



### **Independent Regional Assessment for climate change**

# Key opportunities for climate ambition or implementation



- Implement nature-based solutions, such as restoring mangroves and coral reefs, to enhance coastal resilience against sea-level rise and extreme weather events, while preserving biodiversity and supporting sustainable livelihoods.
- Advance the energy transition by investing in renewable energy sources like solar and wind, and by developing carbon capture and storage technologies to reduce greenhouse gas emissions from industrial sectors.
- Leverage international climate finance mechanisms, including the Green Climate Fund, to support low-carbon development projects, and explore innovative financing options such as blue carbon credits to fund conservation efforts.

Trinidad and Tobago faces unique challenges as a small island developing state (SIDS), including disproportionate exposure to climate-induced loss and damage. Coastal erosion, rising sea levels, and extreme weather events threaten vulnerable communities, particularly low-income and marginalized populations. Climate justice demands urgent global action and equitable financial support to address these vulnerabilities while safeguarding human rights. A focus on loss and damage mechanisms, sustainable development, and inclusive adaptation strategies is critical to ensure resilience, protect livelihoods, and uphold social equity in the face of climate change impacts.



**Climate Justice** 

### **Climate policy instruments**

In compliance with the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, parties have developed policy instruments and institutional and budgetary arrangements to address the effects of climate change at the national level. The following is a list of some of the instruments that frame climate action in Trinidad and Tobago.

| NDC                                   | 1° NDC 2018   |
|---------------------------------------|---|
| 2030-2050<br>Targets                  | Unconditional goal: 30% reduction in emissions (1.7 MtCO2e) from transport by 2030 compared to 2013.  Conditional goal: 15% reduction by 2030 compared to BAU scenario considering only three sectors (energy, transport and industry).   |
| BUR                                   | 1 BUR (2021)  |
| LTS                                   | No Long Terms Stratey   |
| NC                                    | 3 National Communications (2001, 2013, 2021)  |
| NAP                                   | National Adaptation Plan 2023   |
| Laws relevant<br>to climate<br>change | - Carbon Reduction Strategy 2015, Comprehensive Disaster Risk Management Policy Framework 2014, Environmental Management Act and its subsidiary legislation, Integrated Coastal Zone Management Policy Framework 2019, Integrated Water Resource Management Policy (IWFMI), 2017, Miscellaneous Taxes Act and Green Fund Regulations, NDC Implementation Plan 2017, National Cooling Strategy for Trinidad and Tobago, 2020, National Forest Policy 2011, National Policy and Programmes on Wetland Conservation for Trinidad and Tobago 2001, National Protected Areas Policy 2011, National Protected Areas System Plan 2019, National Tourism Policy 2010, The National Climate Change Policy (NCCP), 2011, The National Development Strategy (NDS), 2015, The National Environmental Policy (NEP), 2018 |

**Note:** This profile is based on the referenced sources and may not fully capture the country's current reality. If you have additional information, please feel free to reach out to us.





### **Context**

#### **DEMOGRAPHIC**



Population of 1.53 million (2024)Source: World Bank, 2024



There is no official information on the proportion of the population who perceive themselves as belonging to or descending from Indigenous peoples.



Per capita emissions, 32.2 tCO2e/cápita.



#### **SOCIOECONOMIC**



Trinidad and Tobago

57.91%



**Population lived** in urban areas Source: ECLAC, 2022



Regional average

81.2%

0.81%



**Human development** index 2021

Source: UNDP, 2022



0.75%

15,243.1usps



GDP per capita in 2021 Source: World Bank, 2022

8,340 usps

**NO DATA** 

Poverty 2022



32%

**NO DATA** 



Gini index in 2020

0.46

#### **HABITAT AND ENVIRONMENT**



**Deaths** attributed to air **pollution** steadily increasing over the last 11 years Source: IHME, 2020



The area of represents native forests **44.5%** of the total area of the Trinidad and Tobago (22,000 km² in 2020)

Source: World Bank, 2022





### **Adaptation and Vulnerability**

With the signing of the Paris Agreement, the parties committed to increasing their capacity to adapt to the adverse effects of climate change and build climate resilience and low GHG development.



Trinidad and Tobago faces heightened vulnerability to climate change impacts, including rising sea levels, coastal erosion, and extreme weather events. These challenges threaten biodiversity, infrastructure, and livelihoods, emphasizing the need for enhanced adaptation efforts.



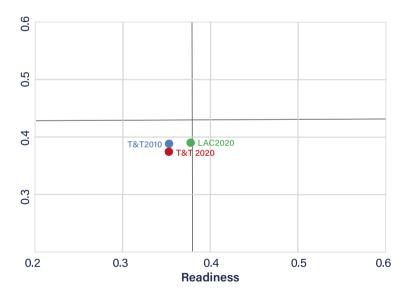
Scaling up ecosystem-based adaptation strategies, such as mangrove restoration and sustainable water management, offers a cost-effective approach to bolster resilience, safeguard vulnerable communities, and preserve natural assets critical for economic stability and biodiversity.

#### 3.1 Vulnerability and Readiness

According to the methodology developed by the University of Notre Dame (ND-GAIN Country Index,) to establish the degree of vulnerability of countries in relation to their degree of readiness, Trinidad and Tobago shows intermediate levels in both aspects, with no major advances in its level of readiness from 2010 to the present (ND-GAIN, 2023).

The green dot, indicates the Vulnerability and Readiness Median for the 15 LAC countries analyzed in this report.

Figure 1. Comparative resilience, 2010-2020 period.



Source: Own elaboration based on ND-GAIN, 2023.

<sup>1</sup> The ND-GAIN Country Index summarizes a country's vulnerability to climate change and other global challenges in combination with its readiness to improve resilience. It aims to help governments, businesses, and communities to better prioritize investments for a more efficient response to the immediate global challenges ahead. In this methodology, vulnerability measures a country's exposure, sensitivity, and adaptive capacity to the negative effects of climate change, considering six life-supporting sectors: food, water, health, ecosystem services, human habitat, and infrastructure. On the other hand, readiness measures a country's capacity to leverage investments and convert them into adaptation actions, considering three components: economic readiness, governance readiness, and social readiness.

The vertical axis shows the vulnerability score, while the horizontal axis shows the readiness score for the country. The dark blue dot repre-

sents the start year, 2010, and the red dot shows the end year, 2020.

Figure 2. Examples of changes observed in Trinidad and Tobago.



The average annual temperature has increased since 1993 between 0.5°C and 2.1°C above the average from 1961-1990. The average air temperature is projected to increase by 0.5°C by 2030 and 1.0°C by 2050.



#### PRECIPITATIONS

Seasonal precipitation is expected to decrease slightly, especially during the dry season, from now until 2030 and undergo significant decreases by 2050.



#### **EXTREME WEATHER EVENTS**

Between 2000 and 2024, Trinidad and Tobago experienced an increase in extreme weather events, such as more intense rainfall, flooding, and storms. For instance, in June and July 2024, consecutive tropical waves caused significant flooding and infrastructural damage nationwide.

Source: NAP, 2023.

Figure 3. Projected impacts

#### **TROPICAL STORMS:**

The potential to be impacted by tropical storms has increased due to changing climatic patterns and warmer sea surface temperatures.

#### **BIODIVERSITY:**

The biodiversity present at the Main Ridge Forest Reserve in Tobago continues to face threats from prolonged droughts, leading to desiccation and habitat stress.

#### **AGRICULTURE:**

Rising temperatures projected for 2030 and 2050 will significantly impact soil aridity, reducing crop yields and affecting livestock.

#### **COASTAL AREAS:**

Loss and degradation of mangroves continue to threaten coastal protection and marine water quality.

# FISHERIES AND AQUACULTURE:

Climate change is directly impacting fisheries by altering fish distribution, reproductive patterns, and increasing flooding risks.

Source: NAP, 2023; NBSAP, 2017, NCCP, 2011.

#### 3.2 Adaptation policies and measures

Trinidad and Tobago has made significant progress in developing and implementing adaptation policies and measures to address the growing challenges of climate change. Through its National Adaptation Plan (NAP) and other strategic frameworks, the country has prioritized key sectors such as water management, biodiversity conservation, agriculture, and coastal protection. These efforts aim to enhance resilience against climate risks, including extreme weather events, flooding, and coastal erosion.

Aligned with the Paris Agreement's pillars of financing, technology, and capacity building, Trinidad and Tobago has integrated climate adaptation into national development planning. This approach reflects a multi-sectoral strategy, combining technical assessments, institutional strengthening, and the implementation of targeted actions to reduce vulnerabilities and safeguard natural ecosystems and socio-economic systems.

**Table 1.** Sectors with adaptation measures according to the Third National Communication of the Republic of Trinidad and Tobago, 2021.

| Sectors |   | Measures   | Degree of implementation (identified priorities / initiatives / flagship projects  |  |  |  |
|---------|---|--|--|--|--|--|
|         | Institutional/<br>Sectoral<br>plans/<br>Financing | Finalization of the Integrated<br>Coastal Zone Management<br>(ICZM) Policy Framework.  | Finalization of the ICZM Policy Framework is ongoing, with efforts to integrate DRM, CCA, and EbA. Public consultations are being conducted to enhance stakeholder engagement. |  |  |  |
|         |   | Revision of legal frameworks to integrate Disaster Risk Management (DRM), Climate Change Adaptation (CCA), and Ecosystem-based Adaptation (EbA). | Legal frameworks are under review to incorporate DRM, CCA, and EbA, aiming for a cohesive approach to climate resilience.  |  |  |  |
|         |   | Improve public participation in ICZM-related projects.   | Initiatives to boost public participation in ICZM projects are in progress, including community workshops and stakeholder meetings.  |  |  |  |
|         | Ecosystems/<br>Biodiversity/<br>Forests           | Conservation of the Main Ridge<br>Forest Reserve and its<br>watersheds.  | Conservation efforts for the Main Ridge Forest Reserve are active, focusing on reforestation and anti-deforestation measures.  |  |  |  |
|         |   | Improved management of coastal and marine areas to address climate risks.  | Coastal and marine management plans are being developed to mitigate climate risks, with emphasis on ecosystem preservation.  |  |  |  |
|         |   | Promotion of sustainable uses of Sargassum through international collaborations and technical assistance.  | Exploratory projects on sustainable Sargassum utilization are underway, seeking international partnerships for technical support.  |  |  |  |
|         | Agriculture<br>Sector                             | Evaluation of the National Food<br>Production Action Plan (2012–<br>2015) to address climate risks.  | The National Food Production Action Plan is under review to integrate climate resilience strategies.   |  |  |  |
|         |   | Development of sustainable strategies for key crops and livestock (e.g., cassava, sweet potato, tilapia).  | Sustainable strategies for key crops and livestock are being formulated, focusing on climate-resistant varieties.  |  |  |  |
|         |   | Expansion of Rocrops' agroecology practices to promote rural development.  | Agroecology practices from Rocrops are being expanded to rural areas to enhance sustainable farming.   |  |  |  |

|               |   | Improved pollution control   | Pollution control measures are being enhanced at industrial   |  |  |  |  |
|---------------|---|--|---|--|--|--|--|
|               | Production/                                     | systems at industrial sites, especially in ecologically sensitive areas.   | sites to protect sensitive ecosystems.  |  |  |  |  |
|               | Industry/ Private Sector/ Circular Economy      | Promotion of energy-efficient technologies in fisheries, such as solar PV systems and retrofits for ice storage. | Energy-efficient technologies are being introduced in the fisheries sector to reduce carbon footprints.               |  |  |  |  |
|               | Economy   | Strengthened export protocols for sustainable agriculture.   | Export protocols are being revised to ensure agricultural sustainability and compliance with international standards. |  |  |  |  |
|               | Risk  | Finalization of the National Disaster Management Policy.   | The National Disaster Management Policy is in the final stages of approval, aiming to enhance disaster preparedness.  |  |  |  |  |
|               | management                                      | Expansion of incentives for climate-resilient fisheries, such as fuel-efficient engines.                         | Incentive programs are being expanded to support climate-<br>resilient practices in fisheries.                        |  |  |  |  |
| ,             |   | Development of national-level risk management plans for vulnerable fisheries infrastructure.                     | Risk management plans are being developed to safeguard vulnerable fisheries infrastructure against climate impacts.   |  |  |  |  |
|               | Water,<br>sanitation,<br>and public<br>services | Universal water metering to monitor and optimize household usage.  | Implementation of universal water metering is underway to enhance water usage efficiency.                             |  |  |  |  |
|               |   | Public education campaigns to promote water conservation practices.  | Public education campaigns are active, raising awareness on water conservation.                                       |  |  |  |  |
|               |   | Improved wastewater treatment systems and pollution control mechanisms.  | Upgrades to wastewater treatment systems are in progress to improve pollution control.                                |  |  |  |  |
| <b>A</b> • 14 | Water<br>resources                              | Expansion of watershed<br>management projects (e.g.,<br>Navet, Hollis, Arena, Hillborough<br>Reservoirs).        | Watershed management projects are being expanded to enhance water resource resilience.                                |  |  |  |  |
| *             |   | Survey and delineation of water and groundwater catchments to identify risks.                                    | Surveys of water catchments are ongoing to assess and mitigate risks.   |  |  |  |  |
|               |   | Implementation of aquifer salinization models to address sea level rise impacts.                                 | Aquifer salinization models are being implemented to counteract sea level rise effects.                               |  |  |  |  |
|               | Seas/Oceans<br>/Coastal<br>Zones                | Coastal infrastructure modifications to address sea level rise and storm surges.                                 | Modifications to coastal infrastructure are in progress to mitigate sea level rise and storm surge impacts.           |  |  |  |  |
|               |   | Development of geospatial tools to map storm surge levels and erosion risks.                                     | Geospatial tools are being developed to map and manage coastal risks.   |  |  |  |  |
|               |   | Risk assessments and repairs for vulnerable coastal infrastructure.  | Risk assessments are conducted to prioritize repairs for vulnerable coastal infrastructure.                           |  |  |  |  |
|               | Cities/   | Regularization of informal settlements in high-risk areas.   | Efforts are ongoing to regularize informal settlements located in high-risk zones.                                    |  |  |  |  |
|               | Human<br>Settlements/<br>Housing                | Development of resilient construction guidelines to address climate risks.                                       | Resilient construction guidelines are being developed to mitigate climate-related risk.                               |  |  |  |  |
|               |   |  |   |  |  |  |  |

| Health                          | Integration of climate risk management into Infection Prevention and Control Policies for healthcare services. | Climate risk management is being incorporated into healthcare infection prevention policies.          |  |  |  |
|---------------------------------|--|---|--|--|--|
|                                 | Monthly use of climate outlooks for early warning systems on climate-sensitive diseases.                       | Climate outlooks are utilized monthly to inform early warning systems for climate-sensitive diseases. |  |  |  |
|                                 | Enhanced data collection on water and vector-borne illnesses.  | Data collection efforts are enhanced to monitor water and vector-borne illnesses effectively.         |  |  |  |
| Evaluation<br>and<br>monitoring | Evaluation of pollution control systems to ensure climate resilience.  | Pollution control systems are evaluated regularly to maintain climate resilience.                     |  |  |  |
|                                 | Analysis of climate data for correlations with long-term health trends.  | Ongoing analysis of climate data seeks to identify correlations with long-term health trends.         |  |  |  |





### **Mitigation**

With the signing of the Paris Agreement, the parties committed to keep theglobal average temperature increase well below 2°C above pre-industrial levels and to continue efforts to limit it to 1.5°C.



Trinidad and Tobago is a high per-capita emitter due to its reliance on fossil fuel industries. Transitioning to renewable energy and decarbonizing key sectors are vital for aligning with global climate targets.



Investing in renewable energy infrastructure, such as solar and wind, alongside energy efficiency initiatives in industry and transport, offers significant potential to reduce emissions while driving economic diversifi-

cation and sustainable growth.

#### 4.1 Country contribution to emissions

Trinidad and Tobago's latest reported total annual emissions were 44.59 MtCO<sub>2</sub>e in 2017, or 42.48 MtCO<sub>2</sub>e without considering emissions from land uses (LULUCF).

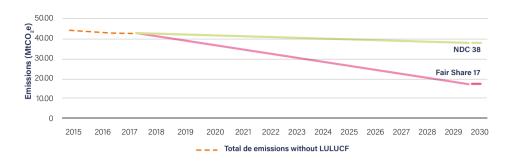
IIn its latest NDC update, Trinidad and Tobago commits not to exceed 38 MtCO<sub>2</sub>e yearly in 2030, which involves a reduction of approxima-

tely 10.5% of total 2017 emissions when considering LULUCF, or 10.6% when excluding LULUCF (BUR, 2021; NDC, 2021).

Whereas, considering the fair share for Trinidad and Tobago, according to the Stockholm Environment Institute Calculator (SEI, 2023), Trinidad and Tobago should reduce its emissions to 17 MtCO<sub>2</sub>e by 2030.

<sup>2</sup> The fair share represents the fraction of emissions that each country should emit at most (in this case by 2030) in order not to exceed the 1.5°C average global temperature increase. In order to estimate this contribution, the contribution developed by the SEI is used because it provides information for all the countries of Latin America and the Caribbean. Considerations used for the calculation (SEI): historical responsibility since 1850. Mitigation path: 1.5 °C standard (excluding LULUCF) Capacity: \$0 development threshold, 50% Responsibility - 50% Capacity.

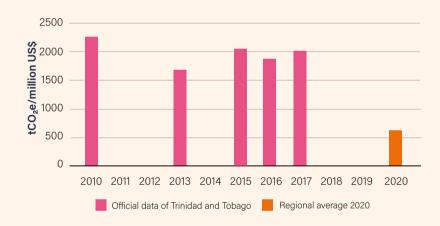
Figure 4. . Total emissions trends without LULUCF, Trinidad and Tobago NDC target and Fair Share without LULUCF



Source: Own elaboration based on BUR, 2021; NDC, 2021; SEI, 2023.

The emissions intensity of Trinidad and Tobago's economy in 2017 was approximately 2,004 tCO<sub>2</sub>e per million USD, based on total emissions of 44.59 MtCOe and a GDP of 22.25 billion USD. While a reduction in emissions intensity occurred between 2010 and 2020, the exact percentage is not confirmed by official sources.

Figure 5. Carbon intensity of the economy (tCO2e/million USD)



Source: Own elaboration based on official country data, BUR, 2022.

Figure 6. Total emissions by sector 2010-2018

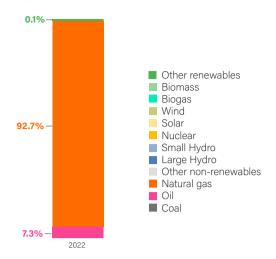


Source: Own elaboration based on BUR, 2021.

#### 4.2 Emissions by sector

Of the country's emissions, 48% come from the industry sector, while another 42% come from the Industry (48) Energy sector (BUR, 2021).

Figure 7. Primary power mix -2022



#### **Energy**

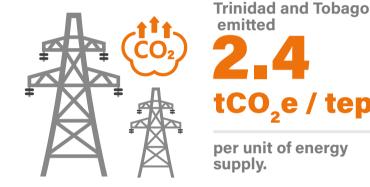
Fossil fuel reserves (natural gas, oil and coal) in Trinidad and Tobago represent a near-zero percentage of the total reserves in Latin America and the Caribbean in terms of energy (OLADE, 2022; British Petroleum, 2022; Our World in Data, 2022).

Historically, the primary energy mix shows a heavy reliance on fossil fuels (100% in 2021) (OLADE, 2022). Trinidad and Tobago displays a reliance on fossil fuel above the regional average of 66% in 2021 (OLADE, 2022).

Source: IEA, 2022.

Figure 8. Carbon intensity Trinidad and **Tobago** 

The carbon intensity of the primary mix reached 2.4 tCO2e/toe in 2021 (OLADE, 2022; EDGAR, 2022), which is slightly above the regional average of 2.25 tCO<sub>2</sub>e/toe in 2021.



Source: Own elaboration based on EDGAR, 2022; OLADE, 2022.

The energy industry is the largest emissions contributor of this sector with a 55% share in 2021, followed by fuels Supply, with 21% (EDGAR, 2022).

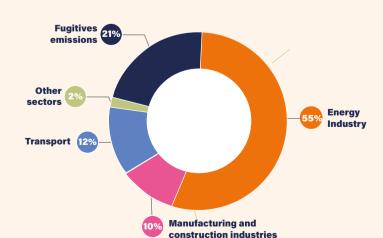


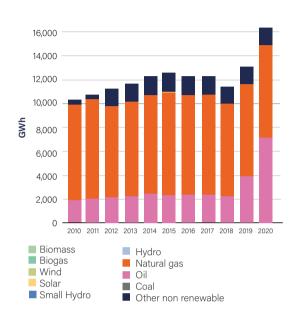
Figura 9. Energy sector emissions by sub-sector

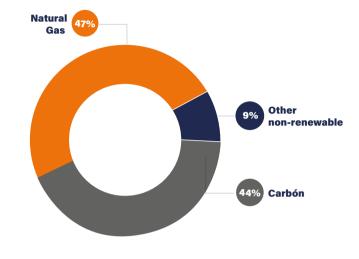
Source: Own elaboration based on EDGAR, 2022.

#### **Power generation**

The share of renewables has been minimal in the past decade, since its power generation mix relies heavily on fossil fuels (Figure 26) (IRENA, 2022). Natural gas accounts for 47% of the power generation mix and coal for 44% in 2020. (Figure 11) (IRENA, 2022).

Figure 10. Power generation mix from 2010 to 2020

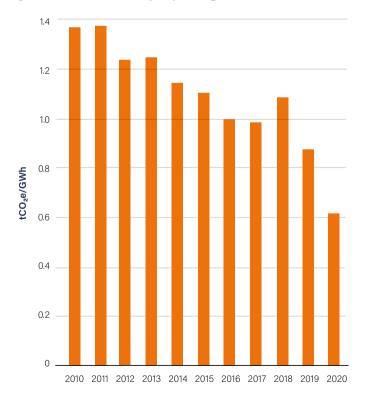




Source: Own elaboration based on IRENA, 2022.

Figure 11. Carbon intensity of power generation (tCO<sub>2</sub>e/GWh).

Regardless, the emissions intensity of power generation has been decreasing in recent years by 55% (EDGAR, 2022; IRENA, 2022).



Source: Own elaboration based on EDGAR, 2022; IRENA, 2022.

#### **Transport**

Emissions from the transport sector have been decreasing by 33% in recent years (EDGAR, 2022).

Source: Own elaboration based on EDGAR, 2022.

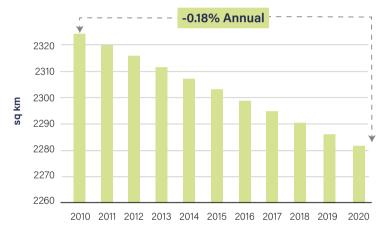
**Figure 12.** Transport Emissions, 2010-2021, and share of total emissions



Figure 13. Area of native forests in Trinidad and Tobago and average annual loss rates

# Agriculture, Forestry, and Other Land Use (AFOLU)

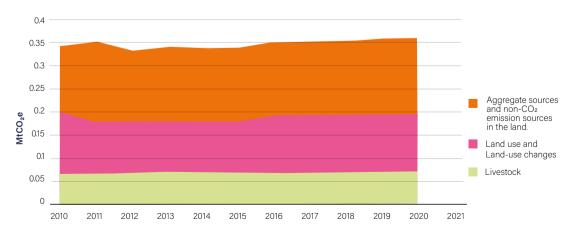
Trinidad and Tobago's forest areas have suffered continuous losses in the last decade (2010-2020) at an average annual rate of 0.18% which is below the regional rate of 0.3% (World Bank, 2022).



Source: Own elaboration based on World Bank, 2024.

Emissions from the Agriculture, Forestry, and Other Land Use sector remained almost constant between 2010 and 2020 (EDGAR, 2022; FAO 2022).

Figura 14. AFOLU emissions by sub-sector



Source: Own elaboration based on EDGAR, 2022; FAO, 2022.

#### 4.3 Mitigation policies and measures

Trinidad and Tobago has demonstrated its commitment to climate change mitigation through policies and measures detailed in its BUR. These initiatives target GHG emissions reductions in key sectors, including energy, transport, waste, and industrial processes, addressing the nation's status as one of the highest per capita emitters in the region.

Mitigation efforts focus on renewable energy integration, energy efficiency improvements, low-carbon technology adoption, and methane recovery through waste-to-energy initiatives. These actions are supported by sector-specific strategies and frameworks, aligning Trinidad and Tobago's efforts with international climate goals and advancing its transition towards a low-carbon development pathway.

Table 2. Mitigation measures in multiple sector

| Sector    | Measure  | Degree of implementation (identified priorities / initiatives /flagship projects)  |  |  |  |  |
|-----------|--|--|--|--|--|--|
|           | Promoting fuel switching to compressed natural gas (CNG)                                 | The government actively promotes CNG adoption as an alternative fuel. By 2024, approximately 15% of the national vehicle fleet uses CNG, supported by 25 refueling stations. |  |  |  |  |
|           | Energy conservation through parking management   | No specific programs or policies for parking management related to energy conservation were identified.  |  |  |  |  |
|           | Upgrade and replacement of aircraft  | The national carrier has replaced 50% of its older aircraft with more fuel-efficient models, including Boeing 737 MAX 8, resulting in a significant reduction in emissions.  |  |  |  |  |
|           | Promoting energy efficiency in maritime and inland waterway transport                    | In 2021, a \$175 million loan from the Development Bank of Latin America (CAF) supported energy-efficient upgrades in transport infrastructure, including ports.             |  |  |  |  |
|           | Introduction of alternative fuels in the Marine Navigation sector                        | No specific data on alternative fuels implementation in the maritime sector was found.   |  |  |  |  |
| Transport | Promoting Information<br>and Communication<br>Technology (ICT) to<br>reduce travel needs | ICT solutions, such as remote work and virtual meetings, have been encouraged to minimize travel, particularly during and after the COVID-19 pandemic.                       |  |  |  |  |
|           | Dissemination of low-emission driving practices and standards                            | Driver training programs have reached approximately 30% of licensed drivers, promoting fuel-efficient driving techniques.  |  |  |  |  |
|           | Introducing electric vehicles in the public and private transport sectors                | Tax exemptions and duty removal have been introduced for electric vehicles, and 50 charging stations have been installed across the country.                                 |  |  |  |  |
|           | Implementation of an air traffic management system                                       | The Civil Aviation Authority has upgraded traffic management systems to optimize flight paths and reduce aviation fuel consumption.  |  |  |  |  |
|           | Revision of fuel subsidies for the transport sector                                      | The government has capped the fuel subsidy at TT\$1 billion annually, aligning fuel prices closer to market rates to encourage energy conservation.                          |  |  |  |  |

Solar PV installation at In September 2024, Queen's Hall, located near the Queen's Park Savannah, the Queen's Park inaugurated electric vehicle (EV) charging stations and installed solar-powered Savannah with EV lighting. This development marks a significant step towards integrating renewable charging stations energy solutions in public spaces. Construct a solar park at The solar park at Piarco International Airport, operational since July 2024, includes a the Piarco International 518.84 kW system generating 767,034 kWh annually, reducing CO<sub>2</sub> emissions by **Airport** 421,102 kg/year. **Rural solar electrification** The rural solar electrification program under the GCCA+ Solar Installation program for underserved Programme has installed solar PV systems at 12 off-grid sites, totaling 108 kW capacity, by 2023. An additional 6 installations (30 kW) are in progress, expected by Energy households February 2025. Training and guidance to The government has initiated public awareness campaigns and training programs to achieve a more efficient promote energy conservation and efficient consumption practices. These efforts are and conservative part of a broader strategy to reduce greenhouse gas emissions and transition to a consumption low-carbon economy. The Ministry of Energy and Energy Industries has developed a Renewable Energy Installing renewable energy sources (10% Policy and Implementation Plan to guide the transition to a low-carbon economy. solar energy on a commercial scale) Acquisition of new high No specific information is available efficiency Single-cycle generators in Tobago **Light Bulb Replacement** The Light Bulb Replacement Programme distributed 1.6 million LED bulbs to 400,000 Programme to replace households by April 2023, achieving near-completion and reducing energy costs for conventional light bulbs participants. with LEDs **Energy audits to improve** Super ESCO Project: Initiated in 2023, focuses on conducting energy audits and energy efficiency in implementing energy efficiency improvements in industrial processes. Target: reduce industrial processes. energy consumption and emissions. Promotion of energy efficiency and heat recovery in industrial processes. **Carbon Capture and** CCS studies are ongoing, targeting major emitters like methanol and ammonia Storage (CCS) studies for production. bp has supported mapping for underground CO2 storage. CO<sub>2</sub> emission reduction. Adoption of efficient technologies in oil and gas production. Integration of renewable Project Lara (112 MW solar PV) and new fuel stations with solar installations are **Industry** energy technologies in operational. Green hydrogen projects with National Energy and European partners industrial sites. focus on offshore wind and renewable energy for production. **Development of green** hydrogen technologies for petrochemical use Reducing venting and In 2023, Woodside Energy updated and implemented 12 operational procedures to flaring in oil and gas minimize gas flaring during facility startups. operations. Promotion of best The government has initiated public awareness campaigns and training programs to

> practices for energy conservation and waste

reduction.

promote energy conservation and waste reduction across various sectors, including

industry. These efforts are part of a broader strategy to reduce greenhouse gas

emissions and transition to a low-carbon economy.

Landfill management to In July 2024, the government launched the Revised Municipal Solid Waste Sector reduce waste volume and Policy Framework, introducing the National Integrated Solid Waste/Resource Manaestablish sustainable gement Policy. This policy outlines a ten-year roadmap to improve waste collection, disposal infrastructure. optimize disposal routes, and upgrade infrastructure, including waste treatment facilities and recycling centers. Implementation of a The National Recycling Policy 2024, part of the revised framework, aims to divert 50% national waste recycling of recyclables from landfills into value-added processes, promoting recycling and program. fostering a local recycling industry. Waste and Feasibility studies for The government has conducted waste characterization studies recommending the waste-to-energy facilities **Water Sector** analysis of waste-to-energy (WtE) potential. Collaborations with organizations like the to recover methane. Organization of American States have provided technical assistance in exploring WtE plant feasibility. Development of The National Integrated Solid Waste/Resource Management Policy 2024 addresses bio-medical and the need for robust infrastructure and innovative technologies to manage various hazardous waste waste streams, including bio-medical and hazardous waste. It emphasizes public management systems awareness and education to foster environmental responsibility.

Table 3. Sectors with mitigation measures for the Agriculture, Forestry, and Other Land Use sector.

| Sector | Measure  | Degree of implementation (identified priorities / initiatives /flagship projects)  |  |  |  |
|--------|--|--|--|--|--|
| AFOLU  | Development of the<br>Managed Agroforestry<br>Programme: Exploration<br>and Development of an<br>Agroforestry Programme<br>for Commercial Lumber | The Tobago Reforestation and Watershed Rehabilitation Programme has been actively promoting agroforestry practices, integrating trees with crops and livestock to enhance land productivity and sustainability. This initiative aims to contribute to Tobago's self-sufficiency through forestry and watershed management, agroforestry, and social enterprise.  |  |  |  |
|        | Improving forest fire protection capacity through sustainable management of Wetland Resources  | The BIOREACH Project, funded by the Global Environment Facility and implement by the Food and Agriculture Organization, has been instrumental in enhancing wildfire management. In 2023, over 40 forestry officers received training in integrat wildfire management, focusing on addressing the root causes of fires and mitigatir threats to biodiversity. The project also provided approximately \$250,000 worth of personal protective equipment, firefighting tools, and communication equipment to the Forestry Division. |  |  |  |
|        | Conservation and reforestation of forests on state lands   | The Forestry Division has been actively replanting at least 100 hectares of forest annually under various reforestation programs. Despite these efforts, deforestation remains a significant challenge, driven by illegal quarrying, slash-and-burn farming,   |  |  |  |
|        | Reduction of deforestation trends  | and squatting. Measures to address these issues include increased patrols, collaboration with law enforcement, and public education campaigns.   |  |  |  |

Source: Own elaboration based on BUR, 2021.





### **Finance**

Under the Paris Agreement, the Parties committed to making sure that financial flows will be consistent with a scenario towards low GHG emissions and resilient climate development.



Trinidad and Tobago's reliance on fossil fuel revenues creates financial challenges for climate action. Mobilizing domestic and international climate finance is crucial for transitioning to low-carbon, resilient development and meeting Paris Agreement goals.



Strengthening access to international climate funds, like the Green Climate Fund, and leveraging innovative mechanisms such as green and blue bonds can unlock resources for renewable energy projects and adaptive infrastructure.

#### **5.1** The role of the public sector

The distribution of the federal budget makes it possible to identify government priorities in the development planning of Latin American and Caribbean countries.

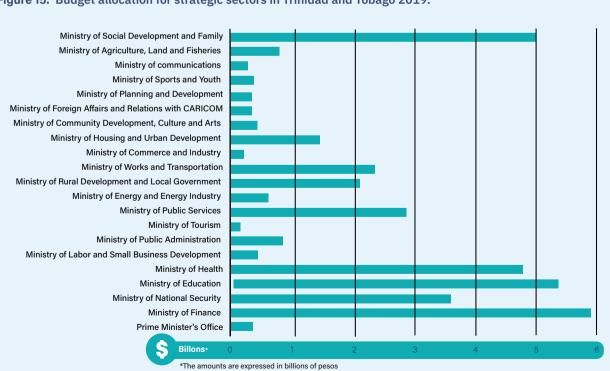
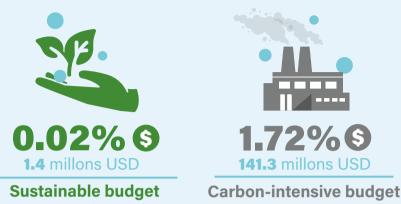


Figure 15. Budget allocation for strategic sectors in Trinidad and Tobago 2019.

Source: Own elaboration based on GFLAC, 2019.

In 2019, the budget directed to hydrocarbons represented 1.72% of the Central Government Budget, i.e., a budget 86 times higher than the country's sustainable budget, made up of spending labeled for climate change, energy efficiency, renewable energy and natural disasters.

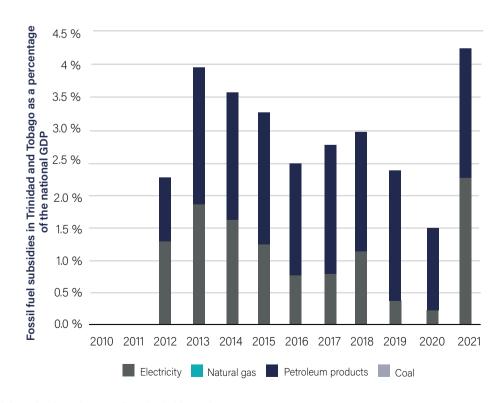
Figure 16. Comparison of Sustainable Budget versus Carbon-Intensive Budget



Source: Own elaboration based on GFLAC, 2019.

Trinidad and Tobago does not have a carbon tax (Our World in Data, 2022). In addition, during the last decade it has maintained a policy of subsidies to fossil fuels, reaching a peak of almost 2% of the GDP in the year 2021, which meant more than 427 million USD, considering the GDP reported by the World Bank for Trinidad and Tobago (FossilFuelSubsidyTracker.org, 2022) in 2021.

Figure 17. Fossil fuel subsidies as a percentage of GDP



Source: Own elaboration based on FossilFuelSubsidyTracker.org, 2022.

Trinidad and Tobago receives international cooperation for mitigation and adaptation projects from different international organizations. These resources include non-reimbursable support and loans.

Table 4. List of approved projects and amounts for Trinidad and Tobago by different international cooperation agencies

| Agency /<br>Institution                               | Scope of the project     | Amount approved, 2016-2022 period (Million USD) |          |                  | Approved projects 2016-2022 period |            |       |             |
|---|--------------------------|---|----------|------------------|------------------------------------|------------|-------|-------------|
|   |                          | No reembolsable                                 | Préstamo | Cofinanciamiento | Mitigación                         | Adaptación | Otros | Preparación |
| Green Climate   | Only Trinidad and Tobago | 3.22  |          |                  |                                    |            |       | 6           |
| Fund (GCF)  | Multiple countries       | 1.30  | 21.73    | 90.31            |                                    | 1          | 1     | 5           |
| Global Environment<br>Facility (GEF)                  | Only Trinidad and Tobago |   |          |                  |                                    |            |       |             |
|   | Multiple countries       | 10.79   |          | 38.85            |                                    |            | 6     |             |
| UN Climate<br>Technology Centre<br>and Network (CTCN) | Only Trinidad and Tobago |   |          |                  |                                    |            |       |             |
|   | Multiple countries       |   |          |                  |                                    |            |       |             |
| Inter-American<br>Development<br>Bank (IDB)           | Only Trinidad and Tobago |   | 657.18   |                  | 14                                 | 5          | 14    |             |
|   | Multiple countries       |   |          |                  |                                    |            |       |             |

**Source:** Own elaboration based on CTCN, 2022; IDB, 2022; GEF, 2022; GCF, 2022.





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#### **Country profile** December 2024

This profile contributes to the iGST Independent Regional Climate Change Balance for Latin America and the Caribbean. Find the Regional Balance and other country profiles at iniciativaclimatica.org

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Note: This profile is based on the referenced sources and may not fully capture the country's current reality. If you have additional information, please feel free to reach out to us.

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