



# The State of Qatar Second Voluntary National Review, 2018 Submitted to the High Level Political Forum on Sustainable Development New York, 8-19 July 2018

# The State of Qatar Second Voluntary National Review, 2018

Submitted to the High Level Political Forum on Sustainable Development



Second Voluntary National Review, The State of Qatar 2018

# **Opening Statement**



I am pleased to present to the High Level Political Forum the Second Voluntary National Review (VNR) of the State of Qatar on the progress achieved in implementing the goals of the Sustainable Development Agenda 2030 in 2018. This review was prepared amidst great progress made by our State in implementing many of the goals and targets of Qatar National Vision 2030 that was adopted in July 2008. His Highness the Emir affirmed that the Vision "aims to transform Qatar into an advanced country capable of realizing sustainable development and a high quality life for its people for generations to come. We will achieve this through diversifying the economy to reduce our dependence on hydrocarbons, investing in knowledge –based economy, and increasing the significance of the private sector".

3

The incorporation of the Sustainable Development Agenda 2030 into Qatar's National Development Strategy 2018-2022 has helped government agencies, the private sector, civil society, higher education institutions, research institutes, and other partners identify strategic goals to be achieved in the years up to 2030. The sustainable development goals assessed in this voluntary review should not be viewed as separate from the rest of the goals and targets of the Sustainable Development Agenda 2030. Rather, the Sustainable Development Goals should be viewed as an integral component of the development process by focusing on its three dimensions: the economic, the social and the environment, highlighting successes, shortcomings, and proposing measures for effective and timely implementation of the goals.

This review shows the progress achieved by our country in implementing the sustainable development goals of ensuring the availability of water and sanitation for all, ensuring that all have access to affordable, reliable, sustainable and modern energy; making cities and human settlements inclusive, safe, resilient and sustainable; ensuring sustainable consumption and production patterns; protecting, restoring, and promoting sustainable use of terrestrial ecosystems; combating desertification and halting land degradation; halting biodiversity loss; strengthening the means of implementation and revitalizing the global partnership for sustainable development.

This review shows that the State of Qatar is an essential partner of the international community that can be relied on in building international security and peace. It also shows that Qatar is always at the frontline providing development and relief assistance to poor countries and refugees. In this context, Qatar had provided development assistance to needy countries and communities in 2017 that exceeded US\$2 billion. Additionally, Qatar has made remarkable progress in implementing the goals designated for the HLPF for the 2018 VNR theme: Transformation towards sustainable and resilient societies.

The review also highlights the mechanisms we have adopted in monitoring, follow-up, and reporting in preparing regular reports submitted to concerned parties, such as the Council of Ministers. I would like to add that Qatar has accomplished the greater part of the infrastructure projects for hosting the 2022 FIFA World Cup. Qatar is ready to make the World Cup event a monumental demonstration for international sports, intercultural exchanges, and a foundation for an advanced peace-loving world.

Ihope I have succeeded in presenting a clear picture of the progress we have accomplished in Qatar.

# Dr. Saleh M. Al-Nabit

Minister of Development Planning and Statistics

# **Contents**

Opening Statement				
Highlights				
Introduction				
6 CLEAN WATER AND SANITATION	Goal 6: Clean Water and Sanitation	15		
7 AFFORDABLE AND CLEAN ENERGY	Goal 7: Affordable and Clean Energy	23		
11 SUSTAINABLE CITIES AND COMMUNITIES	Goal 11: Sustainable Cities and Communities	31		
2 RESPONSIBLE CONSUMPTION AND PRODUCTION	Goal 12: Responsible Consumption and Production	45		
5 LIFE ON LAND	Goal 15: Life on Land	53		
7 PARTNERSHIPS FOR THE GOALS	Goal 17: Partnerships for the Goals	61		
Conclusion and Future Steps				
References				



# **Highlights**

This summary shows the extent of the linkages between the Sustainable Development Goals 2030, the achievements of Qatar's National Development Strategy (NDS) 2011-2016, and the second National Development Strategy 2018-2022 goals and targets to be achieved. Following is a summary of the contents of this review:



With regard to ensuring availability and sustainable management of water and sanitation for all, the whole population of Qatar has access to safe potable water, sewage and sanitation services. There is an increase in the efficiency of water usage and sustainability, and an expansion in building new sewage water treatment plants. Qatar has achieved a reduction in real and total loss of desalinated water to 10% in 2016 compared to a loss of 30% in 2011. Work is underway on establishing a plant for processing water of industrial waste. The ratio of sewage water treated in a safe way was 99% in 2017. The State had also achieved efficiency in water conservation from desalination plants, ground water and sewage water by using modern technologies through international partnerships and by supporting the installation of modern technological equipment at homes. However, some challenges confront the integrated management of water resources run by the Permanent Committee for Water Resources, such as waste caused by excessive use of ground water. About 25% of groundwater is used in fodder irrigation rather than using treated sewage water, especially in the absence of effective pricing of ground water. The agencies responsible for water resources and usage need to promote their institutional capacities; speed up the process of addressing certain water-related issues such as underground injection of treated sewage waters, ground surface water and desalinated water; dealing with surplus sewage water and how to dispose of it.



In the context of ensuring access to affordable, reliable, sustainable and modern energy for all, the State of Qatar has provided electricity services to the whole population and strived to enhance thermal efficiency in energy production through supervising and reviewing the operational efficiency of independent producers. Wide scale awareness raising campaigns about energy rationalization have been conducted and the government has plans to increase the share of renewable energy of total energy mix in the country, which has currently a limited share. Implementing the decision to install energy efficiency cards to air conditioning units is still limited. The state has allocated funds to encourage establishing solar power plants, sustainable energy initiatives and the use of energy saving technologies such as adapting the specifications of solar energy boilers. A transition plan has been developed for using treated sewage water in running cooling stations instead of using potable water; replacing old stations by new more efficient ones; establishing partnerships and companies for solar energy technology; establishing a national committee for renewable energy at the Ministry of Energy and Industry. Nonetheless, there remain challenges to be addressed in the coming period, such as the slow pace of investment in renewable energy to achieve acceptable proportions of Qatar's total energy needs and the expansion of exemptions and grants that include all energy-saving systems such as high-efficiency heat pumps and heaters and energysaving air conditioning systems.



The State of Qatar has been working on making human settlements inclusive, safe, resilient and sustainable by implementing the goals of its national strategy plans since 2011. Satisfactory outcomes have been achieved in the sustainable urban development sector. The State has implemented many infrastructural projects in roads and transport systems, energy, water, sports facilities and sewage systems that guarantee access for all to safe transport, housing, basic services at reasonable costs, in addition to providing care and social protection to vulnerable social groups and protecting society against risks of disasters. For example, Qatar ranked 18 out of 138 countries on the Infrastructure Index of 2015/2016(1), 100% of the population had access to sustainable public transport and to electricity and water services during 2011-2016, and all stages of the national disaster preparedness management project have been completed. The rate of fire incidents was reduced, the number of firms linked to the central operations room at the Ministry of Interior through the early warning system has increased; the number of firms that installed a fire protection system has also increased; and new goals were met for developing the system of electronic security shield. The State is continually concerned with enhancing the quality of life by encouraging cultural activities, protecting national heritage, supporting sports events, expanding public parks and promoting green buildings.

The State will continue its efforts to achieve sustainable urban growth through implementing the goals of the Qatar Master Plan 2032 which was approved in 2014. The development efforts of the country faced some challenges due to rapid population increase as a result of the need for expatriate labor to work on major infrastructure projects. The major challenges are the continued pressures on various resources required to ensure provision of services to the population; the need for expanding green spaces and public parks; reviewing current legislation on minimizing disaster risks; reviewing and modernizing the national energy plan. The State of Qatar is determined to address these challenges according to its national development priorities within the framework of Qatar National Vision 2030 and the National Development Strategy 2018-2022.



The State of Qatar strives to ensure sustainable patterns of consumption and production through encouraging efficiency in consuming natural resources; green buildings and using treated sewage water in central cooling stations and in fodder irrigation; reducing and recycling solid waste. Qatar also supports the provision of plant, fish and animal production system, develops plans and strategies for fishery, natural resources and tourism sectors. Moreover, Qatar has always ratified international, regional and multilateral environmental conventions and has also supported conferences and exhibitions on the environment. It encourages consumers through awareness building and education to adopt patterns of healthy food consumption, optimal use of water, rationalized use of energy, and avoidance of excessive use of underground water.

On the other hand, the State of Qatar continues to face a number of challenges, including the reduction of solid, construction and hazardous waste, the negative effects of climate change, and the pressures on the environment and natural resources resulting from population growth and urbanization.



The State of Qatar endeavors to protect and restore its land ecosystems and promote their sustainable use, combat desertification, and halt land degradation and loss of biodiversity. The total protected area to protect desert ecosystems from overfishing and overgrazing is about 30%. A study of wild birds and biodiversity was accomplished and urgent measures were taken to stop illegal hunting of, and trading in, protected animals. Emissions from the electricity and energy sector were reduced from 46% in 2013 to around 40% in 2016. A project to rehabilitate Qatari land was launched to preserve the flora. In 2018 Qatar ranked 32 out of 180 countries on the Yale University Environment Performance Index. The total area of mangroves increased from 7.3km2 in 2010 to around 9.3 km² in 2015,

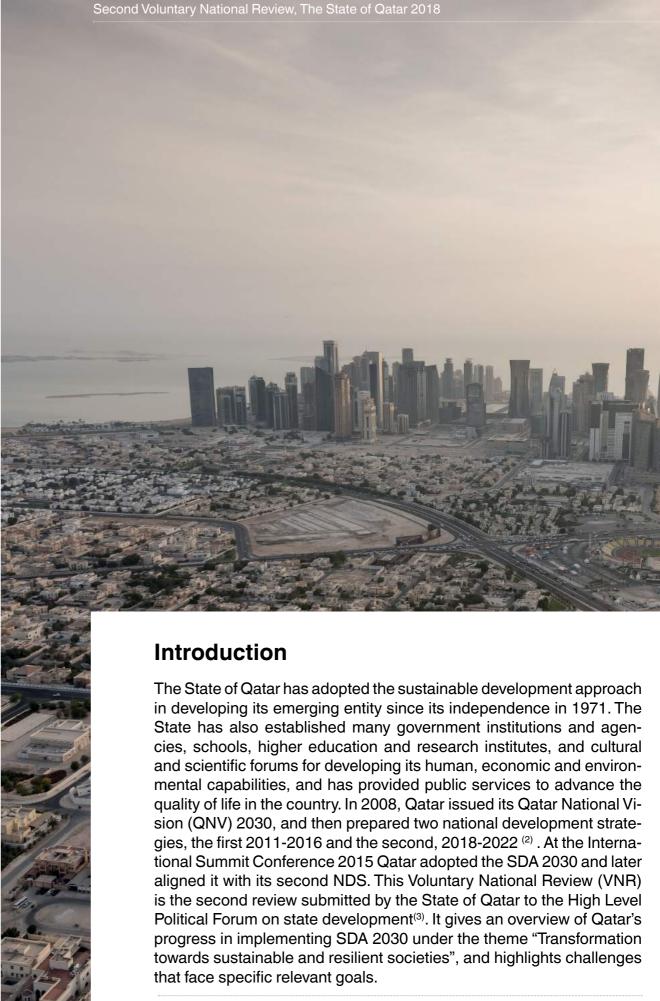
<sup>(1)</sup> www.weforum.org/gcr.

while the total area of mangrove planation (intensive and non-intensive) increased in 2018 to 21.6 km<sup>2</sup>. The green spaces increased with the establishment of new parks that brought the number of parks up to 87. The sum of 37,000 Sidr trees and local plants were planted. Qatar had strengthened its commitments to international conventions and treaties related to environmental preservation. It established several environmental centers and institutions. However, Qatar still faces challenges in preserving terrestrial ecosystems, sewages carrying huge quantities of organic and inorganic compounds to the marine environment, which receives multiple sources of sewage; and the increase in emissions generated by consumption and by the enormous amount of energy needed for water desalination.





At the level of enhancing implementation means and activating international partnerships for sustainable development, the State of Qatar has strengthened its international presence by hosting many international conferences on sustainable development, such as the international follow up Conference on Financing for Development concerned with reviewing the implementation of Monetary Consensus held in Doha (29 November- 2 December, 2008), which sponsored the Doha Declaration on Financing Development, the high level conference on Financing for development and means of implementing the SDA 2030 held in Doha on 18 and 19 November 2017, and the 13th UN conference on Crime Prevention and Criminal Justice held in Doha on 12-19 April 2015. In the case of funding development, the State of Qatar has offered development aid of more than US\$2 billion in 2017 to poor countries, needy groups and refugees. Qatari civil society sponsored the Doha Declaration on the Rule of Civil Society in Implementing SDA 2030. The State of Qatar has also endeavored to promote the use of technology in the implementation of most of its economic, social and environmental development programs aimed at improving the quality of life in the State and establishing sustainable societies in which no one is marginalized. Qatar's National Research Strategy of 2012 provides a framework for research goals, which are pursued by the research development sector of Qatar Foundation. The State also called for enhancing the capacities of its citizens to enable them effectively contribute to the process of development. For that purpose, Qatar has established a multitude of schools and universities, and secured educational scholarships for students to study abroad. Qatar is party to commercial agreements with many other countries, and its trade balance amounted to 137 billion Qatari Riyals in 2017. Qatar has a multiparty international trade system built on international rules within the framework of the World Trade Organization (WTO).



<sup>(2)</sup> https://www.mdps.gov.qa/en/pages/default.aspx

<sup>(3)</sup> https://sustainabledevelopment.un.org/content/documents/16517Qatar\_VNR\_2017\_En.pdf

13

Regarding implementation mechanisms, the ministries and government agencies implement these goals and targets in cooperation with the private sector and higher education institutes and research centers through specialized committees that operate according to the partnership in work approach. The monitoring and follow-up system tracks goals implementation and identifies challenges. The State of Qatar seeks to balance its economic policies to diversify its national economy and to enhance its natural resources and wealth. Qatar was able to set an integrative policy that strengthened the contribution of non-oil sectors in the gross national product to more than 67% in 2017. Much emphasis has been placed on the energy sector being an important source for expanding the national economic base through raising the productive capacity of natural gas to 30%, thereby enhancing the position of the State as the largest producer and exporter of liquified natural gas in the world. According to the International Monetary Fund (IMF) and World Bank sources, the average per capita share of GDP was US\$127,000 in 2016 (4) in purchasing power parity (PPP). In the same year, Qatar's population reached 2.7 million. Several international indicators and indices illustrate the progress achieved by Qatar in many areas of sustainable development fields (see Table 1 below).

Table (1): Qatar's international rank on several selected international indices

Indices		Rank/Number of States	Year
1	Happiness Index (5)	32/156	2015-2017
2	Human Development Index (6)	33/188	2015
3	Global Competitiveness Index <sup>(7)</sup>	14/63	2018
4	Corruption Perceptions Index (8)	29/180	2017
5	Global Peace Index (9)	30/163	2017
6	Economic Freedom Index (10)	29/180	2018
7	Global Innovation Index (11)	49/127	2017
8	Quality of Life Index (12)	26/60	2018
9	Networked Readiness Index (13)	27/139	2016
10	Environmental Performance Index (14)	32/180	2018
11	Competitive Industrial Performance Index (15)	64/148	2016
12	ICT Development Index (16)	39/176	2017

<sup>(4)</sup> https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD?locations=QA

Hosting the FIFA World Cup 2022 will have motivational impacts on Qatar's economy with economic, social and environmental benefits. The State of Qatar renews its commitment to the recommendations of UN summits, including the Rio Declaration on the Environment and Development held in 1997, the Doha Declaration on Financing for Development in 2008, Sendai Framework (17) for limiting the risks of disasters 2015-2030, the SDA 2030, and the Paris Summit on Climate Change in 2015. It is worth mentioning that the State of Qatar has developed several integrated policies in response to UN declarations topped by the Universal Declaration of Human Rights. Qatar has also acceded to several alliances for combating extremism and terrorism, and for promoting international trade in accordance with the UNCTAD approach.

This review shows Qatar's contribution to building international partnerships and to providing development and relief aid to poor countries, UN agencies, and helpless refugees, amounting to US\$2 billion in 2017.

This VNR was prepared by a working group in the Ministry of Development Planning and Statistics, in cooperation with partner ministries, government agencies, and civil society organizations. The working group referred to reports and qualitative and quantitative inputs from all those agencies and organizations. It is worth mentioning that NDS 2018-2022 seeks to improve the lives of all social groups of citizens and expatriates. Qatar seeks to directly reflect the economic growth on the quality of life in several areas, such as education, employment, health, housing, transport and other areas. NDS 2018-2022 aims to advance all societal segments on issues related to gender, women empowerment, children, youth, the elderly and persons with disability. It also aims to grant a key role to civil society organizations, private sector institutions, higher education institutions, research and innovation centers in the implementation, follow-up and monitoring of the NDS goals.

<sup>(5)</sup> https://s3.amazonaws.com/happiness-report/2018/WHR\_web.pdf

<sup>(6)</sup> http://hdr.undp.org/sites/default/files/2016\_human\_development\_report.pdf

<sup>(7)</sup> https://www.imd.org/wcc/world-competitiveness-center-rankings/world-competitiveness-ranking-2018/

<sup>(8)</sup> https://www.transparency.org/news/feature/corruption\_perceptions\_index\_2017

<sup>(9)</sup> http://visionofhumanity.org/app/uploads/2017/06/GPI-2017-Report-1.pdf

<sup>(10)</sup> https://www.heritage.org/index/pdf/2018/book/index\_2018.pdf

<sup>(11)</sup> https://www.globalinnovationindex.org/

<sup>(12)</sup> https://www.numbeo.com/quality-of-life/rankings\_by\_country.jsp

<sup>(13)</sup> http://reports.weforum.org/global-information-technology-report-2016/networked-readiness-index/

<sup>(14)</sup> http://epi.yale.edu

<sup>(15)</sup> https://www.unido.org

<sup>(16)</sup> http://www.itu.int

<sup>(17)</sup> https://www.unisdr.org/files/43291\_arabicsendaiframeworkfordisasterris.pdf



Ensure availability and sustainable management of water and sanitation for all



# First: Aligning Qatar's second NDS goals with Goal 6 of SDA 2030.

The second NDS includes the following goals that enhance the efficiency of water use, availability and rationalization, in addition to sustainable management of sewage services

- Reducing the ratio of potable water loss (both real and administrative) to 8% and establishing infrastructure for using 70% of treated water produced by different projects.
- 2. Providing integrated water management and water pollutants in the industrial area.
- Preserving Qatar's water resources by 2020 through reducing the total loss (real and administrative) of potable water and reducing the per capita consumption of water by 15% through Tarshid National Program.
- 4. Limiting the underground water depletion and developing the underground water tank by 2020.

# **Second: Achievements**

The State of Qatar has accomplished a lot to ensure access to and sustainable management of water and sewage services for all, thanks to the policies adopted in the following areas:

# **Implementation**

The whole population has access to safe potable water through water networks at subsidized prices. Around 100% of the population has access to sewage services. In 2017, around 99% of sewage water was treated <sup>(20)</sup>. Currently, the Public Works Authority is implementing a project for enhancing underground water by collecting and purifying surface or rain water and pumping it into underground wells 400 meters deep in order to maintain the strategic water reserves within its plan (Integrated Master Plan for Wastewater 2030).

Within the framework of enhancing efficiency and sustainability in water consumption, Qatar General Electricity and Water Corporation (KAHRAMAA) has achieved a reduction in the percentage of total losses of desalinated water to about 10%, with a real loss of 4% in 2016. The total length of the sub-water network that transports and distributes water to subscribers is more than 7,000 km, reaching 10,000 km by the end of 2022. The production capacity of potable water is about 395 million gallons/day and can rise to 532 million gallons/day with the operation of Umm Al-Houl Plant project.

<sup>(19)</sup> Qatar's second National Development Strategy 2018-2022, Ministry of Development Planning and Statistics, 2018 (20) Ministry of Development Planning and Statistics, Environmental Statistics Chapter, 2017

# International partnership

Since the beginning of 2018, the State of Qatar, in cooperation with European and American scientific and research institutions (Austria, Britain, Germany and USA) has been working on preparing a sustainable strategy for food, water and energy resources in Qatar's urban areas. Also, the Public Works Authority and Public Parks Department have both applied irrigation by recycled water rather than potable water in all parks in Qatar as part of enhancing and rationalizing the use of water.

# Application of technology

The efficiency of desalination plants has increased due to building and operating new plants. Also, water is being desalinated by applying the method of reverse osmosis that is partially operational and pumping water to the network during the first phase of Ras Abu-Fintas plant's production with an estimated capacity of 36 million gallons/day in April 2017. The production of desalinated water by Umm Al-Houl Plant by reverse osmosis is 65 million gallons, while its total production is 136.5 million gallons<sup>(21)</sup>. Modern meters were installed on underground water wells as a pilot phase in 2017. A feasibility study was completed on injecting the underground reservoir with desalinated water to construct a public reservoir for stocking up and recovering that water. The new reservoir will be a huge strategic water reservoir facility that can provide up to 90 days of water consumption through digging 40 new injection wells and 105 monitoring wells<sup>(22)</sup> in addition to installing sensors for monitoring and detecting poisonous materials, chemicals, biological and radial pollutants in Kharamaa tanks and water plants. Digital controls and optic fiber cables are also used in main water tanks. The Qatar District Cooling Company (Qatar Cool) has succeeded in using treated sewage water instead of potable water to run its two functioning cooling stations in the Pearl and West Bay districts. This has secured 1.7 million cubic meters of potable water in the past 18 months. It has also saved in used energy. Cooling districts by means of treated sewage waters by suppliers (for themselves and for others) has produced around 403 thousand tons of cooling, saved around 488 GW of electricity and 2.6 million cubic meters of potable water compared to traditional cooling methods.

## Governance

The Permanent Water Resources Committee is responsible for decisions concerning various water issues, policies, management and strategies. The Committee was established along with the approval of the water policy in 2018. To achieve water security, Kahrama is building 24 new water tanks in five different sites that will be completed in 2026. The electricity and water tariff law was promulgated in 2016 and is based on gradation of water consumption system that aim to rationalize and regulate consumption on one hand, and to reduce financial subsidy and government expenditure on electricity and water on the other<sup>(23)</sup>. The national program for rationalization and energy efficiency was launched and was able to reduce per capita consumption of electricity by 18%

and water by 20% between 2012 and 2016<sup>(24)</sup>. A draft law was prepared pertaining to irrigating public parks and green spaces at the end of 2017, but its executive bylaws are still pending.

# **Third: Challenges**

Challenges to the availability and sustainable management of water and sewage services can be summed up as follows:

Raising awareness of water issues, problems, importance and preservation, particularly in the housing and agricultural sectors is still below ambitions. Increasing demand for water leads to building additional desalination plants and escalating exploitation of underground water which in turn leads to rise in cost and to negative environmental outcomes. The possibility of recovering the cost of desalinating water and sewage supplies is quite limited in light of a tariff that does not reflect real costs, in addition to subsidizing institutional capacities responsible for securing desalinated water, treated sewage water and underground water. There is a multiplicity of government agencies concerned with water and water management with weak coordination among them, and data on water resources and uses are scattered and outdated. Excessive extraction of ground water in the agricultural sector is estimated at 252 million cubic meters per year. 25% of which is used for irrigating fodder and is considered a waste of water. There is also the issue of how to limit water consumption in Qatar (high per capita water consumption) in light of the decline in underground water levels, increasing exploitation and possible depletion. There is also an increase in domestic consumption with slow implementation of the integrated water management approved in 2017, as well as excessive exploitation of water in the agricultural sector despite its limited contribution to the Gross Domestic Product, and particularly the continued planting of fodders that consume large amounts of underground water, while it should be irrigated with treated sewage waters. Added to that, there is no effective tariff for using underground water, while some water issues have not been not addressed and solved in due course, such as underground injection of desalinated water and treated sewage water that might contain higher concentrations of chemical and biological pollutants.

<sup>(21)</sup> Qatar General Electricity & Water Corporation "KAHRAMAA" (unpublished data)

<sup>(22)</sup> Qatar General Electricity & Water Corporation "KAHRAMAA" (unpublished data)

<sup>(23)</sup> Qatar General Electricity & Water Corporation "KAHRAMAA" (unpublished data)

<sup>(24)</sup> Qatar General Electricity & Water Corporation "KAHRAMAA" (unpublished data)



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





# First: Aligning Qatar's second NDS goals with the 7th goal of SDA 2030<sup>(25)</sup>

The State of Qatar strives to achieve the following:

- Improve energy efficiency by 10%; benefiting from the infrastructure of the existing Gulf linkage network; increase the productive capacities of power generating plants; improve the production and use of renewable energy to meet the increasing demand for electric power and attempt to produce 200 Megawatts of renewable energy by 2020, to be raised to 500 Megawatts at a later time.
- 2. Determine the components of the energy mix to ensure the security of electric energy supplies, promote the integrated management of water and electricity by the end of 2022 and reduce the average per capita consumption of electricity by 8% through Tarshid (Rationalization) national program.
- 3. Provide data on new and renewable energy.

# **Second: Achievements**

In the context of achieving sustainable development goals, limiting pollution and green house emissions, and meeting the country's increasing demand for energy, the State of Qatar made several achievements in the past few years related to all people having access to affordable, modern, reliable and sustainable energy services through adopting policies at the following levels:

# At the Level of Implementation

Around 100% of the population in Qatar is currently supplied with electric power. Al-Houl Power Plant project is underway and is expected to be completed in mid-2018 with a productive capacity of 2,520 Megawatts of electricity and 137 million gallons of desalinated water daily at a total cost of US\$3 billion using reverse osmosis technology that will provide 25% of the country's power needs and 30% of its water needs. Moreover, the best sustainable energy initiative competition was launched as part of the national rationalization program and energy efficiency (Tarshid) which aims to enhance environmental awareness about the concept of sustainable energy and raise public awareness of the culture of efficient use of natural resources. Kahramaa has established the first solar power plant in Duhail that produces 10 Megawatts of electricity in its first stage in 2018. Kahramaa's future projects will generate 100 Megawatts (in cooperation with the Supreme Committee for Delivery & Legacy) for supplying the 2022 World Cup stadiums with electricity. The per capita consumption of electric power in Qatar was 15,307 Kilowatt/hour per year in 2014. This consumption was reduced by 18% during the rationalization program period (2012-2016)<sup>(26)</sup>. Moreover, 17 main electricity transmission stations were opened and 14 high power land cables (220 KV, 132 KV and 66 KV) were installed. Boiler and solar board's specifications were completed.

<sup>(25)</sup> Second National Development Strategy 2018-2022, Ministry of Development Planning and Statistics, 2018 (26) Qatar General Electricity & Water Corporation "KAHRAMAA" (unpublished data)

# At the Level of Applying Modern Technology

In the context of enhancing efficient use of power and gas, Texas A&M University at Qatar has launched the smart networks centre which builds smart networks in Qatar that merge electric power with the infrastructure of ICT technologies in order to produce more efficient, environmentally safe and clean electricity. Kahramaa is implementing two initiatives for promoting the use of technology in power saving through setting the criteria of all electric appliances and plumbing tools in Qatar, and they are expected to be completed in 2018/2019. Electric boiler specifications were approved and air conditioning split units efficiency was raised from 9.5 to 11.5, and that of window units from 8.5 to 10 (27). Initial designs of electric transmission networks for supplying major subscribers such as World Cup 2022 stadiums were prepared. Linking rail stations with land cables of 132 KV voltages and a cyber security project at the control centres of electric transmission were completed. Sources of power were diversified through encouraging investment in renewable energy that will increase Kahramaa power production to 200 Megawatts in 2022. Studies were conducted for qualifying Ras Abu Fintas district through replacing old plants with new more efficient plants that use high level technologies and produce low emissions. Kahramaa is also working on alternative energy projects and optimal use of natural gas in the context of enhancing the efficiency of power production, distribution and consumption.

# At the Level of Partnership

A memorandum of understanding was signed in 2018 between Qatar Petroleum and Kahramaa for establishing a company that specializes in producing electricity using solar power. Also, Siraj Power Company was established in April 2017 for electricity production using solar energy, and the energy purchasing agreement will be signed in 2018, with a production capacity of 500 Megawatts before the summer of 2020 (28). A number of solar-related industrial companies have also been established, including Qatar Solar Technology Company, which produces high-quality polysilicon in Ras Laffan Industrial City, and uses more than 90% of solar power units, also in addition to a solar power farm that produces 101 Megawatts of solar energy.

## At the Level of Governance

A national committee for renewable energy was established at the Ministry of Energy and Industry in 2017 that included representatives of government agencies for the purpose of preparing a national strategy for renewable energy<sup>(29)</sup>. Amiri Decree No. 5 of 2018 was issued for allocating plots to Kahramaa for constructing an electricity and water producing plant.

Tarshid program is based on three elements: applying modern technology, reviewing tariffs and raising awareness. The program combats climate change phenomenon through reducing CO2 emissions by 8.5 million tons since its inception and saving around 4 billion Qatari Riyals (30). Kahramaa Awareness Park was inaugurated in October 2017

offering awareness-raising lectures to students, researchers and other sectors aimed at enhancing a culture of reducing water and electricity consumption in order to preserve the environment.

In addition to passing legislation to cover the financial costs and rationalize energy consumption (fuel prices were raised since January 2016), importation of tungsten lamps was prohibited and replaced with LED energy saving lamps, electricity and water violation penalties were increased, thermal insulation of buildings was applied and enforcement of regulating lists for all electric appliances is underway in 2018.

# **Third: Challenges**

The challenges of ensuring access to energy services for all can be summed up in the following points: A slow pace towards investment in and supply of renewable energy, and supporting its production in the public and private sectors to achieve acceptable ratios of Qatar's total energy needs in the short and medium terms; as well as developing appropriate legislation and regulations to motivate investors and sectors to use solar power, whether in the form of grants, government subsidies or plots of land that encourage investment in clean technologies. There is also a need for better knowledge of technologies required for generating renewable energy, storage systems, as well as expanding the scope of customs and taxation exemptions to cover all energy-saving systems.

<sup>(27)</sup> Qatar General Electricity & Water Corporation "KAHRAMAA" (unpublished data)

<sup>(28)</sup> Qatar General Electricity & Water Corporation "KAHRAMAA" (unpublished data)

<sup>(29)</sup> Ministry of Energy and Industry

<sup>(30)</sup> Qatar General Electricity & Water Corporation "KAHRAMAA" (unpublished data)



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



One of the features of urban growth in Qatar is that most of its population live in urban centers. This growth has been accompanied by the government's attention, within its policy frameworks and strategic plans, to continuously develop and strengthen the infrastructure to deliver basic services to the population. In response to rapid urbanization, the Government has adopted Qatar National Master Plan in 2014 <sup>(31)</sup>. Qatar was ranked 18 out of 138 countries on the Infrastructure Index in 2015/2016. During the period 2011-2016, 100% of the population had access to suitable transportation. The State efforts for sustaining urban growth will continue through by implementing the relevant goals and targets of Qatar National Master Plan and the National Development Strategy 2018-2022. The following paragraphs will cover the most important achievements and challenges.

<sup>(31)</sup> http://www.mme.gov.qa/QatarMasterPlan/Downloads-qnmp/QNDF/Arabic/Arabic\_QNDF.pdf

First: Ensure universal access to adequate housing, basic services and safe and affordable transport systems, improve road safety, promote inclusive urbanization and the capacity to plan and manage human settlements

# **Achievements**

Qatar has addressed housing issues through the enactment of legislation and policies and the formulation of national development strategies and comprehensive urban plans since 1964 by Law No 1 of 1964 pertaining to the Establishment of a system of popular housing, followed by Decree No. 7 of 1977 organizing the housing of senior Qatari officials, and other subsequent legislation amendments. In 2007, Law No. 2 on the housing system was promulgated to provide citizens with adequate housing. Under this legislation, the beneficiary is granted a cash amount to buy a land, or is allocated a plot of land needed to build a house. A housing loan is also granted on concessional terms to be repaid in 30 years. The law also covers the provision of housing units through acquisition or rent. This system has not prevented the continuation of the payment of housing allowance, which is also granted to employees. Those who benefit from the Qatari housing system also include unmarried Qataris and Qatari women married to non-Qataris, as well as divorced and widowed Qatari women, and social welfare recipients such as the disabled, orphans and the unemployed. It is worth mentioning that Qatar National Master Plan 2032 includes goals that promote the provision of suitable housing for all.

With regard to transport, the Qatari Government established a new Ministry of Transport and Communications in June 2013, with some progress being made in the preparation of Qatar Transport Master Plan. The first phase of the rail tunnels and more than 61% of the infrastructure has been completed. More than 2,200 km of new roads, including 990 km of highways, more than 12,000 parking spaces, as well as 1,005 bridges and flyovers, and 59.3% of metro lines have been completed. 70% Of Doha Metro project is expected to be completed by the end of 2018. It aims to establish an integrated public transport network, reduce the use of cars especially for students, workers and employees, decrease accidents and traffic congestion, and provide a fast and affordable means of transport to reduce pollution. In the shipping sector, Hamad Port began operations in 2016 with a capacity of 2 million containers per year and is expected to transport 6 million containers per year after completion of its operational phases in 2020. The Ruwais Port was inaugurated in 2016 for regional maritime trade, and the commercial traffic is now diverted to Doha Port, which is being prepared to receive sea vessels. A special review is underway for the second and third phases of the new Doha Port project, with the capacity of the port already reaching its maximum in 2010.

Regarding air transport sector, the opening of the new Hamad International Airport resulted in the growth of air traffic from 23 million passengers per year to 37 million passengers in 2016. The National Development Strategy 2018-2022 has set out among its sectoral priorities, the provision of a smart and sustainable infrastructure that supports urban and economic development through achieving the following targets:

- 1. To expand and modernize air and sea transport facilities and upgrade the efficiency of their operating systems by the end of 2022<sup>(32)</sup>.
- 2. To continue the implementation of Doha Metro's first phase and operate it by 2020.
- 3. To complete the implementation of the comprehensive and integrated national infrastructure plan in coordination with the stakeholders by 2022.
- 4. To implement the policies and executive measures for Qatar National Master Plan by 2022.

As for road safety, significant progress has been made in the Government's efforts to improve road safety during the National Development Strategy 2011-2016, despite the large increase in population, public and private vehicles and frequent roadworks. The mortality rate was reduced from 12 deaths to 6.9 deaths per 100,000 inhabitants, and the pedestrian mortality rate fell from 3.5 deaths to 2.2 deaths per 100,000 inhabitants. The National Development Strategy 2018-2022 aims to reduce mortality to 6 deaths per 100,000 inhabitants and reduce severe injuries to 25 per 100,000 inhabitants.

Qatar National Master Plan provides an umbrella for the preparation of an oriented national spatial development framework and development plans at the municipal level in addition to the determinants of urban development. Thus, the draft plans for the spatial development of the eight municipalities and the plans of the urban centers (17 plans in progress) have been approved for the municipalities studied. Comprehensive sub-infrastructure plans have been prepared and are under implementation. The state's efforts to promote urbanization have been reflected in high standards of infrastructure quality since 2008. Qatar's hosting of the 2022 FIFA World Cup will further focus on urban development and will create public entertainment spaces that will make the urban environment healthier and more suitable for communities' living.

# Challenges

The rapid growth of the population in Qatar is a major challenge. From 2004 to 2017, the average annual growth rate was approximately 9.4%<sup>(33)</sup>. This situation has resulted from the urgent need to bring expatriate workers to execute the many development projects implemented by Qatar during the last three decades, as well as to build necessary facilities to host the 2022 World Cup. These challenges can be summed up in pressures on natural, material, human and environmental resources resulting from Qatar's development programs and projects that aim to provide basic services such as water and electricity, energy and sanitation, housing and health.

With the exception of buildings, the scarcity of natural raw materials produced by Qatar is hampering urban expansion in public works such as roads, bridges, airports, ports, docks, shipyards and all other structures. Qatar often imports the needed construction materials from abroad. There is also an urgent need for more coordination between relevant government stakeholders at the different levels of urban projects' implementation, especially in terms of prioritization, accurate size of investments required, demand expectations, effective implementation to achieve sustainable transport, issuance of appropriate legislation and provision of relevant data and information, as well as building technical human capacities.

# Second: Strengthening the efforts to protect and preserve the world's cultural and natural heritage

The preservation of the cultural and natural heritage, the promotion of cultural exchange, and the promotion and fostering of the dialogue of civilizations and coexistence are all important components of Qatar National Vision 2030 goals and targets. Therefore, the Culture Sector Strategy 2011-2016 included targets to promote intercultural understanding, protect and develop Qatar's cultural heritage, preserve national identity, promote cultural knowledge among young people, attract and nurture high-quality talents to enrich and stimulate the culture sector, raise cultural interest and promote Qatar as a vibrant cultural destination. Qatar ratified the Convention for the Protection of the World Cultural and Natural Heritage in 1984. Given the close relationship between the values of culture and sports, the National Development Strategy 2018-2022 has adopted an approach linking them to the goal of building a creative cultural, sports and youth system that supports society in its movement towards progress while preserving its values and principles. The strategy of Culture and Sports Sector 2018-2022 seeks to make culture a framework for the preservation of identity and the promotion of citizenship and cultural communication. This will be achieved through the development and implementation of mechanisms for the protection and development of the Qatari cultural heritage by the end of 2022, and the development and implementation of mechanisms to support national cultural production in mid-2019. Qatar annually celebrates a Sports Day in February where employees in most public agencies participate in a variety of sports activities.

# **Achievements**

In terms of cultural infrastructure, a number of cultural buildings and facilities have been established, such as Qatar National Library, which includes one million books, the Museum of Islamic Art and the Arab Museum of Modern Art. Qatar Museums Authority has developed an ambitious plan for ten years to build several museums until the end of 2023. Qatar National Museum is being renovated to highlight Qatar's history and heritage, and celebrate the country's future. Qatari competent authorities started to digitize hundreds of valuable and rare books, maps and manuscripts.

# **Challenges**

The most important challenges facing Qatar's efforts in the cultural field are the obsolescence of the legislative structure and its need to keep abreast of developments and changes at the national and international levels. There is also an urgent need to develop policies for the culture sector based on evidence-based relevant studies. The Culture and Sports Sector Strategy 2018-2022 seeks to address these difficulties through relevant programs and projects.

<sup>(32)</sup> For details of projects related to these goals, see the second NDS 2018-2022

<sup>(33)</sup> Ministry of Development Planning and Statistics, Demographic and Social statistics, Population Chapter, 2017

# Third: 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, with a focus on protecting the poor and people in vulnerable situations

Qatar has not experienced any natural disasters; meanwhile the Government has developed disaster risk management plans that will be addressed later. In the area of providing protection for poor and vulnerable groups, social welfare and social protection systems have been established. These systems have been strengthened through the development of a sectoral strategy that aimed at establishing an effective and sustainable integrated social protection system, building an enabling environment for the integration of marginalized and vulnerable groups in society and in the workforce, and broadening participation through smart partnerships. This aspect takes an advanced position in the development priorities of Qatar, and is of special interest to the political leadership that supports the establishment of a cohesive, just and inclusive society for all.

# **Achievements**

Public spending on social benefits as a percentage of GDP rose from 0.05% in 2008 to 0.14% in 2015<sup>(34)</sup>. The promotion and protection of the rights of persons with disabilities is a top priority for Qatar through its ratification of the Convention on the Rights of Persons with Disabilities. Qatar has made significant strides towards promoting the rights of marginalized and vulnerable groups and their integration into society and in the labor force, especially in employment and education (35). Substantial progress has been made in providing persons with disabilities with support and means to exercise their rights, particularly in the areas of education, employment and sporting activities. The role of civil society in various aspects of social work is increasing through the distinctive efforts of civil society organizations.

# **Challenges**

One of the major challenges facing social protection policies is ensuring the financial sustainability of the social protection system. It is also important that the social welfare program encourages its beneficiaries of working age to engage in the labor market by providing them with more opportunities for reskilling and training and increasing the number of relevant centers.

# Fourth: Reduce the adverse per capita environmental impact of cities, including by paying attention to air quality and municipal and other waste management

The reality of the environment and the socio-economic context in Qatar presents very complex and interrelated factors that affect the very distinct local environment. The hydrocarbon industry produces harmful environmental pollutants that spread pollution during the extraction, refining, shipping and transport operations. The consumption of petroleum products has a detrimental effect on the environment through combustion emissions, which cause global warming that adversely affect the environment. This requires proper strategic planning that takes into account these aspects. Regarding environmental sustainability, the National Development Strategy 2011-2016 aimed to achieve a sectoral outcome that would result in clean air and effective plans to address issues of climate change.

## **Achievements**

With regard to reducing the negative impact on the environment resulting from pollution, the National Development Strategy 2011-2016 goal to reduce the proportion of gas flaring during extraction, compression and manufacturing has been realized. Those were reduced by half from 0.023 billion cubic meters to 0.0115 per million tons of produced energy; it even fell to 0.007 per million tons of produced energy. A sophisticated air quality monitoring and reporting program has been developed, which has provided some appropriate and necessary data. To reduce pollution sources and increase compliance with environmental regulations, air quality regulations, standards and implementation mechanisms have been further updated.

# **Challenges**

There is a need for updating the solid waste management framework of 2009, as it did not take into account construction waste that accounts for 70-80% of total solid waste.

<sup>(34)</sup> Second National Development Strategy 2018-2022

<sup>(35)</sup> Qatar's Fourth Human Development Report, Ministry of Development Planning and Statistics, 2015

# Fifth: Provide universal access to safe, inclusive and accessible green spaces and public areas, in particular for women, children, older persons and persons with disabilities

Second Voluntary National Review, The State of Qatar 2018

Due to the high and rapid urban growth rate in Doha city and other urban areas of Qatar, the need for green spaces and public and inclusive recreation areas has increased. In the relatively harsh climate of Qatar during the summer, the absence of natural protection makes the use of outer spaces unattractive to the population. The National Development Strategy 2018-2022 sets out a target to establish a green belt around Doha and its suburbs, which will play a major role in improving environmental and health conditions. Qatar National Master plan 2032 includes a number of urban development policies and procedures for the expansion and development of open spaces, parks and recreational services aimed at providing public spaces that are vital, attractive and accessible for all users. The plan also aims to use natural and urban garden landscaping designs as basic tools in the design of public spaces and open areas (36).

# **Achievements**

The open, well-prepared green spaces have grown at an annual growth rate of 4% for the use of all segments of society, especially women, children, the elderly and persons with disabilities. There has been a significant expansion in the number of integrated parks between 2010 and 2016 with an annual growth rate of 9%. In 2017, the Ministry of Municipality and Environment issued a detailed guide to all parks in the eight urban zones of the country<sup>(37)</sup>. The percentage of open spaces in public areas to total urban area in Qatar was 27.1% in 2015. The area of green spaces increased from 0.5 million square meters in 2011 to 1.3 million square meters in 2015.

# **Challenges**

The rapid urbanization in some urban areas of the country has negatively affected the landscape and resulted in the creation of large residential complexes interspersed with many vacant land plots and the increasing need for more parks and green spaces. The high costs of creating green spaces and the provision of water for irrigation hinder Qatar's efforts to expand the construction of green spaces and parks.

# Sixth:Supportpositiveeconomic, social and environmental links between urban, peri-urban and rural districts by strengthening national and regional development planning

The Qatar National Vision 2030, launched in 2008, provided a framework for achieving sustainable economic, social and environmental development through the implementation of phased development strategies. Due to the urban nature of the population settlements in the State of Qatar, where about 100% of the population live in urban centers, it is not surprising that the development policies implemented by the State are primarily aimed at promoting positive economic, social and environmental links between urban centers and surrounding areas.

## **Achievements**

The National Development Strategy 2011-2016 sought to improve urban transport infrastructure, implement a national land use plan, achieve high-quality physical and informational infrastructure to meet the requirements of the Qatari economy and its various sectors, and improve the quality and efficiency of economic infrastructure services to meet the emerging needs of Qatar's population. To implement the comprehensive urban plan 2032, the National Development Strategy 2018-2022 seeks to continue in the same developmental direction to promote positive linkages by working to achieve smart and sustainable infrastructure that supports the urban and economic development of the State. Qatar National Master Plan 2032 provides an umbrella for the preparation of a national spatial development framework, spatial development plans at the municipal level and determinants of urban development. The Population Policy 2017-2022 also includes the theme of urban growth, housing and the environment, which seeks to achieve the goal of developing urban centers away from Greater Doha, providing a clean urban environment and ensuring the sustainability of natural resources. The policy has set a number of targets to achieve this goal: to transform existing and innovative urban centers outside Doha into attractive and stable areas; to provide a clean urban environment; and to ensure the sustainability of natural resources.

# **Challenges**

The rapid expansion of urban growth threatens the country's natural wealth and resources and poses a major challenge to the implementation of national development plans and strategies that promote sustainable development. Mega projects tend to focus on highincome community segments. This trend has created a low-density, spatially spaced urban development that is difficult to reach without the use of private cars. At present, urban areas lack high-efficiency mass transport options, resulting in traffic congestion and negative impact on the population. Qatar devotes most of its efforts to policy-making and the development of national development strategies that will sustain the positive economic, social and environmental linkages between urban areas and surrounding areas.

<sup>(36)</sup> Qatar Master Urban Plan, The National Framework for Developing the State of Qatar, 2032

<sup>(37)</sup> Qatar Parks, Ministry of Municipality and Environment, First Edition, March 2017

Seventh: Increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction, holistic disaster risk management at all levels

In terms of achieving efficiency in the use of resources, the National Development Strategy 2018-2022 has set the general directions for the natural resources sector management, which will lead to a main outcome of optimal utilization and sustainability of natural resources for the population of Qatar.

As for disaster resilience, Qatar is committed to disaster risk reduction, preparedness and capacity-building in line with the Sendai framework by integrating it into strategic policies, plans, programs and budgets across different sectors and levels of management. The Public Security and Safety Sector Strategy 2011-2016 adopted a harmonized national security and safety policy, which includes building an integrated and effective criminal information management system, improving traffic safety, reducing road traffic hazards, national building safety strategy and effective disaster management preparedness. The strategy of the Security and Public Safety Sector 2018-2022 seeks to develop an integrated electronic shield system aimed at protecting the financial, industrial, security, health and commercial institutions from penetration and sabotage in order to preserve the information of institutions and individuals and to enhance their safety. In the health sector, the National Development Strategy 2018-2022 will achieve the national goal of putting in place high-speed systems to enhance compliance with the International Health Regulations for Control and Response to protect populations from threats to public health, the environment, chemicals, radiation, food and national emergencies and disasters.

## **Achievements**

For disaster management, the Permanent Emergency Committee has realized the necessity for conducting mock exercises continuously and regularly; hence a number of these exercises have been conducted<sup>(38)</sup> A climate change risk management strategy has been developed for the urban planning and development sector, which focuses on two main axes: adaptation (dealing with the potential impacts of climate change) and mitigation (addressing the causal roots of climate change).

In the health sector, the National Health Committee for Crisis and Disaster Management was established. As for the national preparedness for disaster management, by the end of 2016, all stages of the project were completed, disaster preparedness training and response was provided and disaster recovery was addressed. The Civil Defense Code was passed, and the American Fire Fighting Code was adopted after adapting it to the environmental and urban factors of Qatar. The number of establishments connected to the Central Operations Chamber of the Ministry of Interior through an early warning

system and those establishments with a certificate of compliance with the fire protection regulations have increased.

# **Challenges**

Regarding challenges to the country's resilience to disasters and capacity to develop, and implement overall disaster risk management in line with the Sendai Framework, the National Progress Report on the Implementation of the Hyogo Framework for Action (2013-2015)<sup>(39)</sup> indicated that Qatar still face some challenges. The most important of these challenges is the absence of a national public awareness strategy on disaster risk reduction. There is also a need to review and analyse current legislation on disaster risk reduction and to review and update the National Emergency Plan.

<sup>(38)</sup> https://moi.gov.ga/site/arabic/departments/EmergencyDept/sections/sec418/418.html

<sup>(39)</sup> Interim national report on the implementation of the Hyogo framework (2013-2015)



**Responsible Consumption and Production** 





Qatar has worked to achieve and maintain a clean environment despite the growth of its population from about 1.8 million in 2012 to about 2.7 million in 2017 at an average annual growth rate of 8.4%, accompanied by high standards of living and increased demand for food; that led to an increase in the amount of waste and the percentage of domestic waste from 6.7% of total waste in 2011 to about 14.5% in 2017. The increase in the population of the country was accompanied by an influx of expatriate workers and demographic shifts, a change in lifestyle and an increase in foreign trade, resulting in high and unsustainable patterns of production and consumption in the natural resource sectors (water, plant and animal production, sewage water), as well as an increasing level of pollution. In light of this, the Government encouraged the efficient use of natural resources, green initiatives and buildings by reducing waste production through reduction and recycling, and the development and implementation of programs and projects related to pollution and solid waste recycling (construction, building waste, and domestic waste) from about 9.6 million tons in 2011 to about 4.6 million tons in 2017. The total waste also decreased from about 12.1 million tons in 2011 to about 8.2 million tons in 2017.

The Government has directed to avoid the excessive use of groundwater by installing smart meters so as not to aggravate the problem of water stress and salinization. It has also supported the adoption of modern techniques to rationalize the use of water in schools and mosques and encouraged the use of treated water in central cooling facilities, irrigation of fodder and green areas. In addition, the Government has called for a system of plant, fish and livestock production that contributes to food security and access to high levels of self-sufficiency and has promoted and strengthened local products culture. Thus, ensuring sustainable patterns of consumption and production requires the following:

Achieving efficiency in natural resource management, food waste management and per capita reduction, recycling and promoting sustainable tourism. The value of accommodation and food services increased from QR 4.5 billion in 2012 to QR 7.1 billion in 2016 at an average annual growth rate of 12.1%, the application of sustainable best practices in agriculture, food production and consumption, the promotion of the shift towards renewable energy, the trend towards green construction in government buildings and low energy consumption buildings and facilities. The value added in real estate activities increased from about QR 24.5 billion in 2012 to QR 42.8 billion in 2016 at an average annual growth rate of 14.9%.

<sup>(40)</sup> Ministry of Development Planning and Statistics, Chapter 11, Environmental Statistics, 2017

# Alignment of Qatar's second National Development Strategy (2018-2022) with the 12th Goal of Sustainable Development 2030

Qatar's Second National Development Strategy (2018-2022) includes the following goals to ensure sustainable consumption and production patterns<sup>(41)</sup>:

- 1. By 2020, preserve and develop water resources by reducing the total (real + administrative) losses of potable water and reducing the per capita consumption of water by 15% through the national program "Tarshid".
- 2. Reduce the depletion of groundwater and the development of the aquifer and strengthen the integrated management of water and electricity and reduce the rate of consumption of electricity per capita by 8% through the national program "Tarshid".
- 3. Provide data on new and renewable energy by 2021.
- 4. Increase the proportion of recycled materials of construction projects in the country to 20% of total materials used.
- 5. Keep the rate of domestic waste generation under 1.6 kg/person/day during the period 2018-2022.
- 6. Recycle 15% of solid waste generated.
- 7. Provide the national environment data and information needed to enhance and improve environmental management.
- 8. Build a community that has environmental awareness and supports environmental sustainability

#### **Achievements**

Qatar has achieved the following outcomes in ensuring sustainable consumption and production patterns:

# Implementation

The State has succeeded in keeping the level of domestic waste at 1.3 kg/person/day. In 2011, the Solid Waste Treatment Plant was opened in Mesaieed as well as 4 waste transfer stations. The tire recycling project was launched in 2012, where the recycling rate reached more than 60%. A number of companies (36 companies in 2014) issued sustainability reports (Aluminum Qatar, Dolphin Energy, Vodafone, Qatargas, Barwa, Kahramaa (42), etc.). Qatar Stock Exchange also prepared guidelines for listed companies (45 companies) for the preparation of sustainability reports in 2016 and held a briefing on this in October 2017.

The amount of recycled waste reached about 75 thousand tons in 2017 compared to about 7 thousand tons in 2012<sup>(43)</sup>, and the consumption of natural gas was reduced as a result of the use of district cooling stations by 5 billion cubic feet in 2017. It is expected to reduce gas consumption to 380 billion cubic feet by 2030.

#### Governance

A number of construction specifications have been adopted, including recycled materials, and national instructions have been issued on the management of medical and radioactive waste, and air quality regulations and standards and implementation mechanisms to reduce sources of pollution and increase compliance with environmental regulations have been updated. The State of Qatar has ratified 15 international environmental conventions, 8 multilateral agreements, 5 regional conventions and 5 bilateral agreements. With regard to environmental conventions, Qatar participates in the meetings of the Parties related to the Montreal Protocol and participates in the meetings of the Parties to the Basel Convention on the Control of the Transport of Hazardous Wastes<sup>(44)</sup>. In addition, Qatar Tourism Authority has already developed and implemented its tourism sector strategy (2011-2016) and is currently implementing its second tourism sector strategy (2017-2023), while taking several measures to promote tourism<sup>(45)</sup>. The former Ministry of Environment prepared a five-year plan (2011-2016) to develop the fishery sector (46) and took many regulatory measures to ensure the sustainable management of fish stocks, including the stock of grouper fish, such as limiting the production levels in the range of 1200-1300 tons per year.

# Challenges

The overall challenges to ensuring sustainable consumption and production patterns can be summarized as follows:

The increase in the population growth rate and the pressure on the environment and natural resources, as well as the huge urbanization, increased economic activities, caused significant negative effects on the levels of production and consumption, the environment and its biological diversity as a result of pollution and waste increase, and climate change and negative effects. Solid domestic waste in Qatar is the second largest source of waste after construction waste. This contributes to the difficulty of separating recyclable materials from other materials, identifying hazardous (quantitative and qualitative) materials and wastes produced by hospitals and chemical factories, and the need to develop a clear national plan for hazardous materials and wastes and their safe transportation and disposal.

<sup>(41)</sup> Ministry of Development Planning and Statistics, Second National Development Strategy, 2018-2022

<sup>(42)</sup> Qatar General Electricity & Water Corporation "KAHRAMAA": Kahramaa Achievements Bulletin No.56, 2015

<sup>(43)</sup> Ministry of Development Planning and Statistics, Environmental statistics Bulletin, 2017

<sup>(44)</sup> Ministry of Development Planning and Statistics (unpublished data)

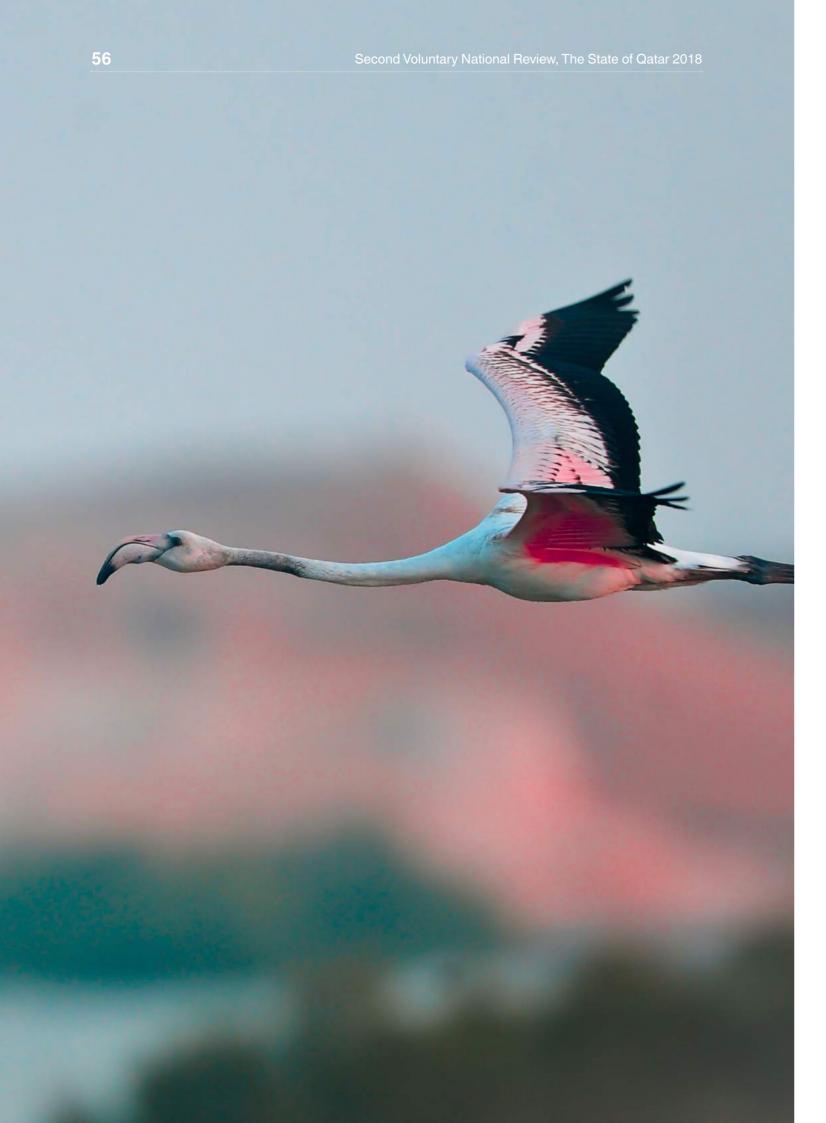
<sup>(45)</sup> Qatar Tourism Authority, The Qatar National Tourism Sector Strategy, 2017-2023

<sup>(46)</sup> Ex-Ministry of Environment. The Five Year Plan for Developing the Fishery Sector (2011-2016)



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss





The Terrestrial and marine protected areas aim at protecting the desert ecosystems from fishing, overgrazing, development effects and desertification. However, the identification of protected areas alone isn't enough to guarantee the protection of natural ecosystems within their borders without proper management.

Furthermore, the marine environment is also characterized by its coastline and diversity of marine resources, including coral reefs, sea grass, mangroves, fish breeding and crustaceans, as well as breeding, nesting and feeding habitats of sea turtles and seabirds. In view of the rapid industrial and urban development in the country, there is an urgent need to maintain the safety and quality of water and the need to prepare a comprehensive plan to monitor the marine environment, which aims at assessing the current situation, predicting future changes, and formulating recommendations and mechanisms to preserve the marine environment and ensure the sustainability of its resources.

Qatar strives to reduce pollution, preserve and protect the environment and preserve biodiversity. While extracting oil and gas and manufacturing represent the majority of economic returns, the industry produces harmful environmental pollutants through extraction, refining, shipping, and transportation and combustion emissions. The rate of economic and population growth has put the environment, its biodiversity, conservation of ecosystems and environmental awareness under a strong pressure.

In order to achieve sustainable development that preserves the environment, Qatar has opted for the extensive use of natural gas, has strengthened its commitment to international conventions and treaties that are working to preserve the environment, and has established several important centers and institutes concerned with the environment.

# First: Alignment of Qatar's Second National Development Strategy (2018-2022) with the 15th Goal of Sustainable Development 2030 (47)

Qatar's Second National Development Strategy (2018-2022) included the following targets to achieve a sustainable terrestrial ecosystems, combat desertification and stop loss of biodiversity:

- Reduce the concentration of air components according to the national standards for ambient air quality.
- 2. Improve the quality of coastal and marine water to conform to national standards.
- 3. Keep the generation rate of household waste under 1.6 kg / person / day during the period 2018-2022.
- 4. Recycle 15% of solid waste generated.
- 5. Create a green belt around the city of Doha and its neighborhoods.
- 6. Raise the knowledge level on the current and future status of biodiversity, develop and operate the biodiversity database.
- 7. Achieve sustainable management of natural reserves and ecosystems.

<sup>(47)</sup> Ministry of Development Planning and Statistics, Second National Development Strategy(2018-2022)

- 8. Provide data and information on the national environment needed to enhance and improve environmental management.
- 9. Build a community that has environmental awareness and supports environmental sustainability

# **Second: Achievements**

Qatar has achieved the following results in ecosystem protection, promotion of sustainable use, halt of biodiversity loss, and combating desertification:

# Implementation level

Some of the activities related to the goal of eliminating ozone levels have been implemented through improved air quality management, and included what follows:

The establishment of an advanced air quality monitoring program and the expansion of the Mangrove forest area from about 7.31 km² in 2010 to 9.3 km² as a dense mangrove area in 2015<sup>(48)</sup>. While the total mangrove area reached 21.26 km², the green areas were increased (40 integrated parks were established in the different areas to become 87 parks) and 37,000 trees and local plants were planted<sup>(49)</sup>. Qatar ranked 32nd internationally in 2018 out of 180 countries on the Yale Environmental Performance Index in collaboration with the International Economic Forum through 24 indicators<sup>(50)</sup>. The percentage of trafficked wildlife was 0.2% of the total number of traded wildlife in 2016, which is a low percentage<sup>(51)</sup>. Furthermore, the life land rehabilitation project was launched in Qatar with the aim of preserving the vegetation cover and working on the rehabilitation of the land and the cultivation of the land by locally adapted plants.

In addition, the project of inventorying, collecting, classifying and conserving wild plants was completed in the period 2012-2016, as well as the establishment of the field genetic bank project for the conservation of important, the rare and threatened local species, where some trees and shrubs were saved. Protected areas increased from 11% to 23.6% of the total area of Qatar with an area of 2744 km² and water area to 6.2% and 720 km². Thus, the total protected area (land and water) reached 3464 km², representing about 30% of Qatar's total area of land that is among the highest rates in the world. In addition, Qatar strived to reduce the emissions of the electricity and energy sector from 46% in 2013 to 39.6% in 2016<sup>(52)</sup>. It has also renewed the building codes, launched Kahramaa incubator for innovation and invention, and launched electric vehicle charging stations.

#### Governance level

Qatar has taken urgent measures to stop the illicit fishing and trafficking of protected species of flora and fauna, as well as urgent and important actions to reduce the degradation of natural habitats, halt loss of biodiversity and protect endangered species and prevent their extinction. The study of the biodiversity of wild birds, which monitored

the presence of 322 species of birds, the lizards biodiversity project, which monitored the presence of 21 species of lizards, and the project of inventory and characterization of animal genetic resources for animal food and agriculture, where the inventory and description of camels, (Breeding of endangered animals in captivity, especially the Arabian Oryx, Ghazal Al Reem, Al-Anam and Al-Habbari), the project of rehabilitating the life land of Qatar, the project of inventorying, collecting, characterizing and conserving wild plants, and the establishment of the field genetic bank project<sup>(53)</sup>, as well as the preparation of the National Biodiversity Strategy in Qatar 2015-2025<sup>(54)</sup>and its Action Plan, by the former Ministry of Environment in 2015.

# **Third: Challenges**

The most important challenges related to the protection of land ecosystems, combating desertification, halting land degradation and loss of biodiversity could be summarized as follows: a.) the enormous pressures on ecosystems and key systems supporting wildlife, b.) the increase in the amount of emissions from consumption, c.) the amount of energy needed for desalination and air cooling, coupled with the scarcity of forests, green areas and greenhouse environments that consume greenhouse gases, and d.) the exposure of the marine environment to multiple sources of drainage, including hot water flowing from industrial cities, and brackish water from cooling plants after treatment, e) the negative impact of landfill and excavation operations on ports, residential and tourist islands as well as various marine activities related to hotels and resorts, the activation of conservation and restoration of land ecosystems and inland freshwater ecosystems and their services; f) the conservation of terrestrial and marine organisms from extinction. In addition, the rapid industrialization, climate change, invasive species, water scarcity and habitat degradation are major threats to biodiversity.

<sup>(48)</sup> Ministry of Municipality and Environment, Geographic Information Positioning Network

<sup>(49)</sup> Ministry of Municipality and Environment (unpublished data)

<sup>(50)</sup> Yale University, http://epi.envirocenter.yale.edu

<sup>(51)</sup> Ministry of Municipality and Environment (unpublished data)

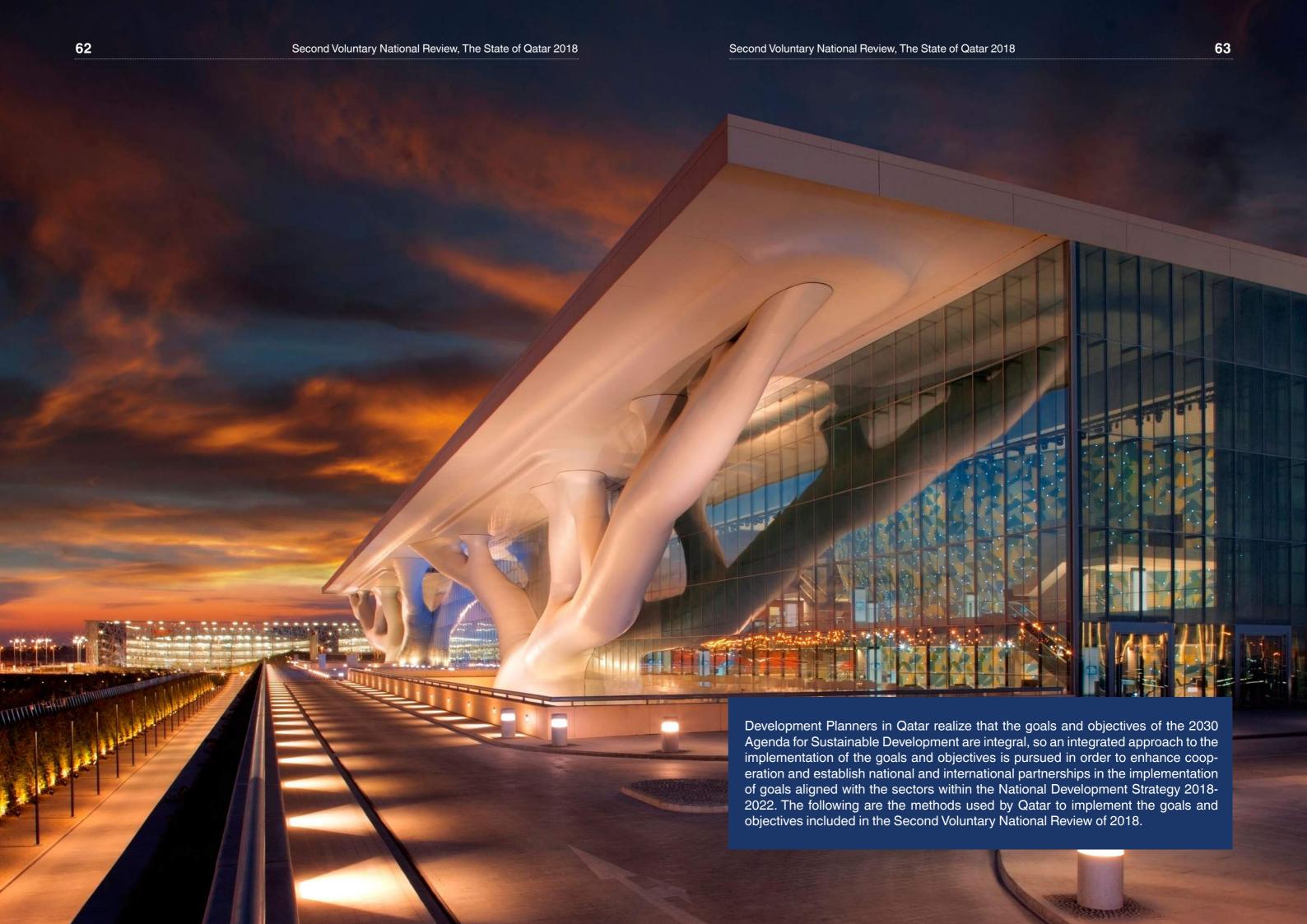
<sup>(52)</sup> Ministry of Municipality and Environment (unpublished data)

<sup>(53)</sup> Ministry of Municipality and Environment (unpublished data)

<sup>(54)</sup> Ex-Ministry of Environment, 2015



Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development





# TARGET 17.16 Partnerships in development



ENHANCE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT Qatar's National Development Strategy 2018-2022 stressed that Qatar's international cooperation aims to enhance its regional and global economic, political and cultural role within the framework of the United Nations system and regional and international organizations and to promote cultural exchange with Arab countries and peoples in particular. On an international level Qatar aims to provide help in many areas of development, support projects to combat poverty, unemployment and illiteracy, establish peace, and fight crime and terrorism. Qatar also looked forward to fostering dialogue among civilizations, among different religions and cultures, and contributes to building international peace and security through political initiatives, development and relief assistance.

The objectives of Qatar's development assistance are in line with the Qatar National Vision 2030 and Articles 6 and 7 of the Permanent Constitution of the State of Qatar, which stipulate: "The State shall respect the international charters and conventions, and shall strive to implement all international agreements, charters, and conventions it is party thereof" (55). "The foreign policy of the State is based on the principle of strengthening international peace and security by means of encouraging peaceful resolution of international disputes; and shall support the right of peoples to self-determination; and shall not interfere in the domestic affairs of states; and shall cooperate with peace-loving nations" (56).

Public-private sectors and civil society organizations partnership is essential to meet challenges, promote investment in projects that benefit both citizens and residents<sup>(57)</sup>, and encourage private sector contributions to development through Corporate Social Responsibility (CSR) projects. Qatar, which is committed to the spirit and provisions of the Convention Concerning the Protection of the World Cultural and Natural Heritage, is making great efforts to help some countries preserve their historical human heritage.

<sup>(55)</sup> Article 6 of Qatar's Permanent Constitution

<sup>(56)</sup> Article 7 of Qatar's Permanent Constitution

<sup>(57)</sup> https://www.globalreporting.org/information/news-and-press-center/Pages/Growing-role-for-the-private-sector-in-the-2030-Agenda.aspx



# **Development and relief assistance** provided by the State of Qatar

In its National Vision 2030, Qatar adopted a people-centered approach to the decent life enshrined in the Universal Declaration of Human Rights and voluntarily provided development assistance to developing countries, particularly the least developed countries (LDCs), to help them achieve the goal of the sustainable development agenda referred to above. The international commitment to development assistance rests with the Organization for Economic Co-operation and Development (OECD) in accordance with the international commitments on Official Development Assistance (ODA), which refers to the commitment of many countries to allocating 0.7 per cent of their gross national income to Official Development Assistance in developing countries. It should be noted that Qatar has responded to the recommendations of the Addis Ababa Action Agenda on Financing for Development, adopted in 2015, by providing funding resources for the implementation of the goals of the international 2030 Agenda for Sustainable Development (58). The value of development assistance and aid provided by the State of Qatar, both governmental and nongovernmental, has increased from about US \$ 483 million in 2008 to over US \$ 2 billion in 2017. At the opening session of the preparatory high-level meeting of the Economic and Social Council Forum on Financing for Development Follow-up, Doha, 2017<sup>(59)</sup>, Qatar's development and relief assistance in 2018 focused on donations to assist stranded Syrian refugees and financial support to UNESCO and UNRWA organizations to cover their activities. Qatar also sponsored the Doha Declaration of the Follow-up International Conference on Financing for Development held in Doha on November 29, 2008<sup>(60)</sup>. It also committed itself to providing financial support to strengthen UNESCO's capacity to conserve World Heritage sites in areas prone to natural disasters. The World Heritage Committee of UNESCO has listed the ancient city of Zubara in Qatar as a World Heritage Site.



# **Multi-stakeholder partnerships**

Within the framework of the national efforts to activate the goals and objectives of the 2030 Agenda for Sustainable Development, Qatar hosted the Arab Conference on the Role of Civil Society in the Implementation of the Goals of the 2030 Agenda for Sustainable Development, on 20 and 21 April 2016 in Doha. Qatar Social Work Foundation, in partnership with the United Nations Development Program Economic and Social Commission for Western Asia (ESCWA), the United Nations Population Fund (UNFPA), the League of Arab States and the Gulf Cooperation Council (GCC) organized the Conference. The participants emphasized that the partnership in development is one of the most important tools for achieving sustainable development, especially at the national level, where the cultural background, societal customs and traditions that promote community participation exist in order to build a society in which no one is marginalized and people enjoy high levels of quality of life. The conference adopted the Doha Declaration on the Role of Civil Society in the Implementation of the 2030 Agenda for Sustainable Development, which emphasized the role of civil society in the implementation of the 2030 Agenda for Sustainable Development, and assisting governments in implementing the goals and objectives of the Agenda and reporting on progress achieved (61).

<sup>(58)</sup> http://www.un.org/esa/ffd/wp-content/uploads/2015/08/AAAA Outcome.pdf

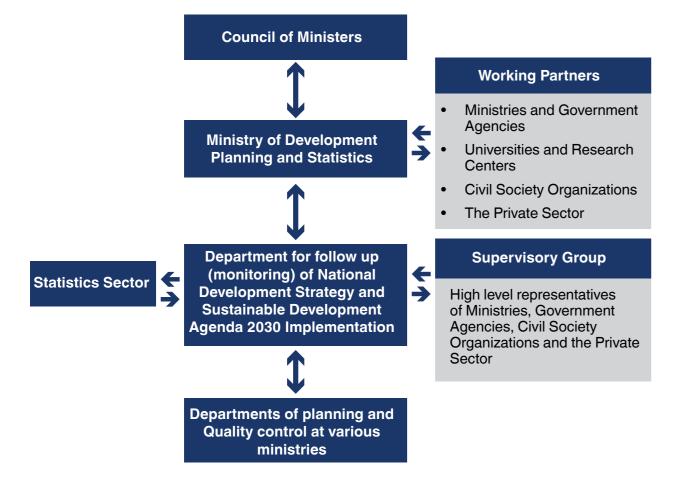
<sup>(59)</sup> http://www.un.org/esa/ffd/high-level-conference-on-ffd-and-2030-agenda/index.html

<sup>(60)</sup> http://www.nazaha.iq/%5Cpdf\_kanon%5C2403%5Catf\_p5%20(1).pdf

# Institutional aspects and governance

The Ministry of Development Planning and Statistics has aligned the outcomes and targets of the National Development Strategy (2018-2022) with the goals and objectives of the 2030 Agenda for Sustainable Development, which consists of 17 goals and 169 goals. With this alignment, the goals and objectives of the 2030 Agenda for Sustainable Development have become a component of the National Development Strategy (2018-2022); will receive the same attention as those of the National Development Strategy. Implementing agencies will allocate the necessary resources to implement the goals and objectives of the 2030 Agenda for Sustainable Development in accordance with the agreed timetable. Qatar has committed itself to achieving the goals and objectives of the 2030 Agenda for Sustainable Development. For this reason, high-level committees, teams and technical working groups have been established to provide indicators to monitor progress and prepare periodic reports, on progress in the implementation of the objectives. The following chart shows the mechanisms for implementing the goals of the 2030 Agenda for Sustainable Development and the National Development Strategy (2018-2022).

Figure 1: Implementation Mechanism of the National Development Strategy 2018-2022 and Sustainable Development Agenda 2030









# The role of technology in building the knowledge economy in Qatar

Qatar has strived to promote the use of technology in the implementation of most of its economic, social and environmental development programs aimed at improving the quality of life in the State and establishing sustainable societies in which no one is marginalized. The Qatar National Research Strategy 2012 (62) provides a framework for the research objectives of Qatar Foundation's R&D sector, which contributes to guiding program plans and performance metrics by guiding investment decisions in research and development programs that address national priorities and progress towards QNV 2030 and support Qatar's drive to become a leading center for excellence and innovation in research and development. Qatar Foundation launched the Qatar National Research Fund in 2006 as part of its ongoing commitment to a knowledge-based economy. Qatar attaches great importance to Qatar Foundation on the basis of its vital role in achieving growth both within Qatar and at the regional level, as a means of diversifying the country's economy, enhancing educational opportunities and developing areas impacting society such as health, energy and the environment(63). The results of the R & D Survey conducted by the Ministry of Development Planning and Statistics in 2015 indicate that Qatar spent about US \$ 894 million on various research projects. The volume of domestic expenditure on R & D in the same year was about 0.51% of GDP, while domestic expenditure on research represents about 98% of total R & D expenditures (64). Additionally, important research activities are carried out at Qatar University, Shaikh Hamad University and the several universities under the umbrella of Qatar Foundation, in three prestigious institutes that are:

- 1. Qatar Biomedical Research Institute (QBRI) Qatar Computing Research Institute (QCRI)
- 2. Qatar Environment & Energy Research Institute (QEERI)

The Qatar National Research Fund, in collaboration with several research centers around the world, contributes to the funding of a large number of joint researches with international universities and research centers.



To promote innovation at the national level, Law No. (36) for the year 2005 was issued to establish Qatar Science and Technology Park<sup>(65)</sup>, a member of Qatar Foundation's research and development sector. The Park is a free zone and incubator

<sup>(62)</sup> https://www.gf.org.ga/news-ar/348

<sup>(63)</sup> https://www.qnrf.org/ar-qa/

<sup>(64)</sup> https://www.mdps.gov.qa/en/statistics/Statistical%20Releases/Social/RAndD/2015/RD\_Qatar\_2015\_Ar.pdf

<sup>(65)</sup> http://www.almeezan.ga/LawView.aspx?opt&LawID=275&language=ar

for emerging technology companies in Qatar and aims to support innovation and entrepreneurship in Qatar. Also the incubator helps emerging technology companies to accelerate the commercialization of the developed technology, which contributes to the promotion of economic diversification in the country. The Park focuses on four key themes that are consistent with the Qatar National Research Strategy launched in 2012. including Energy, Environment, Health Sciences and ICT.

Second Voluntary National Review, The State of Qatar 2018

Qatar Science and Technology Park comprises small and medium-sized companies, major international institutions and research institutes operating in accordance with the Free Zone Law; it is characterized by its synergy and cooperation in financing new projects, consolidating the concept of intellectual property, enhancing technology management skills and developing innovative products. Qatar Technology Park also supports the nationalization of sustainable development goals in Qatar and reinforces its position as an international hub for applied research, innovation, incubators and entrepreneurship (66).

# **Building capacities**

Qatar is keen to enhance the capacity of its citizens in order to enable them to contribute effectively to the development process in the country. Thus, Qatar has built various schools and universities and sent many students on scholarships overseas. Qatar also expanded the training programs for public sector employees as part of the professional development path program implemented by the Ministry of Administrative Development, Labor and Social Affairs. It should be mentioned that Qatar ranked 33rd globally and the first in the Arab World in the Human Development Index in 2015 (67).



**DEVELOPING** 

COUNTRIES

# Contributing to capacity building at the regional and international levels

Development assistance in capacity building for LDCs is a key objective of several initiatives within Qatar's international cooperation program. Reducing poverty and providing jobs in infrastructure projects, as well as providing education and healthcare, are among the key focus areas of this program. Qatar Foundation has developed and implemented the Silatech Foundation initiative to foster the ambitions of Arab and international youth in decent work. The Education Above All Foundation provides educational opportunities, especially for children living with low-income families or facing humanitarian crises. The initiative builds on, and helps to ensure, a broad range of national, regional and international partners in promoting the right of all children to education. The program has brought 10 million children back to school around the world, investing around \$ 1.8 billion in the program, according to Qatar Foundation sources. This is achieved in the context of strengthening international support for the effective and targeted implementation of capacity building in developing countries to support national plans for the implementation of all sustainable development goals, through means that include North-South and South-South cooperation. Further, Qatar encourages and supports talented and distinguished foreign students from less developed countries to study at its University, the Doha Institute of Graduate Studies, Hamad University and Education City Universities. This will help in building long-term relationships between Qatar and countries of origin for students. In addition, the sponsorship of outstanding international students will help enhance capabilities in the labor market and strengthen national development.

# Mechanisms to monitor and follow up the implementation of the sustainable development agenda

As part of its efforts to build an efficient, effective and integrated system for monitoring and monitoring the implementation of the goals of the 2030 Agenda for Sustainable Development, the Ministry of Development Planning and Statistics has aligned the goals and objectives of the 2030 Agenda for Sustainable Development with Qatar's Second National Development Strategy 2018-2022 targets. It has also developed a monitoring and follow-up system that tracks the challenges facing the implementation of the Second National Development Strategy sectors in achieving the 2030 Agenda for Sustainable Development goals in opportune time. Progress measurement will be based on key performance indicators agreed upon by the relevant parties and included in the Second National Development Strategy 2018-2022. The monitoring and follow-up system will be

<sup>(66)</sup> https://qstp.org.qa/

<sup>(67)</sup> http://hdr.undp.org/en/year/2017

supported by sophisticated technological software to produce periodic reports, annually, semi-annually and quarterly, through refined dashboards to measure progress of the main projects of National Development Strategy 2018-2022, as well as the goals of the sustainable development agenda, using the indicators that have been adopted in the United Nations Statistical Commission.





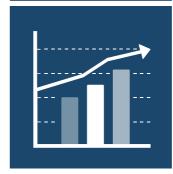
PROMOTE A UNIVERSAL TRADING SYSTEM UNDER THE WTO

# International trade

International trade is a powerful tool for enabling economic development and stimulating economic growth, which in turn is a necessary condition for broader development outcomes. By linking global markets with producers and consumers in developing countries, both exports and imports provide a critical channel for the flow of funds, technology and services needed to further improve productive capacity in agriculture, industry and services sectors. In this regard, Qatar affirms the adoption of the agenda of the Fourth Ministerial Conference of the World Trade Organization held in Doha, Qatar, in November 2001<sup>(68)</sup>. Qatar has trade treaties with many countries of the world. The trade volume of goods between Qatar and the rest of the world amounted to about QR 355 billion, while the trade balance was about QR 137 billion in 2017.

Qatar has a global, multilateral trading system based on global rules within the framework of the World Trade Organization (WTO). It is worth noting that Qatar hosts a large number of expatriates from various nationalities working in many economic sectors of the country. Qatar Central Bank sources indicate that the volume of expatriate workers remittances amounted to about 12.7 billion US dollars in 2017<sup>(69)</sup>, which contribute to the development of the expatriate labor countries.

# **TARGET** 17·19



FURTHER DEVELOP MEASUREMENTS OF PROGRESS

# Data, monitoring and reporting

In order to build its national statistical capacity and enable it to produce the list of indicators adopted by the United Nations Statistical Commission at its forty-eighth session in March 2017, the State of Qatar, represented by the Ministry of Development Planning and Statistics, has joined the transformational project in the official statistics system of the United Nations Statistics Division. These indicators will be used by stakeholders to monitor progress in the implementation of the goals and objectives of the 2030 Agenda for Sustainable Development, as well as the National Development Strategy 2018-2022. Accordingly, a roadmap for updating the national statistical system has been developed, including the following:

- 1. Evaluating the national statistical system and identifying the strengths and gaps in the statistical process.
- 2. Assessing availability of indicators of the sustainable development agenda mentioned above.
- 3. Setting up a working group to develop a national plan to produce the necessary indicators to monitor the implementation of the goals and objectives of the 2030 Agenda for Sustainable Development.
- Forming sectorial working groups to prepare sectoral plans to provide indicators of the Sustainable Development Agenda and sectoral national indicators according to specific topics such as education, health and environment.
- Building a national database of 2030 sustainable development indicators and updating them periodically, and making them available to national and international users.

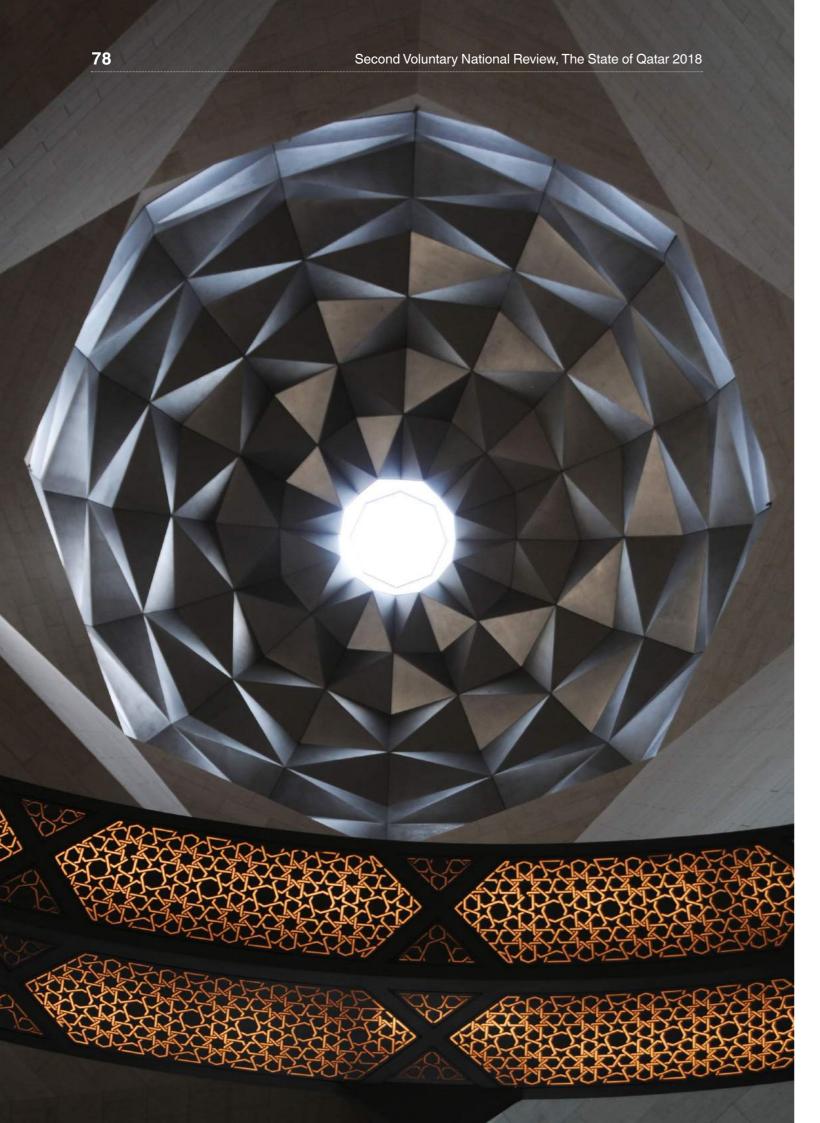
The Ministry of Development Planning and Statistics adopted a modernization plan that is based on various international initiatives to update official statistics. In addition to the recommendations of the United Nations Statistical Commission and its task forces, such as the High-level Group for the Modernisation of Official Statistics (HLG-MOS), the European Statistical Office (Eurostat), and the Cape Town Global Action Plan for Sustainable Development (CTGAP); the roadmap for updating the statistical system in Qatar will be based on these initiatives and groups experiences, as well as on best practices in developed countries.

<sup>(68)</sup> https://www.wto.org/english/tratop\_e/dda\_e/dda\_e.htm#declaration

<sup>(69)</sup> Central Bank of Qatar, 31/3/2018

**Conclusion and Future steps** 





# **Next steps**

Qatar will continue its firm commitment to the 2030 Agenda for Sustainable Development in its policies and programs to align them with the Qatar National Vision 2030. It will continue to ensure that the goals and objectives of the Agenda are implemented concurrently with the implementation of the National Development Strategy 2018-2022 while focusing on the national priorities for each sector. This includes continued cooperation, partnership and solidarity between public and private sectors and civil society organizations in order to achieve QNV2030 goals and objectives, as well as taking advice, suggestions and recommendations to overcome implementation challenges in the coming phase. Qatar should also capitalize on its past experience to strengthen positive practices with quick wins. In addition, it should avoid obstacles and difficulties by finding ways to overcome them. Further, Qatar will make every effort to enable stakeholders to provide statistical indicators for measuring the implementation of the goals of the 2030 Agenda for Sustainable Development that have not been made available yet.

The follow up and monitoring system will enhance Qatar's ability to ensure that targets are implemented according to plans and timelines that have been set to ensure quality of implementation, overcome difficulties and address future potential challenges in a timely manner. Qatar will continue to form national teams that support the implementation process with visions, proposals and recommendations. Progress in achieving these goals and targets will be monitored through periodic reports to be submitted to the Council of Ministers. Qatar will also continue to strengthen statistical capacity for collecting, analyzing and disseminating statistical data, providing indicators of the sustainable development agenda for users, and implementing the Population, Housing and Establishments Census 2020.

# References

#### **Arabic References**

- General Electricity & Water Corporation (2015). Kahramaa Achievements Issue No.
   56
- General Electricity & Water Corporation (kahramaa) The Water Policy of the State of Qatar (unpublished)
- Qatar Tourism Authority. The State of Qatar, National Tourism Sector Strategy, Next Phase (2017-2023)
- Ministry of Municipality and Environment, The State of Qatar (2016) Geographic Information Systems Network, Qatar National Master Plans

  – National Framework for Development 2032
- Ministry of Municipality and Environment, the State of Qatar (2017), Qatar Gardens, First Edition, March 2017.
- Former Ministry of Environment, the State of Qatar, The Five Year Plan for Developing Fish Resources (2011-2016)
- Ministry of Development Planning and Statistics (2015), Environmental Statistics Bulletin, the State of Qatar.
- Ministry of Development Planning and Statistics (2016), Environmental Statistics Bulletin, the State of Qatar
- Ministry of Development Planning and Statistics (2017). Demographic and Social Statistics, Population Chapter, The State of Qatar
- Ministry of Development Planning and Statistics (2018). Qatar's Second National Development Strategy (2018-2022). First Edition January 2018
- Ministry of Development Planning and Statistics/ Permanent Population Committee, Qatar's Population Policy (2017-2022)
- Ministry of Development Planning and Statistics (March 2011). Qatar's First National Development Strategy (2011-2016)
- ment agenda for users, and implementing the Population, Housing and Establishments Census 2020.

# **English references**

- The Permanent Committee for Emergency) 2015). National progress report on the implementation of the Hyogo Framework for Action (2013-2015), Qatar
- UNDP (2017) GUIDELINES TO SUPPORT COUNTRY REPORTING ON THE SUSTAINABLE DEVELOPMENT GOALS
- United Nations Development Group (2017) SDG COUNTRY REPORTING GUIDELINES.
- United Nations ESCAP (2015). Integrating the Three Dimensions of Sustainable Development
- United Nations. (2016) Report of the Inter-Agency and Expert Group on Sustainable DevelopmentGoalIndicators(E/CN.3/2016/2/Rev.1).https://sustainabledevelopment. un.org/content/documents/11803Official-List-of-Proposed-SDG-Indicators.pdf
- United Nations. Division for Sustainable Development (DSD). Department of Economic and Social Affairs (DESA) (2018). Hand Book for the Preparation of Voluntary National Reviews
- United Nations. Economic and Social Council (2018). Mainstreaming of the three dimensions of sustainable development throughout the United Nations system. Report of the Secretary General.
- United Nations. General Assembly (2015) Draft outcome document of the United Nations summit for the adoption of the post-2015 development agenda. Sixty-ninth session
- World Bank (2017). World Development Indicators
- Yale University: http://epi.envirocenter.yale.edu



WWW.MDPS.GOV.QA