



AGENDA 2030 - THEME II
**BRINGING PROSPERITY
TO THE LIVES OF
OUR PEOPLE**



"BUILDING FORWARD STRONGER"

SDG 7: Affordable and Clean Energy

Ensure access to affordable, reliable, sustainable and modern energy for all



One hundred per cent of the urban population has access to electricity while 96.55 per cent of those in rural areas have access. One of the key priorities of the Government is to reduce the cost of energy and improve energy security. Energy security is viewed as key to improving its competitiveness as an investment destination as well as in improving economic resilience and reducing the nation's carbon footprint. The Government recognizes that in the pursuit of energy efficiency focus must be given to reducing the negative impacts on the environment through exploring and investing in opportunities for expanding the use of renewable energy.

Like most Small Island Developing State (SIDS), Antigua and Barbuda has been reliant on conventional fossil fuels for energy supply—electricity generation and transport. The country imports almost 100 per cent of petroleum products to meet its energy demands. This dependence coupled with uncertainties in the global environment due to declining global oil reserves, conflicts in some major oil producing states also renders the country vulnerable to disruptions in the energy supplies due to external shocks and volatility of the petroleum fuel market. Rising energy costs negatively impacts communities, households and businesses.

Antigua and Barbuda's electricity utility rates range from approximately US\$0.15 per kilowatt-hour (kWh) – US\$0.17 per kWh, which is below the Caribbean regional average of \$0.33 USD/kWh.¹⁴ While the nation's carbon footprint is relatively low, vulnerabilities to the impacts of climate change necessitates adaptation and mitigation efforts.

Antigua and Barbuda continues to make significant progress in advancing sustainable energy policy. Antigua and Barbuda's National Energy Policy (2011) provides the framework for ensuring that the population as well as enterprises have access to affordable, sustainable and modern energy. The National Energy Policy has been designed to create a stable, sustainable and efficient

¹⁴ https://www.energy.gov/sites/prod/files/2020/09/f79/ETI-Energy-Snapshot-Antigua-Barbuda_FY20.pdf (Accessed on June 7, 2021)

energy sector that fosters national economic and social development. It places focus on energy cost reduction; diversification of energy sources; electricity reliability improvement; environment protection and stimulating new economic opportunities. Aligned to the National Energy Policy is the Sustainable Energy Action Plan developed and implemented in accordance with the stipulations of the National Energy Policy. It serves as a road map for the energy future in the country. It outlines strategies action ranging from short to long term. Specifically, it focuses on energy conservation, energy efficiency, and diversification of energy sources, sustainable energy consumption and generation as well as the utilization of available renewable energy sources.

Antigua and Barbuda possesses abundant renewable energy resources, including considerable solar, wind, ocean and biomass potential. The challenges in harnessing these resources are significant and include financial, technological, environmental and other barriers. To support its efforts to increase the percentage of renewables in the energy mix, the Renewable Energy Act was promulgated in 2015 to promote the use of renewable energy resources that are capable of generating electricity such as winds, solar, hydropower, biomass, geothermal and wave/tidal.

In 2019, Antigua and Barbuda received assistance from the International Renewable Energy Agency to develop a Renewable Energy Roadmap. An assessment of the country's power system showed that about 3.55 per cent of the electricity share is derived from renewables. The Roadmap concluded that it is both technically feasible and economically viable for the country to increase its renewable energy share to 100 per cent through a mix of solar, wind, hydrogen and biodiesel for both power and transport sectors. It also noted that full deployment of electric vehicles to further increase the renewable energy share in the transport sector can also be achieved cost efficiently. This is consistent with the revisions made by the Government to its National Determined Contributions under the Paris Agreement, which has proposed a target of 100 per cent of its energy generation from renewable energy sources by 2030 and carbon neutrality by 2050, reflecting the need to contribute to emission reductions and develop a robust energy system based on renewable energy.

Through the renewable energy roadmap¹⁵ Antigua and Barbuda is exploring renewable energy options such as utility-scale solar photovoltaic (PV), distributed solar PV, utility-scale wind and green hydrogen. The island nation recently established interconnection standards and a net billing



¹⁵ <https://www.irena.org/publications/2021/March/Antigua-and-Barbuda-Renewable-Energy-Roadmap>

programme, creating the incentive for households to consider renewable energy such as photovoltaic as a viable option to reduce their household energy costs.

The table below shows a snapshot of actions and targets in energy efficiency and renewable energy that Antigua and Barbuda have either successfully implemented or is in an advanced stage of implementation.

Energy Efficiency Actions		Renewable Energy Actions	
Energy Efficiency Standards	■	Feed in Tariffs	■
Demonstration Projects	■	Net Metering	■
Restrictions on incandescent lighting	■	Interconnection Standards	■
Appliance Labelling Standards	■	Public Loans/Grants	■
Energy Efficiency Targets	■	Renewable Energy Targets	■

Source: *Catalyzing Low-Carbon Sustainable Development in the Caribbean Region*

Key - ■ in development ■ in place

To begin to fulfill its renewable energy targets, the Government in 2018 began implementation of a project geared towards retrofitting government buildings, hospitals, schools and car parks with wind and solar installations. This project will contribute 10 megawatts of renewable power and represents around 10 percent of the island’s energy needs.

Bright Spots, Success Stories and Opportunities

Green Barbuda, 800 kW Solar + 800 kWh Lithium-ion Battery Storage Project

Following the devastation caused by Hurricane Irma in 2017 on Barbuda, the Government will build a solar and storage plant on the island as a first step in Barbuda’s reconstruction and in advancing a more sustainable approach to the country’s development as they seek to ‘build back better’. The project will build a modern, climate-resilient, safe, reliable and sustainable supply of electrical power for Barbuda. This project will include a hybrid solar-diesel power station, with a hurricane-resilient lithium-ion battery storage. The plant is expected to save the Government of Antigua and Barbuda over US\$320,000 a year through the reduction in oil imports and offset 690 tonnes of carbon dioxide annually. Hurricane Irma destroyed 95 per cent of the island, forcing all 1,800 of its residents to be evacuated to Antigua.



Aerial view of the ground-mounted solar power plant at the VC Bird International Airport

The country also recently installed in 2016 a 3-MW ground-mounted solar power plant project at the newly constructed V.C. Bird International Airport. This was Antigua's first major infrastructure project to utilize renewable technology. It has exceeded the original expectations and generated revenue of more than US\$1 million. In its first six months of operation the plant generated 2.5 million kWh and saved 2,000 tons of CO₂ emissions. The solar energy plant covers almost all energy demand of the airport. The significant benefits of the solar power plant to the energy needs of the airport resulted in the V.C. Bird International Airport to be chosen by the Caribbean Journal as the second-best airport of the Caribbean. The installation of the 3 MWP airport solar energy plant represents the first step of a 10 MW clean energy project cluster.

Strategies and Actions that will Accelerate the Achievement of Goal 7

- Develop a green public procurement policy that includes targets for use of energy efficient equipment within the public sector as well as renewable energy technologies as a strategic action to drive and increase the use of renewables in the energy mix as well as reduce the use of fossil fuel energy.

- Develop and implement tax credits and tax exemptions to drive the uptick of renewable energy.
- Develop and roll out a comprehensive energy conservation programme.
- Create the enabling environment to facilitate the use of renewable energy by businesses, including opportunities for wheeling.
- Adopt and adapt the Regional Energy Efficient Building Code to local conditions. The Code establishes the minimum energy efficiency requirements for buildings using prescriptive and performance-related provision inclusive of building envelop, cooling systems, ventilation, lighting, pumping and water-heating systems.
- Promote energy efficiency and conservation practices among consumers through public education.
- Implement activities to reduce energy use in the transportation sector.
- Ensure that the country can generate 100 per cent of its water from reverse osmosis and the energy to power these plants is 100 per cent renewable.

SDG 8: Decent Work and Economic Growth

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



GDP Growth 2019

3.4%

Unemployment Rate

8.7%

Inflation Rate 2015 -
2019

2 - 3%

Debt-to-GDP 2020

89%

As a small open economy, Antigua and Barbuda remains vulnerable to external shocks in the global economy, extreme weather events and climate change. The COVID-19 pandemic has triggered a socioeconomic crisis which is impacting lives and livelihoods. The uncertainty regarding the pathway, duration and full impact of the pandemic threatens economic development which benefits from stable and predictable macroeconomic conditions. The challenges facing Antigua and Barbuda involves treating with the impacts associated with the COVID-19 pandemic, building back better from the unprecedented devastation caused by Hurricane Irma in 2017, overcoming the legacies of the global financial crisis of 2008, and remaining focused on the country's long-term goal of improving the quality of life for all its citizens. Disaggregated, these challenges may seem insurmountable, however, the Government remains focused on building and entrenching resilience in all areas of development.

Over the period 2016 – 2020, the country's strategic imperatives were based on the recognition that the country was in the efficiency-driven stage of development. This stage requires focus on optimizing the benefit to be harnessed from higher education and training, market efficiency (goods, services and financial), technological readiness and market access towards attaining higher levels of competitiveness.

The strategic priorities to improve fiscal and debt sustainability are contained in the Medium-Term Debt Strategy 2016 – 2020, designed to ensure that the country can better respond to exogenous shocks, give greater focus to fiscal discipline, strengthen the financial sector and pursue sustainable and inclusive growth initiatives.

Hurricane Irma halted and, in some cases, reversed progress made in economic development and labour market conditions. Prior to the devastating impact of Irma, Antigua and Barbuda had begun to show stable and predictable macroeconomic conditions evidence by relatively low and stable levels of inflation, a reduction in public debt and economic growth led by the tourism sector. Efforts to restore pre-disaster output levels resulted in an uptick in the construction sector which

combined with the tourism industry contributed to growth of 6.95 per cent in 2018 following growth of 3.1 per cent in 2017.

For 2019, the country continued to experience increases in economic output with growth of 3.4 per cent. In 2020, Antigua and Barbuda's economy plummeted by 20 per cent. This decline follows annual average growth of about 5 per cent over the preceding five years. Much of this could be attributed primarily to the strategies employed to stem the spread of the COVID-19 as well as devastation caused by the pandemic on all the country's major source markets which also were impacted by COVID-19. This also created fiscal pressures as revenues declined and there was increased spending on programmes related to COVID-19 as well as on imports of medicines and medical equipment. The economic and social disruption has and is expected to, inter alia, place downward pressure on economic output, increase unemployment, widen the fiscal imbalance, delay critical development projects and increase the vulnerability of many, particularly the poor.

The country's debt-to-GDP ratio at the end of 2020 was 89 per cent, compared to 67 per cent at the end of 2019. Reducing the debt-to-GDP ratio is one of the key thrusts of the Government in pursuit of debt and fiscal sustainability. Based on International Monetary Fund (IMF) estimates, the economy is projected to decline by 3 per cent for 2021¹⁶. The fiscal deficit also is expected to increase to 9 per cent and the rate of unemployment is projected to be over 30 per cent. Given the high dependence on tourism, the impact of COVID-19 is expected to be significant.

To address the fiscal issues that the country is confronted with due to the global pandemic, the Government has developed a Medium-Term Fiscal Strategy (MTFS) for execution over the next three to five years – 2021 – 2026 which focuses on enhancing revenue performance, increasing efficiency in public spending, and securing debt sustainability.

Regarding labour market outcomes, in October 2018, there were 47,429 employed persons aged 15 and over in Antigua and Barbuda which corresponded to an unemployment rate of 8.7 per cent¹⁷. Unemployment was, however, more prevalent among women (9.9%) than men (7.3%). Notwithstanding, when absolute numbers are considered, there were more employed women than men as women comprise a larger share of the working age population. The overall employment to population ratio stood at 65.9 per cent with females having a lower ratio (62.1 %) than males (70.5 %). By the end of 2020, there were about 11,000 fewer employed persons than at the start of the year. More than 70 per cent of these persons were employed in the hotel accommodation and hospitality sectors. Early estimates by ECLAC (2020) indicate that total employment will be reduced by nine percentage points in the Caribbean with Antigua and Barbuda

¹⁶ World Bank, World Economic Outlook Database. Available at <https://www.imf.org/en/Publications/WEO/weo-database/2021/April>. (Accessed on June 7, 2021)

¹⁷ Antigua and Barbuda, Statistics Division, Antigua and Barbuda 2018 Labour Force Survey Report. Available at <https://statistics.gov.ag/wp-content/uploads/2020/10/2018-Antigua-and-Barbuda-LFS-Report.pdf>. (Accessed on June 7, 2021)

being one of the countries. expected to experience the largest declines of over 13 percentage points due to the issues that have emerged because of COVID-19.

The country has employment legislation ensuring that there is equal pay for equal work regardless of gender. Efforts continue to be made by the government to reduce the high level of unemployment by increasing activities across a range of economic industries such as tourism and ensuring that decent work is placed on the agenda in new and emerging activities. The country also suffers from underemployment and like many other Caribbean countries, a large informal economy. The informal sector is a significant source of employment and income, with the informal economy accounting for as much as 31 per cent of economic activity, with a high proportion of those in the informal economy being women.

With respect to youth employment, employment and sustainable livelihoods for youth is one of the key focus areas of Antigua and Barbuda's 2007 National Youth Policy, including significant attention to the need for decent work. The country also has been implementing a range of initiatives towards facilitating the school to work transition for youth, both male and female, as well as the development and implementation of programmes to support youth entrepreneurship. Some of these programmes include:

- Work-Based Training Component of the Antigua & Barbuda Skills Training and Empowerment Programme (ABSTEP) which is operated by the Department of Labour
- ICT Cadet Programme operated by the Department of Information Technology
- Secondary Schools Internship Programs operated by various secondary schools
- Training and Internships for Youth - youth in the tourism sector are provided with hospitality training and placed in internships, with private internships offered by some of the country's major hotels

Despite this, there remains insufficient work opportunities for youth, reflected by a high overall youth unemployment rate. In 2018, the unemployment rate for youths aged 15 to 24 was 25.7 per cent¹⁸, with even higher rates for youth aged 15 – 19. These rates have been observed despite growth in the economy which was driven by growth in the country's tourism industry. Recent natural disaster events such as Irma in 2017 may negatively impact this situation even further.

With respect to the tourism sector, the country relies heavily on tourism for growth and income generation and the sector accounts for about 47 per cent of annual output when both direct and indirect impacts are considered¹⁹. The levels of unemployment forecasted in the sector due to COVID-19 will, disproportionately affect women more, as they make up about 60 per cent of persons working in Hotels & Restaurants.

¹⁸ <https://statistics.gov.ag/wp-content/uploads/2020/10/2018-Antigua-and-Barbuda-LFS-Report.pdf>

¹⁹ Available at <https://www.bb.undp.org/content/dam/barbados/docs/heat-reports/updated-heat-reports/undp-bb-Human%20Impact%20and%20Economic%20Assessment%20of%20Impact%20-%20Antigua%20&%20Barbuda.pdf>. (Accessed on June 7, 2021)

With respect to the tourism sector and within the context of enhancing international competitiveness, the sector, through public-private partnerships have been implementing programmes and initiatives such as the Green Tourism Initiative which has been developed to assist businesses in the sector to reduce negative impacts on the natural environment while providing opportunities for them to reduce costs and improve the overall efficiency of their operations. Areas of focus include hotels and other tourism related entities implementing initiatives towards:

- Energy conservation and efficiency and use of renewable energy
- Water conservation
- Improved and proper waste disposal practices
- Green building practices
- Green procurement
- Sustainable transportation practices
- Promoting the local economy,
- Employee engagement and consumer education in conservation
- Corporate social responsibility activities

The manufacturing industry is fairly small and concentrates primarily on light manufacturing. Local manufacturers have some access to the United States (US), European, and Caribbean markets. The agricultural sector over the years has experienced a steep decline in productivity and competitiveness and contributes less than three per cent to GDP. There has been focus on the development of agriculture. Focus is being placed on attracting new investments in agriculture as well as financing to increase job opportunities in the sector and contribute to food security.

Micro, small and medium sized enterprises suffer from issues related to operational inefficiencies, to access to capital to business development support and limited use of clean technologies which impact their competitiveness. Other sectors such as Construction, Transport, Storage and Communication and the Wholesale and Retail sector also declined in 2020. The decline of the various economic sectors also impacted employment.

Foreign direct investment (FDI), particularly in industries that create jobs and earn foreign exchange is strongly encouraged by the Government and remains one of the key pillars for advancing economic growth. Through the Antigua and Barbuda Investment Authority (ABIA), and the Ministry of Tourism, the government facilitates and supports FDI and maintains an open dialogue with current and potential investors. All potential investors are afforded the same level of business facilitation services. Priority investment areas that have been identified include tourism and related services, manufacturing, agriculture and fisheries, information and communication technologies, business process outsourcing, financial services, health and wellness services, creative industries, education, yachting and marine services, real estate, and renewable energy.

One of the areas that the country is working towards making significant improvements is in the ease of doing business. The 2020 World Bank Ease of Doing Business Report ranked Antigua and Barbuda at 113 among 190 economies with a score of 60.3²⁰. While the country has done relatively well in areas such as starting a business and getting electricity, there is need for reforms related to resolving insolvency and access to credit, among others.

Remittances also are an important source of income and foreign exchange revenue, reflecting the close ties that the Antigua and Barbuda Diaspora in the USA and Canada have with their families back home. Remittances over the years have also played a key role in shoring up the foreign exchange position in the currency union and provide critical sources of income for the most vulnerable, supporting basic consumption, education costs for children and medical care.

A critical issue faced by Antigua and Barbuda is its inability to access concessional funding or grants from the international financial institutions due to its relatively good economic performance and its designation by the UN as a high-income country. The island nation has been denied loans from the International Financial Institutions (IFIs) because of the skewed per capita income criterion applied by these institutions' policy-making boards. This was particularly troubling during 2020 and at the heights of the COVID-19 pandemic when the country needed assistance. Apart from a line of credit from the Inter-American Development Bank, Antigua and Barbuda did not receive much support from IFIs to assist with the enormous challenges faced, challenges which caused some developed countries to 'buckle'. Notwithstanding, the Government was able to assess some funding from the Eastern Caribbean Central Bank, the Regional Government Securities Market, and other institutions such as the Caribbean Development Bank, the Abu Dhabi Fund, and the country's domestic bank.

The economic fallout due to COVID-19 is predicated on declines in the economies of the country's main tourism markets, increase expenditure on the health sector, financial support for the most vulnerable, which is likely to increase as the pandemic persists, as well as other necessary measures which requires government intervention. The issues and challenges facing the country necessitates innovative and strategic approaches which call on all stakeholders to be engaged in partnerships for recovery and development. The actions taken today must address the immediate concerns of the country, while keeping the island nation on a path to achieve its long-term goals and targets. Some of the more urgent issues and challenges that the country needs to address include:

- Rising unemployment particularly for persons employed in the tourism sector.
- Widening current account deficits due to lower tourism receipts and remittance inflows

²⁰ World Bank, Doing Business 2020: Comparing Business Regulation in 190 Economies, (Washington, D.C., World Bank, 2020). Available at <https://documents1.worldbank.org/curated/en/688761571934946384/pdf/Doing-Business-2020-Comparing-Business-Regulation-in-190-Economies.pdf>

- Slowdown of foreign direct investments
- Sustaining emergency fiscal and monetary measures
- Risk to the stability of the financial system owing to the combination of high debt and low growth can transform liquidity problems into insolvency crisis

Bright Spots, Success Stories and Opportunities

Achievements under SDG#8

Despite many challenges, Antigua and Barbuda can boast of many achievements under SDG#8. Some of these include:

- Consecutive years of economic growth over the period 2016-2019, with a high of 6.95 per cent in 2018
- Low stable inflation within the target range of 2 – 3 percent over the period 2015-2019
- Debt to GDP of 78.5 per cent in 2018, which is below the 80 per cent target of 2019
- Implemented a series of measures to respond to the health, economic and social impacts of COVID-19 including:
 - increase in health- sector expenditure equivalent to 0.5% of GDP
 - 20 per cent reduction in electricity costs to the public and fuel costs to fisherfolk for 90 days
 - a one-year investment incentive framework for home renovation and construction
 - suspension of the common external tariff on food imports and all new tax measures announced in the 2020 budget
 - expansion of social safety net programmes

Medium-Term Fiscal Strategy (MTFS) to Accelerate Recovery from COVID-19

Various targets have been established to help the country recover faster from the fallout due to the COVID-19 pandemic. The implementation of the MTFS over the next few years is expected to lead to the achievement of key fiscal targets as presented below:

- Primary surplus between 0.5 per cent and 1 per cent of GDP by 2023
- Overall deficit less than 1.5 per cent of GDP by 2024
- Wages and salaries accounting for not more than 9 per cent of GDP by 2025
- Tax to GDP to increase to at least 18 per cent by 2023 and to be maintained at a minimum of 20 per cent over the medium-term
- Debt to GDP ratio to fall below 70 per cent by 2030

Entrepreneurial Development Fund

The Entrepreneurial Development Programme (EDP) is for the creation of new business entities which generate revenues, employment and innovation, and is essential for the development of a vibrant micro and small business sector. The vision of the EDP is to create a supportive business environment that empowers entrepreneurs to be successful and contribute to national economic development. The mission of the EDF is to provide entrepreneurs with access to affordable funding,

enabling them to deliver quality goods and services to customers resulting in the creation of wealth to owners and shareholders.

Interventions Aimed at Supporting Youth Entrepreneurship

In an attempt to reduce the number of unattached youths, several interventions are being implemented. Some of these include:

- Creativity for Employment and Business Opportunity (CEBO) which is part of a regional project developed by the CARICOM secretariat, where out-of-school youths are given theoretical and practical training on how to start a business. They must design a business plan, make it marketable and promote a product or service. The target groups are mainly unemployed young men and young women
- Gilbert Agricultural Rural Development (GARD) Centre Business Enterprise Courses and Business Development Support, which is operated by an NGO, the GARD Centre and provides vocational training and business advice to young people and women through its training courses. Courses include business enterprise training, agriculture, yacht maintenance and craft-related skills among others. The target groups are youth and women.

Green Fins Programme – “The only Internationally recognized Environmental Code of Conduct for Diving and Snorkelling”



The Green Fins Programme is part of the country’s thrust for a more sustainable tourism product and to also improve the competitiveness of the tourism sector. The objective of the Green Fins Programme is to increase public awareness and management practices among local diving and snorkeling companies that will benefit the conservation of coral reefs and reduce unsustainable tourism practices. Antigua and Barbuda is the 1st English Speaking country to adopt the Green Fins Programme at the National Level in the Western Hemisphere. There is an established and certified Green Fins team within the Ministry of Tourism with three (3) additional local persons trained and internationally certified as Green Fins Assessors. Six (6) businesses have been certified with more signaling their intention to participate in the programme.

Strategies and Actions that will Accelerate the Achievement of Goal 8

- Reposition Antigua and Barbuda as a premier world class destination that is sufficiently differentiated from other destinations. This will enable the country to restore, maintain and enhance its competitive advantage.
- Transform Barbuda into a Green, Low Density, High-End Tourism Destination.
- Pursue strategies to expand existing efforts and explore new opportunities to utilize the country's marine space and resources. New opportunities could include the generation of energy from ocean currents, wave motion and temperature differences as well as exploration and sustainable extraction of minerals
- Create the enabling environment to allow nationals to engage in entrepreneurial opportunities.
- Improve employment opportunities for youth and aim to reduce youth unemployment levels consistent with the National Youth Policy. Include opportunities spanning the promotion of on-the-job training and work experience, to initiatives for youth entrepreneurship development, and the expansion of skills training, especially in the areas of agriculture, ICTs, and the creative and cultural industries.
- Create strategies to better align education and training to match employment needs.
- Continue to intensify efforts to attract foreign investment in order to reposition the tourism industry and develop new and emerging industries.
- Improve the ease of doing business.
- Promote the use of clean technologies across all economic sectors to enhance efficiencies and competitiveness and put Antigua and Barbuda on the path to advancing its green economy.
- Promulgate a tourism master plan and develop a green growth strategy for the tourism sector.
- Undertake the necessary assessments and provide much needed support to micro and small businesses to expand private sector participation and more so small businesses.
- In the pursuit of the green and blue economies, the Government will also need to assess the new and emerging jobs that could be created in these sectors and ensure that training needs are aligned with the labour market and the opening up of industries associated with these 'new' economies.

SDG 9: Industry, Innovation and Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



Rank ICT Development Index

76/176

% of Households Owning a Computer

59%

% of Households with Internet Access

58%

% Contribution of Other Industries (outside of tourism) to GDP

21.57

The country's Medium Term Development Strategy has as one of its four sustainable development dimensions as Optimal Generation of National Wealth which focuses on ensuring adequate infrastructure, a strong tourism industry that serves as an economic anchor; Barbuda is transformed into a green, low density, high-end tourism destination; and diversification of the economy by prioritizing the export of non-tourism services.

It is universally recognized that adequate infrastructure is essential in creating and achieving higher levels of competitiveness. Quality infrastructure for transport (air and sea) water, telecommunication and electricity has facilitated the development of the country's tourism sector. Focus has been given to maintaining and enhancing the competitiveness of the tourism industry which requires the rehabilitation and upgrading of aging transportation infrastructure. This provides a strong base to reposition the country as a premier world-class tourism destination.

Efforts to improve the economic infrastructure is embedded in an improved physical planning framework which must be integrated into efforts to reduce disaster risks. This integration is seen as important in improving resilience to climate change and reduce and where possible reverse adverse environmental impacts. To accomplish this, priority has been given to improving coordination among agencies to ensure effective planning and implementation of infrastructure projects.

Work is already underway to address issues related to the adequacy of airport and seaport infrastructure. A new terminal building for the V.C. Bird International Airport has been completed and progress is being made with the implementation of a comprehensive plan to redevelop the main seaport.

The contribution of industries outside of tourism including construction, mining, manufacturing, electricity, water and gas was 21.57 per cent in 2019, up from 17.9 in 2016²¹. Antigua and Barbuda’s manufacturing sector is relatively small, contributing 2.29 per cent towards overall GDP in 2019. The performance for 2019 represents a trend decline from 2.7 per cent in 2016.²² The majority of the manufacturing industry comprise light manufacturing sectors such as textiles, distilled liquors and pottery. The major manufacturing exports are bedding, handicrafts and electronic components, the local manufacture of which is encouraged by incentives such as tax- and duty-free concessions.

High cost of labour is one of the contributing factors for the relatively limited scope of the manufacturing industry. Antigua and Barbuda has one of the highest costs of labour in the region which results in the country being seen as uncompetitive among potential manufacturers and investors. The government has introduced projects and legislation such as the Caribbean Basin Initiative, CARICOM and the Lomé Convention which give local manufacturers access to markets in the Caribbean, Europe and the US.

The COVID-19 pandemic is causing disruptions in global value chains and the supply of products and compounding existing challenges. Disruptions in the sector will have an impact on the sectors employment levels.

Development of ICT underpins the full gamut of social and economic development – from e-Government to improving health services, education and industrial development and is key to achieving the sustainable development goals. Antigua and Barbuda prioritizes technological adaptation and innovation as it is viewed as a necessary condition to effect transformative change for sustainable and inclusive outcomes. Over the period 2016 - 2020, a number of strategic efforts were pursued including:

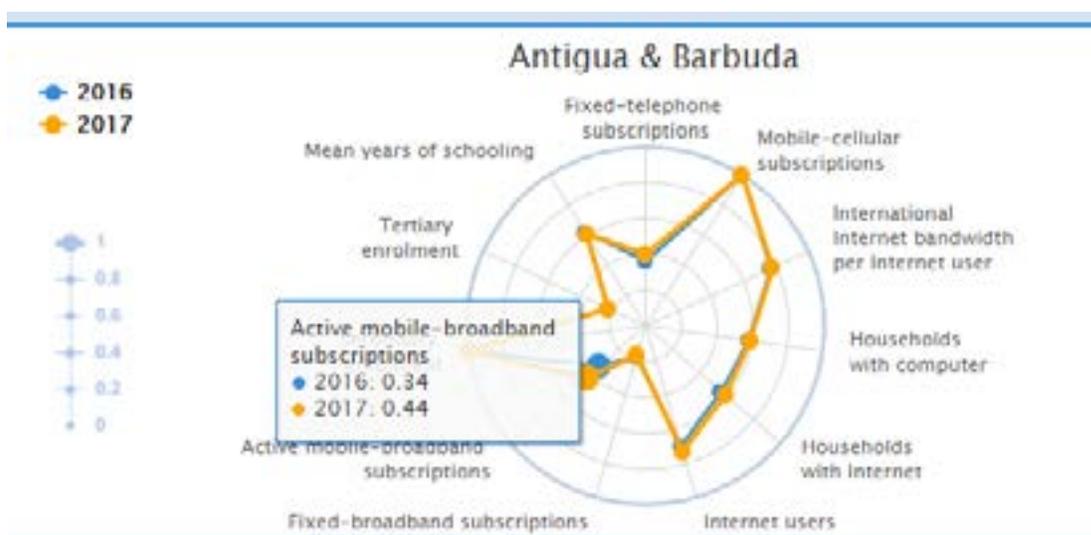
- Building institutional capacity to encourage technological adaptation and innovation. Focus was and continues to be given to supporting business to explore the use of technology to improve performances of enterprises
- Developing an intelligence framework to support technological adaptation and innovation, including green technology towards ensuring timely awareness of opportunities to growth through technological imitation and adaptation
- Developing a framework and function for rational assessment of specific application of technology which will provide a clearer basis for promoting the use of such technologies and will map a general path forward for accelerating the mainstreaming of green technology application in Antigua and Barbuda

²¹ World Bank, “Industry (including construction), value added (% of GDP) - Antigua and Barbuda”, World Development Indicators. Available at <https://data.worldbank.org/indicator/NV.IND.TOTL.ZS?locations=AG>. (Accessed on June 7, 2021)

²² World Bank, “Manufacturing, value added (% of GDP) - Antigua and Barbuda”, World Development Indicators. Available at <https://data.worldbank.org/indicator/NV.IND.MANF.ZS?locations=AG>. (Accessed on June 7, 2021)

The government recognizes the importance of information and communication technology (ICT) and the critical role it plays in promoting growth and increasing productivity. Antigua and Barbuda has made substantial progress in the market for ICT services. The Government through the Ministry of Foreign Affairs continues to monitor ongoing discussions concerning E-commerce at the World Trade Organization (WTO) concerning facilitating electronic transactions, electronic contracts, electronic invoicing and electronic payments which once finalized and multilateralized will have impacts related to SDG 8 and 9. Increased competition has fostered both the expansion of services provision and viable pricing when compared not only with regional levels but also worldwide, resulting in a high share of the population regularly using the Internet.

In 2017, the country ranked 76 out of 176 countries on the ICT Development Index ahead of countries such as Saint Lucia, St. Vincent and the Grenadines, Jamaica and Mexico with a score of 5.48 and above the global average of 5.11.



This relatively high rank was based on a number of indicators including:

Indicator	2017
Fixed-telephone subscriptions per 100 inhabitants	24.26
Mobile-cellular telephone subscriptions per 100 inhabitants	194.08
International internet bandwidth per Internet user (Bit/s)	88622.21
Percentage of households with computer	59.13
Percentage of households with Internet access	58.63
Percentage of individuals using the Internet	73.00

Indicator	2017
Fixed (wired)-broadband subscriptions per 100 inhabitants	9.99
Active mobile-broadband subscriptions per 100 inhabitants	44.21

SDG 9 also focuses on fostering innovation. Technology and innovation are among the primary engines of a nation's growth and economic development. To this end, in 2018, with the support of UNOPS, Antigua and Barbuda launched the first science and innovation centre to support national and regional innovation in science and technology fields with a focus on youth engagement.

Bright Spots, Success Stories and Opportunities

Mobile-Cellular Penetration Rates and the Market for ICT Services

The country's mobile-cellular penetration rates surpass both regional and worldwide levels. The fixed-broadband market has been partially competitive since 2000 and not only is pricing lower than the world's average, but bandwidth per Internet user is largely above it, being on par with the region's average. Antigua and Barbuda has made substantial progress in the market for ICT services. Increased competition has fostered both the expansion of services provision and viable pricing when compared not only with the regional levels but also worldwide, resulting in a high share of the population regularly using the Internet.

Strategies and Actions that will Accelerate the Achievement of Goal 9

- Develop and implement a National Transport Plan which will examine among other things future transport demand, key transport issues, appropriate institutional arrangements for effective management of infrastructure. The Plan should explore business logistics including linkages between the international air and the main seaports and reflect all areas of transport infrastructure including road, sea and air.
- Renew and upgrade critical infrastructure, especially seaports and airports, and improve waste disposal systems as a foundation for maintaining and enhancing the country's competitiveness.
- Put initiatives in place to improve the country's information technology infrastructure and strengthen the regulatory environment. The ultimate goal will be to secure the most cutting-edge, reliable and growth-inducing ICT network for Antigua and Barbuda as well as harness the benefits of advanced ICTs which requires appropriate infrastructures, services, and skills.
- 'Climate proof' physical infrastructure to withstand heavy rainfall events, and more intense storms and hurricanes.



SDG 10: Reduced Inequalities

Reduce inequality within and among countries

Vulnerable, Poor and Indigent

28.3

Gini Coefficient

0.49

Government Budget Allocation to Education

10%

Human Capital Index

0.60

SDG 10 calls for a reduction in inequalities by 2030. The more unequal a society is, the more likely there would be large groups of persons who are left behind. Antigua and Barbuda has been making improvements in inclusion and efforts towards leaving no one behind.

Some of the groups in the country that are most impacted or at risk of being left behind include: the youth, PWDs, the elderly and women and girls. Whilst Antigua and Barbuda continues to make steady development progress, issues such as inequality, poverty and unemployment continues to impact progress. This has been further exacerbated by the COVID-19 pandemic. It is estimated that 28.3 per cent of the population is either poor or at risk of falling into poverty²³. The UN indicates that the island nation has one of the highest Gini coefficients in the Caribbean (0.49), as the poorest 20 per cent enjoy just 4.5 per cent of expenditures compared to 56.3 per cent enjoyed by the wealthiest 20 per cent of the population²⁴.

The Government is cognizant of the fact that inequality and lack of opportunity remains one of the greatest impediments to people-centred development. As such the Government is intent on implementing a range of interventions under SDGs 1 to 5 to reduce the pockets of inequality that exist, increase job opportunities, access to education and health care as well as strengthening the social safety net. The Government also recognizes the role budgetary allocations to key areas such as social protection and other social areas play in reducing inequalities by increasing access to various goods and services and have attempted over the years ensure that budgetary allocations in areas such as education, health and social development are prioritized. For example, the Government usually allocates the largest share of the Government's budget to education – about 10 per cent in 2021 for example.

²³ Antigua and Barbuda, Living Conditions in Antigua and Barbuda: Poverty in a Services Economy in Transition, Accessed at <https://statistics.gov.ag/wp-content/uploads/2017/12/Antigua-and-Barbuda-CPA-Main-Report-Vol-I.pdf>.

²⁴ United Nations Office for the Coordination of Humanitarian Affairs OCHA Antigua and Barbuda Country Profile

Human capital—the knowledge, skills, and health that people accumulate over their lives—is a central driver of sustainable growth and poverty reduction. The Human Capital index (HCI)²⁵ provides a new definition of human capital and quantifies the contribution of health and education to the productivity of the next generation of workers. Antigua and Barbuda has a value of 0.60 on the index tying with Trinidad and Tobago and Saint Lucia and above countries such as Jamaica. The HCI ranges between 0 and 1. The index is measured in terms of the productivity of the next generation of workers relative to the benchmark of complete education and full health. An economy in which a child born today can expect to achieve complete education and full health will score a value of 1 on the index. Countries can use the measure to assess how much income they are foregoing because of HC gaps, and how much faster they can turn these losses into gains if they act now. The HCI therefore suggests that those born today receive 60 per cent of their education and health needs.

The Government also has put in place dynamic social protection mechanisms recognizing that universal access to effective social protection is key to reducing poverty and inequality. More importantly, the Government recognizes the need for a multidimensional approach to address poverty that includes a diversity of needs beyond income.

Aligned to reducing inequalities is also advancing the decent work agenda and creating opportunities for new jobs. By accelerating economic and social transformation the ability to access more and better paying jobs is envisaged to emerge in the near future. The Government also is cognizant of the inequalities as it relates to women and girls and how poverty and inequality disproportionately impact women and therefore is focusing strategies and actions that provide greater opportunities for women and girls.

For the government reducing inequalities also extends to providing opportunities for micro, small and medium sized enterprises to allow them to improve their competitiveness.

The Government remains focused on economic, social and environmental forces that could affect and contribute to widening inequality. Some of these factors include the impacts of a changing climate, technological innovation, climate change, and urbanization. Through policy development and implementation, the Government is taking strategic steps to ensure that these four factors do not lead to widening inequalities but close the gaps in equality and enhance equality of opportunity of opportunity. For example, technological change can be an engine of economic growth, but it can also exacerbate wage inequality and displace workers, while the impacts of climate change can result in the most vulnerable and certain groups such as PWDs suffering most. In the case of urbanization which offers unmatched opportunities, care is being taken to reduce

²⁵ The HCI was launched in 2018 as part of the Human Capital Project, a global effort to accelerate progress toward a world where all children can achieve their full potential. Measuring the human capital that a child born today can expect to attain by her 18th birthday, the HCI highlights how current health and education outcomes shape the productivity of the next generation of workers. In this way, it underscores the importance for governments and societies of investing in the human capital of their citizens.

the incidence of poverty in the capital city thereby reducing the existence of poverty and wealth in close proximity.

Bright Spots, Success Stories and Opportunities

Policy, Legislative and Institutional Frameworks Designed to Reduce Inequalities

Across a range of sectors, the Government has been implementing policies and programmes that support reducing inequality by promoting the social, economic and political inclusion of all, regardless of age, sex, disability, race, ethnicity, origin, religion or economic or other status. Some of these include:

- Medium-Term Development Strategy
- Social Protection Act, 2020
- Disabilities and Equal Opportunities Act, 2017
- National Food and Nutrition Policy (2012)

Strategies and Actions that will Accelerate the Achievement of Goal 10

- Develop a multidimensional Poverty Index, as a means of addressing issues of inequality.
- Undertake national poverty surveys every 5 years to be able to better and more fulsomely address social development and inequality issues.
- Build the capacity to ensure that policy development is undertaken through an inequality lens.
- Enable the macroeconomic policy environment to be conducive to reducing inequality recognizing that fiscal and monetary policies can encourage greater equity. In addition to their direct impact on income distribution, they can also mobilize resources for social policies, including social protection.
- Pursue the path to a green and blue economy as key to eradicating poverty, increasing employment, enhancing food security, managing water resources, and increasing energy conservation and efficiency.
- Implement strategies to ensure that vulnerable persons and their families can, in the event of a natural disaster identify and access shelters that are equipped to handle the needs of women, single parent families, persons with disabilities, young men and women, and other persons with special circumstances.
- Expand the existing social protection mechanisms to consider unemployment benefits as well as sustainable livelihoods and access to insurance mechanisms for the vulnerable as well as financial inclusion.

SDG 11: Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable



The Government of Antigua and Barbuda is committed to transforming urban spaces and human settlements toward ensuring that they are inclusive, safe, resilient and sustainable. Managing rapid urbanization remains a challenge and involves ensuring adequate housing and infrastructure, addressing environmental impact of urban sprawl and reducing vulnerability to natural disasters. The urban population represents about 24.5 per cent of the total population.

Over 95 per cent of the population has access to basic services such as electricity, potable water, sanitation services, and shelter.

Antigua and Barbuda is among the top five countries most exposed to multiple hazards as 100 per cent of the land area and 100 per cent of the population is exposed to 2 or more hazards. Regarding risk to economic output, the country is also among the top 20 countries at risk from two or more hazards with an estimated 80.4 per cent of GDP that could potentially be impacted.²⁶ Critical infrastructure, concentrated in the vicinity of St. Johns, in Antigua, for power generation, drinking water, air and sea transport, among others are particularly at risk and alternative services are limited. One seaport serves the islands and is located on Antigua in the capital St. Johns. The islands are also served by a single international airport on Antigua and two smaller airfields on Barbuda. Damages to these facilities disrupts critical services to the functioning of the country.

Population growth and urbanization has put increasing pressure on land, housing and other resources. Squatting has been on the rise due to rising land prices. A relatively large portion of residential dwellings are built with wood and sheet metal roofing, which is less resilient to natural hazards such as tropical cyclones and manmade hazards such as fires. The issues associated with housing quality were further exposed after the passage of Hurricane Irma in 2017, with that sector suffering significant damage and loss. The capital city St. John's suffers from a myriad of urban issues related primarily to the expanding urban population and expanding economic activity due to its designation as the main commercial hub and tourism centre.

²⁶ <https://www.gfdr.org/sites/default/files/publication/drm-country-note-2010-antigua-barbuda.pdf>

Despite the country's high level of human development, many citizens, are not able to afford decent housing. Focus is being placed on making adequate housing more accessible to citizens, reducing urban congestion, improving poor living conditions, and improving the aesthetics of housing. Specific actions include establishing new housing developments; replacing inadequate and dilapidated shelters on already owned lands; alleviating housing pressure especially in urban areas through the construction of flats in close association with the redevelopment of existing areas. A number of new housing projects are being implemented to allow public servants such as teachers, nurses and police to be able to access affordable housing.

Increase focus has been placed on urban and rural planning. Urban and rural planning is being integrated with land-use planning in order to maximize economic potential and efficiency through the appropriate location of economic and residential activity, reducing poverty and vulnerability and improving living standards. Emphasis is being placed on ensuring that adequate provisions are made to accommodate road and utility services within settlements, reducing vulnerability to natural disasters and climate change. As such, priority has been given to increasing access to adequate housing and improving the living conditions in communities and addressing urban congestion. Improving the aesthetics of housing is also being prioritized as part of efforts to improve national pride and sharing the benefits of economic growth equitably, while at the same time positively impacting the quality of the tourism product.

The COVID-19 pandemic may significantly impact persons who are already challenged by, inter alia, inadequate housing, poor waste management systems and overcrowded public transport. This exacerbates existing challenges linked to urbanization and the repercussion for sustainability cities.²⁷

A National Physical Development Plan (NPDP) was ratified in 2012. It aims to provide a strategic, national spatial development framework that addresses current development issues, and provides a platform for feasible private and public sector development initiatives, reflecting local cultural values and aspirations over the next twenty years to 2032.

The country has adopted the 'Build Back Better' approach following the devastation caused by Hurricanes Irma and Maria in 2017 and initiatives are being put in place to improve construction standards and support more resilient building code amendments. Antigua and Barbuda has embarked on updating and revising the national building code to ensure that climate change resilience and other adaptations are integrated into the construction process, thereby making significant strides in prioritizing the resilience of its building sector. Climate-resilient technologies and interventions are being implemented in public and community buildings (i.e. disaster services, healthcare, fire services, police, schools and community centres).

The preservation of a country's cultural and natural heritage is key to achieving SDG 11. To this end, the Government has been mapping natural and cultural heritage sites. The objective of this initiative is to develop a current and up-to-date inventory of all cultural, traditional and natural

²⁷ <https://data.worldbank.org/indicator/EN.ATM.PM25.MC.M3?locations=AG>

heritage sites. This is to help to raise awareness and support for heritage preservation. The maps give the location and local history of each site. Over fifty sites in Antigua and Barbuda and the trails/paths leading to them have been GPRS mapped. These maps preserve the authenticity and accuracy of the story being told for each site as it also provides that text; and contributes to the diversification of the country's tourism product.

Bright Spots, Success Stories and Opportunities

Housing Support to Barbuda after Hurricane Irma

Antigua and Barbuda and the European Union (EU) have signed an agreement to support the reconstruction of houses in Barbuda after Hurricane Irma in 2017. The programme will rebuild to higher resilience standards 150 houses in Barbuda, following strict and adapted building codes that will allow 150 Barbudan families will return to a safe, high quality.

UNOPS Sustainable Infrastructure Impact Investments

UNOPS is partnering with the government of Antigua and Barbuda and the private sector to launch an innovative affordable housing programme that will create jobs and opportunities for local communities. Over ten years to 2030, UNOPS – through its Sustainable Infrastructure Impact Investment (S3I) initiative – and Sustainable Housing Solutions (SHS) will utilize construction technology that promote sustainability, resilience, disease control and use of renewable energy to develop 10,000 affordable homes.

The Establishment of Management Plans and Mechanisms for the Betty's Hope Estate

The objectives of these plans are to create a functioning management plan for Betty Hope to ensure the preservation of this component of the country's cultural heritage. Outside of the Nelson's Dockyard National Park, this is the largest heritage site on Antigua and has several of its ruins still intact. Hence, with the proper management mechanisms in place, this site will ensure that visitors and locals have a true understanding and appreciation for the country's history.

Strategies and Actions that will Accelerate the Achievement of Goal 11

- Review and as necessary adjust arrangements or surveillance, review and control of developments that surround historical and cultural sites.
- Put in place appropriate institutional arrangements for implementing the National Physical Development Plan.
- Develop local area development planning and the preparation of local sustainable development plans.
- Continue efforts to significantly increase access to housing.
- Creating sustainable mechanisms to facilitate low- and middle-income beneficiaries who are most in need of housing and shelter especially those that are unable to access housing loans and are otherwise unable to finance adequate housing solutions.

Dashboard of SDG Targets – Prosperity

This dashboard shows at a snapshot how Antigua and Barbuda is progressing with respect to the achievement of the SDG targets under **Prosperity**.



SDG Targets #7 – Affordable and Clean Energy	Progress
By 2030, ensure universal access to affordable, reliable and modern energy services.	Yellow
By 2030, increase substantially the share of renewable energy in the global energy mix.	Yellow
By 2030, double the global rate of improvement in energy efficiency.	Yellow
SDG Targets #8 – Decent Work and Economic Growth	
Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries.	Yellow
Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value added and labor-intensive sectors.	Yellow
Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro- small- and medium-sized enterprises, including through access to financial services.	Yellow
Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation.	Yellow
By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.	Yellow
By 2020, substantially reduce the proportion of youth not in employment, education or training.	Yellow
Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.	Yellow
By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.	Yellow
Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.	Yellow

SDG #9 - Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	
Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.	
Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries.	
Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.	
By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.	
Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.	
SDG #10 - Reduce inequality within and among countries	
By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.	
By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.	
Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.	
Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.	
SDG Targets #11 – Sustainable Cities and Communities	
By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.	
By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.	
By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.	

Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.	
By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable Situations.	
By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.	
By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.	