Figure 4).

It is expected that the average number of hot days (temperatures exceeding 95°F) will increase by four times to 80 days per year by 2100. Extreme heat conditions will also have impacts on the high concentration of air pollutants; exacerbate health conditions for individuals who are more vulnerable; and, contribute to reduced efficiency of water, energy and transportation infrastructure systems owing to increased heat stress.

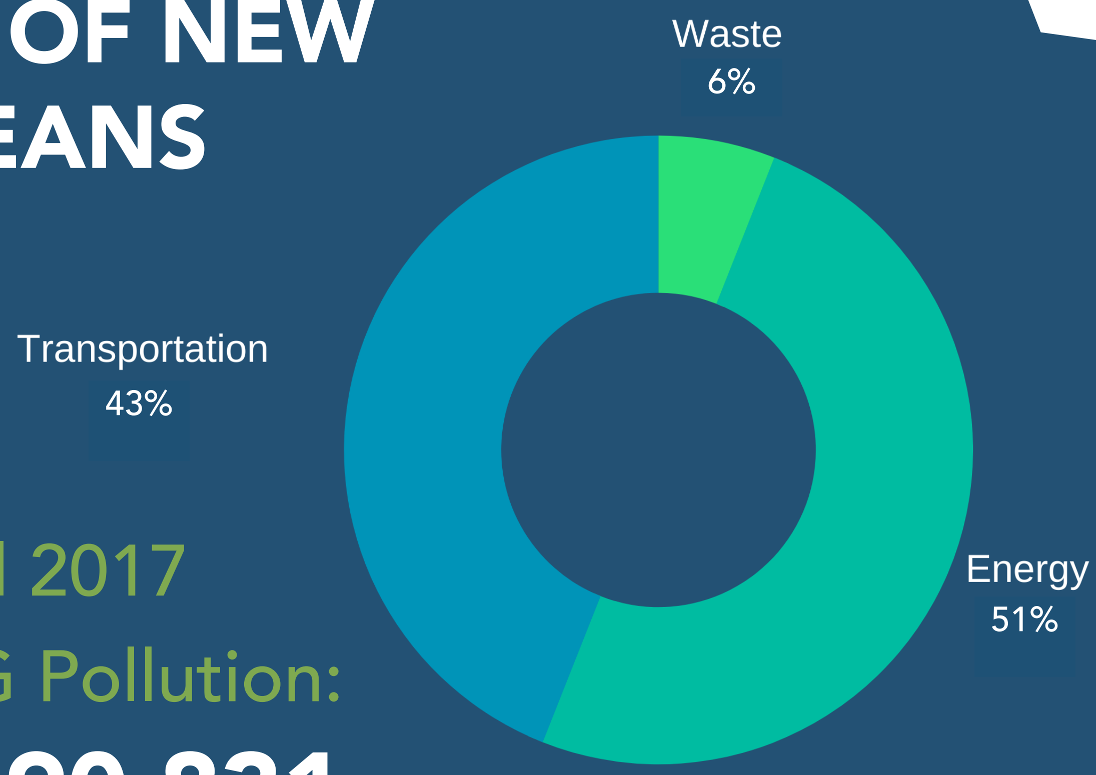
The loss of coastal wetlands will also increase the exposure of New Orleans to extreme weather in the future. Louisiana has already suffered from significant land loss (1,900 square miles since 1932) with an additional 1,800 square miles expected to be lost by

"City resilience is about more than building stronger infrastructure to hold back water and withstand wind. We must also **reduce our contribution to climate change as we adapt** to its effects and build a culture of awareness and climate action."

(NOLA Climate Strategy, 2017)

Figure 3:

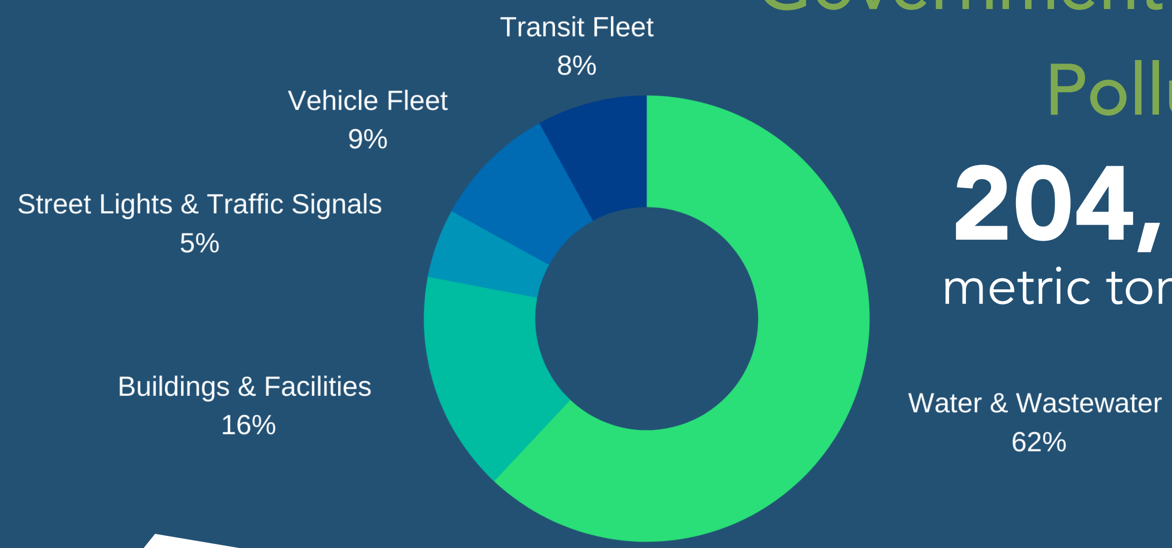
EMISSIONS PROFILE OF THE CITY OF NEW ORLEANS



Total 2017 GHG Pollution:

3,490,831

metric tons CO_2e



Total 2014 Government GHG Pollution:

204,136

metric tons CO_2e

2060. The increased subsidence (~ 10 feet) will make reliable levees and drainage pumping stations even more critical to holding back coastal flooding. The economic impact of land subsidence is estimated to be approximately $2.1 billion over the next 50 years, as reported in the New Orleans Urban Water Plan.

Targets

The City's transition pathway to net zero by 2050 includes an intermediary milestone aiming for a 50% reduction by 2035. By 2035, New Orleans aims to achieve sectoral targets for energy, waste, transportation, and tree planting outlined in Table 1. However, these targets are subject to change as the City works to ensure its climate priorities align with the global 1.5°C goal and with federal and state climate action.

Economic Consequences of Climate Change

The primary sectors of New Orleans' economy include education, energy, manufacturing, international trade, healthcare, and tourism. Small businesses create more than 75% of new employment opportunities. Tourism remains the most critical to New Orleans considering the revenue generation capacity of the sector – 43% of the City's sales taxes are paid in by tourists.
The tourism sector is responsible for generating $9 billion per year and hosting an estimated 18.5 million visitors.In the aftermath of Hurricane Katrina, the number of tourists was reduced to 3.7 million (63%) with spending numbers also being reduced by 42% between 2004 and 2006. The tourism sector is also likely to play a significant role in the post COVID-19 economic recovery.

According to the Intergovernmental Panel on Climate Change (IPCC) (2018)[5] , the impacts of climate change will be felt more acutely by the poor with exposure being exacerbated by health conditions, sub-standard housing and increasing climate hazards. According to the American Community Survey (ACS) (2015)[6], an estimated 27.7% of New Orleanians live in poverty while the unemployment rate as of August 2020 was 12.70% compared to the long-term average of 7.17%. This suggests that a significant portion of the New Orleans population may be vulnerable to climate change impacts.

Figure 4: Sea-level rise projections for the City of New Orleans (State of Louisiana, 2017).

Table 1: Sectoral climate change targets identified by New Orleans.

Sector	Description	Target
Energy	The adoption of a 100% low-carbon standard to reduce reliance on carbon-intensive fuels. City to leverage former landfills, brownfields, and other suitable city land, while residents, businesses, and the City and residents could develop solar directly as well. City Council, acting as the City's energy regulator, has set an energy savings target for utility customer programs to save electricity every year equal to the 2% of the utility's annual sales, and continues to expand opportunities with the Energy Smart program.	Scale local solar from 40 MW to 255 MW and moving to 100% low carbon power. Electricity savings equal to 2% of annual electricity sales.
Waste	The City currently diverts only about 5% of waste from the landfill. The landfill captures most of the methane created and creates renewable natural gas. Increased recycling and resource efficiency may also help create new jobs and support local business development.	New Orleans aims to increase recycling rates and divert 50% of waste from landfills.
Clean Transportation	New Orleans will launch its bike share program this year and a citywide policy that prioritizes right-of-way use between walking, biking, transit, and motor vehicles is being worked on by the City Council and the Office of Resilience and Sustainability (ORS).	New Orleans seeks to electrify the City's public transportation system and ensure 50% of all trips are made using non-fossil fuel powered vehicles.

Clean Transportation *(continued)*	In 2020, the Regional Transit Authority (RTA) did the first transit route re-organization in 15 years. Mayor Cantrell has committed to 75 miles of new bike lanes and the City is about to work on a transit-oriented communities plan to coordinate better alternatives to driving. The City is also re-launching bike share later this year. Strategic objectives include: • Reduce RTA's environmental impact; • Support walkable, livable transit corridors; and, • Improve access to healthcare and recreation.	Some of the targets laid out in the Strategic Mobility Plan of the New Orleans Regional Transit Authority (NORTA) include: • 75% of RTA's fleet powered by low or no-emissions vehicles by 2030; • 20% of the share of work trips made by transit in New Orleans by 2030; • 80% of households in the service area within 30 minutes by transit of a major healthcare facility during typical office hours by 2022. • 80% of households in the service area within 30 minutes by transit of a community health center during typical office hours by 2022; • 80% of households in the service area within 30 minutes by transit of a major park or recreational facility during typical hours by 2022; and, • 500 bikes used in the City of average per day by 2030.
Adaptation and Resilience	Nature-based solutions to reduce flooding and increase cooling are significant for New Orleans. The City has several rain garden and other green infrastructure projects underway and is about to conduct a tree survey.	The City plans to plant 40,000 new trees and install a great deal of new green infrastructure.

4. GREEN FINANCE FRAMEWORK

The Green Finance Framework is the primary component of the Resilient New Orleans Finance Plan. The City of New Orleans intends to help diversify the regional economy and help prepare it for new opportunities related to climate action. Therefore, the City aims to lead by example and support new markets.

Creating a strong platform for the mobilization of green finance is contingent on the development of a robust process that incorporates the use of appropriate approaches, tools, structures, and products to enable sustainable growth. The Green Finance Framework acknowledges that short-term performance must be balanced with long-term development goals. The financing approach within the Resilient New Orleans Finance Plan can create opportunities for public citizens, financial institutions, and the private sector to have impact while managing environmental risks. The management of environmental risks cannot be managed in isolation of the financial sector and there is a recognition that the financial system must transition to one that enables the mainstreaming of climate and green objectives.

The Resilient New Orleans Finance Working Group acknowledges that inconsistent market signals inhibit green economic growth. As such, there is a need to develop incentive-based models that reward outputs aligned to the Resilient New Orleans Finance Plan and disincentivize unsustainable outcomes. The coordination of various actors across the public and private sectors can be challenging. The Working Group commits to using its convening position to increase the participation of all stakeholders to create alignment and common interests in the long-term.

The introduction of new technologies and markets creates perceived risks that need to be identified and managed. These risks may be evident through increased capital costs and higher transaction costs. The Working Group aims to provide long-term public support to green initiatives to ensure that they reach their full potential in a predictable, credible, and reliable manner.

The primary principles of the Resilient New Orleans Finance Plan are envisioned to be consistent and predictable in the long-term noting that investment can be deterred in the absence of a stable framework which creates certainty. Operationally, the Green Finance Framework will focus on three areas as outlined in Figure 5: consistency and innovation, partnerships, and transparency.

Consistent policy signals can create more certain market conditions that can potentially enable greater green investment. This is particularly important in the context of green project types which are less familiar to investors. Policy signals alone may not be sufficient to enable green investment; therefore, the Working Group also notes that innovation may also be needed in terms of the creation of new financial instruments, business models and approaches.

Partnerships refer to the strategic collaborations between Working Group members and implementation and financing entities. The Working Group recognizes the need to create mutually beneficial partnerships to ensure streamlined project implementation. The selection of partners will be dependent on the project needs and the gaps identified by the implementation agency.

Transparency measures are critical to ensure that the outcomes of green project implementation are real and are aligned with the objectives of the Resilient New Orleans Finance Plan. The Working Group recognizes that transparency on internal processes and its operations can enhance trust within green sectors thereby creating further buy-in from external stakeholders and securing green economic growth in the long-term.

Figure 5: Focus Areas within the Green Finance Framework of the Resilient New Orleans Finance Plan.

Strategic and Sectoral Priorities and Actions

IIn the Resilient New Orleans (2015) strategy and subsequent Climate Action for a Resilient New Orleans (2017) strategy, the City outlined the following actions to be fulfilled by 2050:

- Advancing coastal protection and restoration;
- Investing in comprehensive and innovative urban water management;
- Incentivizing property owners to invest in risk reduction;
- Creating a culture of environmental awareness at every stage of life;
- Committing to mitigating our climate impact;
- Investing in household financial stability;
- Lowering barriers to workforce participation;
- Continuing to promote equitable public health outcomes;
- Continuing to build social cohesion;
- Expanding access to safe and affordable housing;
- Redesigning regional transit systems to connect people, employment, and essential services;
- Promoting sustainability as a growth strategy;
- Improving the redundancy and reliability of our energy infrastructure;
- Integrating resilience-driven decision making across public agencies;
- Investing in pre-disaster planning for post-disaster recovery; and,
- Developing the preparedness of businesses and neighborhoods.

In addition to the high-level actions presented above, Table 2 provides a list of specific sectoral actions as outlined in the 'Climate Action for a Resilient New Orleans'. The Resilient New Orleans Finance Plan aims to support the implementation of the strategic and sectoral priorities and actions outlined in City strategies. The strategic and sectoral priorities and actions will support the identification of green projects and inform the selection and prioritization process of green projects that deliver strategic outcomes.

Barriers to Green Finance Mobilization

The main challenges to the mobilization of green finance identified by the City of New Orleans, and agencies include: limited revenues; fewer bankable green projects within project pipelines; challenges in aligning the needs of public or private sector stakeholders; and, the need for awareness raising and education.

There is a significant need for innovative ways to attract investment, while keeping in mind challenges around equity and the ability of poorer communities being able (or not being able) to pay for services. In addition, this need will likely be exacerbated by the economic downturn from COVID-19. Therefore, blended finance structures could be a key opportunity for the City agencies.

Table 2: Specific sectoral actions including the strategic focus area (NOLA Climate Strategy, 2017).

Sector	Strategy	Actions
Energy	Reduce the City's reliance on carbon-intensive fuels	• Implement a 100% low carbon power standard. • End coal use.
	Save energy and make the savings a sustainable resource	• Increase annual energy savings. • Innovate regulation and integrate demand-side management into resource planning. • Reduce the energy burden for low-income New Orleanians.
	Increase the resilience of New Orleans' energy, water, and sewer infrastructure	• Evaluate critical utility assets and align on reliability, resilience, and climate action.
Clean Transportation	Transform infrastructure to reduce car dependence and encourage active transportation	• Partnering with schools, hospitals, and major employers to encourage ridership; • Coordinate with any expansions of bike share and car share programs; • Build park-and-ride lots and car share stations near transit; • Begin incorporating low- or no-emission vehicles into fleet; • Reduce redundant stops; • Generate more renewable energy on facilities; and, • Work with partners to make major corridors more pedestrian-friendly.
Green Buildings	Enable the development of green and climate friendly building through energy and resilience standards	The New Orleans Redevelopment Authority supports compliance with the standards that promote environmental benefits. The recognized standards include: • Hazard Resilience: All developers are required to achieve the Institute for Business and Home Safety (IBHS) FORTIFIED Gold Home certification for each home. This certification also requires the participation of a certified FORTIFIED evaluator. • Energy Efficiency: All developers are required to achieve the Environmental Protection Agency (EPA) Energy Star Homes Version 3.0 for new construction certification on each home. This certification requires the participation of a certified Home Energy Rating System (HERS) rater and an energy star certified Heating, Ventilation, and Air Conditioning (HVAC) sub-contractor. • Green Infrastructure (GI): All developers are required to incorporate a minimum of two (2) of NORA's green infrastructure features related to stormwater management into the design of each home, with a combined minimum storage capacity of 1,000 Gallons. NORA will provide

Green Buildings *(continued)*		direct technical assistance in support of green infrastructure requirements.
Waste	Launch a comprehensive recycling and waste reduction initiative	• Increase recycling rates. • Pilot organic waste program. • Reduce impact of waste-related transit.
	Generate value from waste	• Explore opportunities for solid waste and wastewater. • Develop a device donation program. • Explore zero-waste and circular-economy opportunities.
Cross-cutting	Grow the local low carbon economy	• Promote sustainable business practices and jobs.
	Enable data-driven decision-making and collaboration	• Utilize digital climate adaptation tools to prioritize, design, and engage. • Conduct a tree survey of New Orleans' urban forest and plant 40,000 trees by 2030. • Assemble and make data available for analysis and action.
	Connect culture and climate action	• Inform and engage residents and local business about action opportunities. • Engage visitors to New Orleans in climate action.

Blended finance refers to the use of development finance and philanthropic funds to mobilize private finance investment (OECD, 2020).

The Resilient New Orleans Finance Working Group notes that the knowledge of green finance products is limited in New Orleans agencies therefore, there is a need for awareness raising on green financing with a focus on the specificities of products; the impact of these financial solutions linked to City targets; and, their feasibility under local, state and federal legislation.

Process: Creating Green Project Pipelines

The existing project pipeline for bankable and investable green projects is acknowledged to be insufficient to meet the demand by investors. The Resilient New Orleans Finance Working Group has identified a stepwise approach (depicted in Figure 6) that will assist members in the development of green projects that are profitable, bankable and deliver the outcomes in envisioned impact areas. The following sections outline the stepwise actions in more detail.

Identification of Emissions Sources and Sectors

The starting point for the implementation of the Resilient New Orleans Finance Plan is the robust identification of the emission sources, vulnerable assets, and the sectors' critical effective mitigation and adaptation strategies. This assessment has been undertaken to a certain extent in the Resilient New Orleans (2015) and Climate Action for a Resilient New Orleans (2017) strategies. However, further assessments may be required.

Project Concept Development and Strategic Actions

Project concept development is an all-encompassing term which includes various process steps which may include (but is not limited to): stakeholder engagement; project identification; financial planning; project due diligence; internal project approval; and, feasibility and prefeasibility studies. This is most likely to be undertaken by the agency leading the project and ideally would be supported by a senior City climate staff leader coordinating with Finance New Orleans (FNO) and the project lead.

Project concept development will be guided in terms of project identification, selection and prioritization by the identification of the emission sources and vulnerable sectors in the City. Project concept development may also require extensive internal and external stakeholder engagements with relevant parties. The inclusion of partners in the early stages of the project concept phase can assist developers in avoiding common green financing barriers. Despite the inclusion of financial planning at the project concept development stage, this step is often not as extensive as is needed for green projects. Financing partners could include entities that assist public agencies in project concept development and financial transaction structuring. The prefeasibility and feasibility studies to be conducted are usually project specific but may include studies on technical, economic, financial, legal, operational or scheduling feasibility.

Business and Financial Model Development

The Resilient Finance Working Group recognizes the creation of dynamic business and financial models as a key step in the development of bankable project pipelines. Business models refer to the conceptual framework of a project that allows for value (profit) to be captured. The development of the business models will focus on the identification of the green product or service to be sold, the market segment, and the underlying financial structure and model which incorporates investment flows, revenues, and expenditures.

The Working Group may act as a platform to connect potential partners to support the development of the business or financial model. By including the appropriate partners to address distinct business and financial challenges, well-developed models can ensure sustainable financial flows and stable growth in the long term. Working Group meetings will also be used to facilitate knowledge sharing on business and financial models to create further learning.

Implementation

Project implementation involves the actioning of a set of activities that delivers outputs based on a workplan. The phases of project implementation can be varied and will depend on the strategy developed by the lead agency. The project implementation phase will be the responsibility of the proposing agency with support from other Working Group members, if needed. The Working Group may also act as an advisory body during the implementation phase.

Measurement of Impact Against Targets

Beyond feasibility and implementation, the tracking of impact and outcomes is critical to understanding the progress of the implementation of the Resilient New Orleans Finance Plan. The measuring of impacts against targets is envisioned to inform the future identification of green project concepts depending on future emission sources and adjustment to targets. It is expected that the process be cyclic and flexible depending on the outcomes of project implementation. The indicator framework that is provided within the Green Bond Framework in Appendix A can be used more broadly for green projects implemented by Working Group members.

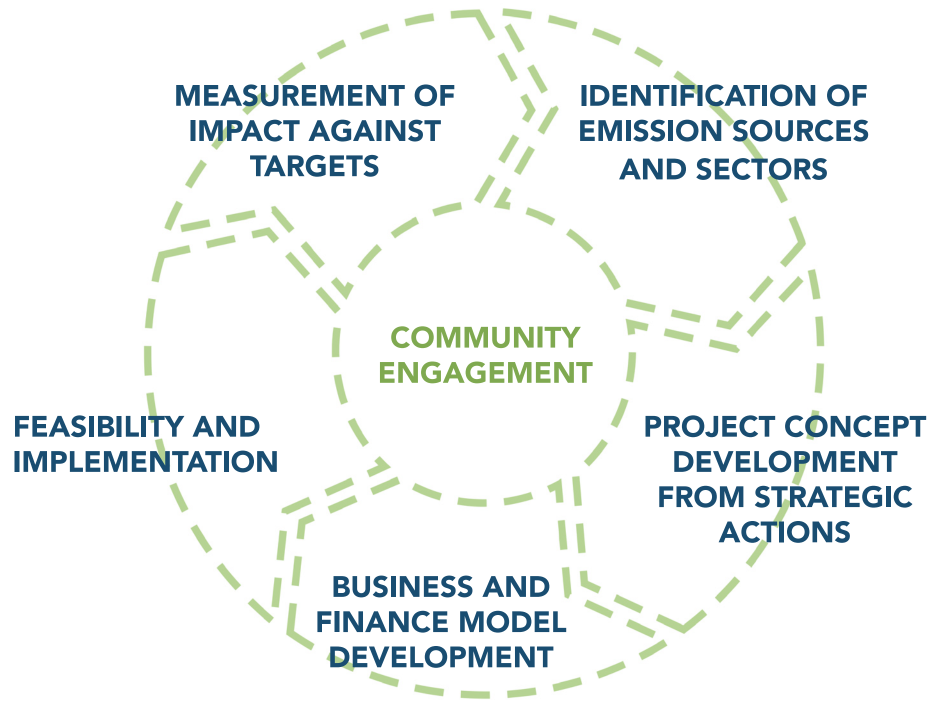


Figure 6: Process within the Green Finance Framework to deliver green project pipelines.

Institutional Coordination and Organizational Structure

One of the key components of the green financing framework is the coordination between agencies and City departments to ultimately create the momentum needed to implement, execute, and formalize the envisioned goals and outcomes. Coordination is also critical to ensure alignment while adhering to institutional mandates and avoiding the duplication of efforts. This Resilient New Orleans Finance Working Group comprised of City stakeholders, agencies and partners is envisioned to play an oversight role in the implementation of the Resilient New Orleans Finance Plan while assisting in the identification and development of projects in different agencies which are likely to deliver green benefits or require green financing (see Appendix B).

Operationally, the Resilient New Orleans Finance Working Group will hold monthly meetings, moderated by neutral parties. These meetings may include public and private sector actors depending on the needs identified by the Resilient New Orleans Finance Working Group. This collaborative modality is expected to ease implementation and create joint responsibility between stakeholders creating a common shared vision, priorities, and expertise.

It is critical to the success of this green finance coordination that the City designate a senior leadership representative versed in its climate, hazard, mitigation, and economic priorities and with capacity to work on pre-development and pipeline support and as a Resilient New Orleans Finance Working Group member. This person may be from the Office of Resilience and Sustainability or similar and can assist the implementation of the Resilient New Orleans Finance Plan from the perspective of ensuring alignment with the climate and economic development goals of the City.

Considering the small project size which inhibits certain financial transactions, FNO was identified as an interlocuter to aggregate projects from different agencies. Agencies may also pursue green finance solutions independent of FNO; in this case, alignment will be maintained by the Resilient New Orleans Finance Working Group. Lastly, FNO will manage the operational coordinator of the Resilient New Orleans Finance Working Group.

Roles and responsibilities of the Resilient New Orleans Finance Working Group includes but is not limited to:

- Researching and developing consensus on green finance products and services which create strategic policy signals and frameworks;
- Creating alignment with existing green finance principles;
- Enhancing capacity building and awareness to expand the knowledge of green finance approaches;
- Supporting the development of environmental bonds such as environmental impact bonds, resilience bonds, and green impact bonds. This is inclusive of decision-making on the use of proceeds if the option of a single issuance with multi-agency collaboration is pursued;
- Promoting national and international collaboration and participation in green finance forums; and,
- Improving the measurement of green finance activities and their impacts.

Reporting under the green bond framework will be the responsibility of the issuer (e.g. issuer agency or FNO).

Green Finance Approaches

The mobilized financial flows should be able to meet the different needs or stages of funding using strategic instruments which are able to address barriers. A comprehensive list of green finance instruments that have been identified are outlined in Table 3. A prioritized list of approaches will be determined once specific project priorities have been identified.

Table 3: Comprehensive list of possible green finance solutions to be pursued by the City of New Orleans.

Instrument/Approach/Solution	Description
Green mortgages	These products provide retail customers who purchase homes with renewable energy and other sustainability and resilience retrofits with lower interest rates. An alternative model for green mortgages allows for the cost of green retrofits to be covered (Climate Bond Initiative (b.)).
Home equity loans	Home equity loans assist homeowners to finance home improvements which may include renewable energy and energy efficiency projects. These loans are sometimes referred to as second mortgages (United Nations Environment Programme Finance Initiative).
Auto and fleet loans	The loans are designed to incentivize the uptake of cars that demonstrate lower GHG emissions/ higher fuel efficiencies. These loans are typically offered at below market interest rates (United Nations Environment Programme Finance Initiative).
Labelled/Thematic bonds	These are general bonds with proceeds earmarked for green initiatives. There is no preferential coupon rate but rather green bonds that are able to access a different set of institutional investors. Different types of green bonds include: • General obligation green bonds; • General revenue bonds; • Sub-national green bonds; • Sovereign green bonds; • Green convertible bonds; • Green project bonds; • Environmental impact bonds; • SDG bonds; and, • Social-impact bonds (Climate Bond Initiative (b.)).
Environmental travel fees	Environmental travel fees refer to the voluntary linkage of carbon or green initiatives to tourist fees. For example, offset CO_2e associated with airfare (BIOFIN).
Green banks	Green banks are entities that leverage limited public funds to attract additional private investment in clean energy or other green investments.
Incentives (tax credits, subsidies)	Incentives are economic instruments that aim to encourage investments and savings through payments or concessions. Examples of incentives include tax credits and subsidies (Climate Bond Initiative (b.), United Nations Environment Programme Finance Initiative).
Green securitization	"These are debt securities backed by a pool of underlying assets. Proceeds are allocated only to nominated projects and assets." (Climate Bond Initiative (b.):8).
Clean energy standards	Clean energy standards are policy measures that assist with

Instrument/Approach/Solution	Description
Clean energy standards *(continued)*	the long-term renewable energy transition. These standards set firm policies that help investors commit capital to clean energy investments with levels of confidence that would otherwise not be possible (United Nations Environment Programme).
CAT-bonds	Catastrophe bonds are high-yield debt instruments that allow for an entity to raise capital in the event of a natural catastrophe. CAT-bonds have a special condition that allows for the principal to be forgiven, if the covered catastrophe occurs (United Nations Environment Programme Finance Initiative).
Green loans, syndicated loans and credit loans	Green loans, syndicated loans and credit loans aim to provide debt financing towards projects that are climate-aligned. The interest rate of loans may be determined by the Environmental, Social and Governance (ESG) scores (Climate Bond Initiative (b.)).
Private-Public Partnerships	Private-Public Partnerships refers to a collaboration between public- and private-sector entities for the purposes of financing, operating and building projects (Climate Bond Initiative (b.)).
Infrastructure/Property funds	These funds are focused on infrastructure investments. Their financing structure may allow for investments directly in assets or through debt issuances (Climate Bond Initiative (b.)).
Guarantees	Guarantees are contractual agreements between a creditor and a third-party (a guarantor). In the contract, the guarantor backs the debt on behalf of the creditor. This ensures that the debt will be repaid to the investor in case the creditor defaults. In summary, guarantees act as a de-risking instrument. The different types of guarantees include: • Full/partial risk guarantees; • Political risk guarantees; • Partial risk swap guarantees; and, • First-loss provisions. (Climate Bond Initiative (b.), United Nations Environment Programme Finance Initiative).
First-loss provisions	First-loss provisions are instruments that provide investors with protection from losses if they are initially exposed to potential financial losses. First-loss provisions may be in the form of debt, equity or derivatives (Climate Bond Initiative (b.)).
Green capital notes or securitization	"This is a form of risk management (de-risking) to release loss reserves, with the use of freed capital to fund green projects.

Instrument/Approach/Solution	Description
Green capital notes or securitization *(continued)*	It reduces the risk of the weighting of assets, while keeping the assets tied to the banks' balance sheet and the current operations" (Climate Bond Initiative (b.): 13).
Disaster risk insurance	Disaster risk insurance is a risk transfer mechanism that allows for entities to manage their exposure to natural disasters. Entities may issue premiums in exchange for coverage in the event that a natural hazard occurs (BIOFIN).
Donor/philanthropies and charities grants	Grants are non-repayable transfers provided from one party to the other. Grants can be useful forms of finance for technical assistance, research, and product development that allows for the business model to be tested during the prefeasibility, feasibility and piloting phases.
Sustainability standards and certification	Sustainability standards and certifications are policy measures which seek to create awareness around the sustainability impact of products, services, and initiatives. Sustainability standards aim to alter the consumption and demand patterns, driving investment towards green products and services (United Nations Environment Programme).
Climate mainstreaming	Climate mainstreaming does not refer to a specific financial instrument rather, it refers to the integration of policies and measures into financial structures that deliver resiliency benefits e.g., climate-aligned building codes.

5. CASE STUDIES OF PAST PROJECT IMPLEMENTATION

To conclude the Resilient New Orleans Finance Plan, we present case studies of successful implementation efforts which serve to demonstrate the possible project types to be pursued by green financial flows.

MSY Hurricane Proofed Terminal Building

The low elevation of the City of New Orleans combined with overwhelmed pump systems makes the area particularly vulnerable to the impacts of climate change (Schaberg, 2018)[13] . Considering the importance of tourism to the local economy, the adaptive capacity of transportation hubs is critical. The Louis Armstrong New Orleans International Airport (MSY) is the primary airport in the state serving over 80% of passengers visiting Louisiana. MSY is owned by the City of New Orleans.

The $1 billion MSY airport was opened in November 2019 with resilience to storms and hurricanes built into the design. For example, the MSY terminal has a spherical roof shape to accommodate heavy rainfall while extensive wind-tunnel modelling and on-site testing was done to ensure that the walls had the ability to resist hurricane-force winds.

FNO's Green Mortgage Program

The Green Mortgage Program was envisioned to provide homeowners with the opportunity to upgrade new or existing homes with green features and minor renovations. Eligible improvements include energy efficiency measures, fortified roofing, solar panels, permeable pavement, rain barrels, and other improvements that make the home more resilient. The Green Mortgage Program was activated in June 2021. In addition to the Green Mortgage Program, FNO is developing a Resilient New Orleans Infrastructure Fund which will be used to support projects through loan and credit enhancement products. The Fund is envisioned to reinvest loan income into future revenue generating projects thereby continuing into perpetuity. The Fund will finance resilience and renewable energy projects for homeowners, developers, businesses, and municipalities. Project types will include commercially viable technologies, such as solar panels, energy efficiency measures, water management systems, and clean transportation systems. The Resilient New Orleans Infrastructure Fund can also support local early-stage technology companies developing solutions to help local governments mitigate the effects of climate change.

Solar for All and Community Solar programs to incentivize residential and small business

The City initiated a campaign - Solar for All NOLA - which is a clean energy initiative which was designed to offer both financial and resiliency benefits of rooftop solar. More than 60% of New Orleanians spend more 30% of their income on utility bills. Solar can help reduce energy costs and create local green jobs.

In 2020, the City initiated Solar for All to communicate solar benefits to residential and small business property owners, and in 2021, the City will extend the opportunity of solar to those who don't have control of a roof with the new Community Solar program. In Solar for All, two local solar companies - Posigen and Solar Alternatives - offer free evaluations to property owners to determine if they can realize cost savings by going solar. If so, they install solar with company-financed leases or third-party solar financing.

Community Solar will offer the opportunity for people to invest in a solar project somewhere in New Orleans up to the amount of their regular energy bill and get credits for the solar to offset their bill. Projects can be up to 2MW and half need to have 30% low-income subscribers.

Flood Risk Mitigation in the City of New Orleans

The City of New Orleans has recognized the need for structural and non-structural protection measures against storm surges and flooding. Structural measures such as levees, floodwalls, pumps, and floodgates still result in some residual risk that is unmanaged therefore there is a need for non-structural measures in complement. Non-structural measures may include incentives for elevating existing or new structures or for relocation to lower-risk areas, revised building codes, and land use restrictions designed to curtail future growth in the floodplain (Fischbach, 2011).

The Hazard Mitigation Office, the Office of Resilience and Sustainability, and the Capital Projects Administration have had a significant focus on flood risk management and are managing over $300 million for stormwater management activities that reduce flood risk, beautify neighborhoods, promote health & recreation, and foster environmental awareness. Some of the notable flood risk projects in the City include the Gentilly and Oak Park Stormwater Management projects. The Gentilly project has focused on implementing green infrastructure to increase stormwater capacity. In the case of the Oak Park Stormwater project, a cluster of five vacant parcels on Perlita Street have been used as a stormwater management area that reduces the risk of flooding for the surrounding neighborhood.

Energy Smart Energy Efficiency Program

Entergy New Orleans administers a program to help customers save energy to meet the City's energy savings goals.

The program offers a suite of services and incentives for residential and business customers that can be used for individual measure and whole building upgrades. Since its inception in 2010, the program has distributed $29 million to more than 86,000 customers.

APPENDIX A: NEW ORLEANS GREEN BOND FRAMEWORK

1. Vision and Strategy

New Orleans faces significant climate risks with hurricanes, sea-level rise, air quality issues, flooding and extreme heat and cold blasts becoming more common. Achieving the necessary transformation and investment needed to help the City of New Orleans prosper in the future cannot be funded by public investment alone. The city's transition pathway to net zero by 2050 includes an intermediary milestone aiming for a 50% reduction by 2035.

The Resilient New Orleans Finance Plan aims to engage a wide and inclusive array of stakeholders from the public and private sectors to realize co-benefits and resilience dividends from its investments, and help put the city on a sustainable development path that mitigates future risks and harnesses opportunities. This Green Bond Framework (the "Framework") represents a further step made by the City to ensure the financing of environmental and social goods at scale.

This Framework may apply to Green Bonds issued by any members of the Resilient New Orleans Finance Working Group on or after January 1, 2021. It sets out the guidelines for the City's Green Bond issuances in accordance with the four core components of the International Capital Markets Association's Green Bond Principles: (i) use of proceeds; (ii) process for project evaluation and selection; (iii) management of proceeds; and, (iv) reporting.

This Green Bond Framework is envisioned to be a starting point for any City agency to issue a green bond with the use of proceeds being adapted to the agency's focus. In cases where project sizes are small and aggregation is needed, FNO will act as an aggregator and issuer of the green bond with implementation efforts being shared between agencies but the management of proceeds being the responsibility of FNO.

2. Use of Proceeds

The net proceeds of the City's Green Bond issuances will be used to finance or refinance, in part or full, new and/or existing eligible capital projects across the City of New Orleans that meet the Eligibility Criteria as outlined in Table 4. Eligible projects are identified through the City's agency processes to ensure the capital projects have elements of environmental and social integrity while being aligned to the sectoral needs and criteria that will be updated over time.

Table 4: Eligible Project categories and associated descriptions.

Eligible Category	Description of Projects
Energy	• Solar thermal and photovoltaic installations. • Wind energy installations. • Fuel cells. • Energy storage infrastructure and batteries. • Biogas. • Smart energy management systems. • Equipment to reduce energy consumption including LED building lighting, and efficient heating, ventilating, air conditioning (HVAC).
Green Buildings	• New buildings or retrofitted existing buildings that meet building City code and third-party environmental certifications, such as LEED Gold / Platinum and others. • Hurricane proofing of buildings.
Clean Transportation	• Supporting infrastructure for electric public transit. • Electric Vehicle (EV) infrastructure to support EV uptake. • Zero emission vehicles. • Cycling and walking infrastructure.
Sustainable Water, Waste and Wastewater Management	• Infrastructure for clean water and water efficiency. • Infrastructure for wastewater treatment. • Construction or maintenance of water collection and urban drainage infrastructure including storm water management and sewer separation. • Recycling infrastructure.
Adaptation and Resilience	• Nature-based solutions including initiatives that promote, restore, or preserve biological diversity in urban areas such as parks, green rooftops, and other green spaces while reducing climate risks. • Implementation of flood risk mitigation initiatives aligning with the New Orleans Resilience strategy. Initiatives may include, but are not limited to, permeable pavers, rain barrels, French drains, and rain gardens. • Hurricane proofing of homes and infrastructure.

3. Process for Project Evaluation and Selection

Projects to be financed and/or refinanced through Green Bond proceeds are evaluated and selected by the Resilient New Orleans Finance working group as well as alignment with the green bond framework developed as Appendix A in the Resilient New Orleans Finance Plan. The Resilient New Orleans Finance working group is made up of representatives from various agencies. Subject matter experts may be consulted when necessary. As part of the Resilient New Orleans Finance Plan, the Resilient New Orleans Finance working group has also identified climate resilience principles which will be used to ensure the selected green bond projects are climate proofed.

4. Management of Proceeds

- Finance New Orleans will be responsible for the tracking and allocation of the net proceeds from the issuance of Green Bonds to the relevant and approved Eligible Green Projects and Assets as per the eligible project categories within the green bond frameworks.
- Net proceeds from each Green Bond will be deposited and recorded separately tracking the use of and allocation of funds for Eligible Projects.
- In most cases when such projects are underway, proceeds from the Green Bonds issued will be directly applied to the Eligible Projects.
- In the case where projects are delayed, any portion of the net proceeds that have not been allocated can be temporarily held in the account of the issuer and invested in cash or liquid fixed income instruments according to financial laws, policies, and regulations.
- Payment of principal and interest on any Green Bond issuance will be made from our general or sinking funds and will not be directly linked to the performance of any Eligible Project.
- Internal budget/accounting systems or invoices are used to identify costs of projects, which are then marked against funds held in the Additional Eligible Green Projects which will be added to the issuers Eligible Green Project Portfolio to the extent required to ensure transparency.

5. Allocation and Impact Reporting

The issuer will provide annual reporting, covering the allocation of net proceeds to the Eligible Green Project Portfolio and impact reporting of the Eligible Green Project Portfolio, at least at the category level covering at least 5% of the project portfolio. Reporting will take place a year following the issuance of the applicable Green Bond. Allocation reporting will include an assessment of the total amount of investments and expenditures in the Eligible Green Projects portfolio as well as the percentage of new and existing projects as well as the balance of unallocated proceeds.

Table 5: Possible indicators associated with eligible project categories.

Eligible Categories	Indicator
Energy	• GHG emissions reduced/avoided (tCO_2e). • Biomethane captured (tCH_4). • Energy saved per year (kWh/year).
Green Buildings	• Green building certifications. • Square feet of green buildings. • Number of buildings which have been hurricane proofed. • List/number of third-party environmental certifications received. • Total tonnes of community CO_2e emissions from all community buildings.
Clean Transportation	• Number of buses electrified (total and as a percentage of the fleet). • Number of miles of walking and cycling infrastructure that is built or improved. • Number of charging stations installed.
Sustainable Water, Waste and Wastewater Management	• Tonnes of waste recycled. • Gallons of stormwater managed (based on design or product specifications). • Alignment to the city's stormwater management requirements. • Number of new projects implemented.
Adaptation and Resilience	• Number of individuals/households/communities with resiliency improvements. • Area of natural assets conserved/protected/restored.

6. Climate Resilience Principles

Considering the significant exposure of the City of New Orleans to extreme weather events which are expected to be exacerbated under climate change, it is critical that climate resilience be acknowledged as a key element to the financing of green initiatives. In this respect, the City will align processes outlined in the Climate Bond Initiative (CBI)'s Climate Resilience Principles (CRP) (CBI, 2019). From the CBI CRP, the City of New Orleans intends that the assets and activities be financed under the green bond framework. They shall (where applicable):

- Understand the climate risks faced by the asset, activity or system;
- Have addressed those risks by undertaking risk-reduction measures and adopting flexible management plans that take account of inherent uncertainties around climate change, ensuring that the asset, activity or system is robust, flexible and fit-for-purpose in the face of that uncertainty;
- Deliver resilience benefits over and above addressing identified risks (for system-focused investments); and,
- Undertake regular (re)evaluation of the asset and/or system's climate resilience performance, adjusting to risk reduction measures over time as needed.

7. External Review

7.1 Second Party Opinion (pre-issuance) – The City of New Orleans Green Bond Framework will be reviewed by providers of Second Party Opinions. The Second Party Opinion and the Green Bond Framework will be made available to Green Bond investors.

7.2 Annual Verification (post-issuance) – The City of New Orleans intends to request a limited assurance report or auditor comfort letter to be produced on the information contained within the allocation of Green Bond proceeds report.

8. Terms and Conditions

The green bond framework presented is intended to provide a non-exhaustive list of information related to eligible project types which can qualify under the use of proceeds. This document may include information from public sources that were not peer-reviewed and therefore the City of New Orleans assumes no representation or warranty as to the fairness, accuracy, reasonableness, or completeness of such information.
This document may also include details about the future events and objectives of the City of New Orleans; however, none of the statements are to be considered promises nor should they be taken as implying any indication, assurance or guarantee that the assumptions on which such future projections, expectations, estimates or prospects have been prepared are correct or exhaustive or, in the case of the assumptions, fully stated in

the document.

This document is not intended to be and should not be construed as providing legal or financial advice. It does not constitute an offer or invitation to sell or any solicitation of any offer to subscribe for or purchase or a recommendation regarding any securities, nothing contained herein shall form the basis of any contract or commitment whatsoever and it has not been approved by any security regulatory authority.

The distribution of this document and of the information it contains may be subject to legal restrictions in some countries. Persons who might come into possession of it must enquire as to the existence of such restrictions and comply with them.

The information in this document has not been independently verified.

The addressee is solely liable for any use of the information contained herein and the Resilient New Orleans Finance Working Group shall not be held responsible for any damages, direct, indirect or otherwise, arising from the use of this document by the addressee.

APPENDIX B: RESILIENT NEW ORLEANS FINANCE WORKING GROUP MEMBERS

- City of New Orleans – Office of Resilience & Sustainability
- City of New Orleans - Office of Utilities
- City of New Orleans – Office of Economic Development
- City of New Orleans – Office of Housing Policy and Community Development
- New Orleans Redevelopment Authority
- New Orleans Business Alliance
- Sewerage & Water Board of New Orleans
- Housing Authority of New Orleans
- Greater New Orleans Foundation
- Louis Armstrong New Orleans International Airport
- New Orleans Regional Transit Authority
- Orleans Parish School Board
- Downtown Development District
- Finance New Orleans

REFERENCES

New Orleans Homeowners". Prnewswire.com, 2020, https://www.prnewswire.com/news-releases/solar-for-all-nola-new-city-program-makes-clean-energy-accessible-and-affordable-to-all-new-orleans-homeowners-300993022.html. Accessed 6 Oct 2020.

BIOFIN. "BIOFIN Catalogue of Finance Solutions". Biodiversityfinance.net, 2021, https://www.biodiversityfinance.net/finance-solutions. Accessed 10 Sept 2020.

City of New Orleans (a). City of New Orleans Carbon Footprint Report. City of New Orleans, New Orleans, 2009, https://www.nola.gov/getattachment/7aeaa7e4-7489-48f0-ac7b-4406c0926e79/Appendix-Ch-13-City-of-New-Orleans-Carbon-Footprin/. Accessed 27 Sept 2020.

City of New Orleans (b). GreeNOLA: A Strategy for a Sustainable New Orleans, City of New Orleans, New Orleans, 2008, pp. 55.

City of New Orleans (c). Climate Action for a Resilient New Orleans. City of New Orleans, New Orleans, 2017, https://nola.gov/nola/media/Climate-Action/Climate-Action-for-a-Resilient-New-Orleans.pdf.Accessed 27 Sept 2020.

City of New Orleans (d.). "Resilience & Sustainability - Areas of Focus - Green Infrastructure - Hazard Mitigation - Stormwater Projects - Oak Park - City of New Orleans". nola.gov, 2021, https://www.nola.gov/resilience-sustainability/areas-of-focus/green-infrastructure/hazard-mitigation-stormwater-projects/oak-park/. Accessed 14 Nov 2020.

City of New Orleans (e.). "Resilience & Sustainability - Areas of Focus - Green Infrastructure – National Disaster Resilience Competition – Gentilly Resilience District". nola.gov, 2021, https://www.nola.gov/resilience-sustainability/areas-of-focus/green-infrastructure/national-disaster-resilience-competition/gentilly-resilience-district/. Accessed 14 Nov 2020.

Climate Bond Initiative (a.). Climate Resilience Principles. Climate Bond Initiative, London, 2019. https://www.climatebonds.net/files/page/files/climate-resilience-principles-climate-bonds-initiative-20190917-.pdf. Accessed 8 Dec 2020.

Climate Bond Initiative (b.). ASEAN Green Financial Instruments Guide. Climate Bond Initiative, London, 2021, pp. 1 - 16, https://www.climatebonds.net/files/reports/asean_green_fin_istruments_cbi_012019_0.pdf. Accessed 8 Dec 2020.

DSIRE. Programs.dsireusa.org, 2021, https://programs.dsireusa.org/system/program/detail/3752. Accessed 9 Sept 2020.

Fischbach, Jordan R. Reducing Future Flood Damage in New Orleans Through Home Elevation and Land Use Changes. Pardee RAND Graduate School, New Orleans, 2011, pp. 1 - 3, http://p://www.rand.org/pubs/rgs_dissertations/RGSD262.html. This. Accessed 3 Sept 2020.

Intergovernmental Panel on Climate Change. Summary for Policymakers. In: Global Warming Of 1.5°C. World Meteorological Organization, Geneva, 2018, pp. 1 - 24, https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf. Accessed 2 Sept 2020.

Leodaly. "New Orleans International Airport Opens World-Class New Terminal - www.leoadaly.com". www.Leoadaly.Com, https://leoadaly.com/new-orleans-international-airport-opens/. Accessed 7 Sept 2020.

New Orleans Regional Transit Authority. Strategic Mobility Plan. New Orleans Regional Transit Authority, New Orleans, 2018.
http://www.norta.com/RTA/media/RTA-PDF-Files/SMP/Strategic-Mobility-Plan.pdf?ext=.pdf.
Date Accessed 25 May 2021.

OECD. OECD Blended Finance Principles for Unlocking Commercial Finance for the Sustainable Development Goals. OECD, 2018, pp. 1 – 12. https://www.oecd.org/dac/financing-sustainable-development/development-finance-topics/OECD-Blended-Finance-Principles.pdf. Accessed 12 Sept 2020.

Schaberg, Christopher. "A World-Class Airport for The End of The World". The Atlantic, 2018, https://www.theatlantic.com/technology/archive/2018/10/airport-climate-change-new-orleans/573268/. Accessed 5 Sept 2020.

State of Louisiana. Louisiana's Comprehensive Master Plan for a Sustainable Coast. Coastal Protection and Restoration Authority of Louisiana, New Orleans, 2017, pp. 1 - 93, http://coastal.la.gov/wp-content/uploads/2017/04/2017-Coastal-Master-Plan_Web-Book_CFinal-with-Effective-Date-06092017.pdf. Accessed 27 Sept 2020.

The New MSY, 2021, https://www.thenewmsy.com/project-background. Accessed 3 Sept 2020.
United Nations Environment Programme. The State of Sustainable Finance in The United States. United Nations Environment Programme, Geneva., 2016, pp. 1 - 38., http://unepinquiry.org/wp-content/uploads/2016/02/The_State_of_Sustainable_Finance_in_the_US.pdf. Accessed 12 Aug 2020.

United Nations Environment Programme Finance Initiative. Green Financial Products and Service: Current Trends and Future Opportunities in North America. United Nations Environment Programme Finance Initiative, Geneva, 2007, pp. 1 - 82, https://www.unepfi.org/fileadmin/documents/greenprods_01.pdf. Accessed 12 Sept 2020.

US Bureau. "American Community Survey (ACS)". The United States Census Bureau, 2021, https://