

Sultanate of Oman



Second Nationally Determined Contribution

July 2021

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Summary

The Second Nationally Determined Contribution (NDC) is rooted in the Oman vision 2040 and the National Energy Strategy to support a gradual transition to a low carbon economy and an energy matrix significantly lower in carbon emissions. The deployment of renewable energy and the deepening of energy efficiency actions are the 2030 carbon control plan pillars. They would enable the Sultanate of Oman to slow GHG emission growth and reduce them by 7% in 2030, compared to the Business-As-Usual (BAU) scenario, which is predicted at about 125.254 MTCO_{2e}. 4% of the GHG reduction commitment will be based on national efforts, and the remaining 3% would necessitate grants and other forms of concessional financing and assistance with capacity building and institutional strengthening, and access to appropriate technologies. International climate finance is a crucial element for the Sultanate of Oman to further bend the GHG emission growth curve over the next decade. Article 6 of the Paris Agreement is an additional mechanism for the Sultanate of Oman to achieve cost-efficient emission reductions, facilitate the transfer of carbon mitigation technology, and deliver significant sustainable development co-benefits. Such co-benefits would reduce air pollutants', create jobs, and lay the ground for the just transition to a climate-resilient economy and society.

The Sultanate of Oman adopted a strategic alignment between their NDC adaptation goals with the National Adaptation Plan (NAP) process to foster the resilient climate development's coherence and efficiency. The NAP's objective is to integrate the adaptation into development planning in Oman, resulting in low carbon, climate-resilient development priorities, projects, and transition pathways. Climate economics and finance are central in dealing with this objective. NAP will build a national system for developing project pipelines that help Oman mobilize local funds (public and private) and access climate finance from international funds to implement climate-resilient and transition pathways. The need for the Sultanate of Oman to cope with climate threats is enormous, and the resources to address this are limited. Therefore, mobilizing climate finance from a variety of sources is a top priority of the NAP process that will be implemented over 2021-2024 with GCF to address the financial needs of the Sultanate to cope with climate change in a context of a fast, fair, and just transition to a resilient, low carbon economy.

The Covid19 pandemic outbreak has plunged the national economy into an unprecedented recession. The Sultanate of Oman continues to resolve health crises and secure critical public services in tandem with comprehensive policies that promote long-term growth, including improving governance and the business environment and extending and improving investment outcomes in education and public health. As the Covid19 pandemic persists, the socio-economic consequences will almost certainly last a long time and will further delay real GDP growth in the coming years.

1. National Circumstances

The Sultanate of Oman is one of the most vulnerable countries in West Asia to the adverse impacts of climate change and has a heightened degree of awareness and concern about global warming and its adverse impacts. Ratification of the Paris Agreement on April 24, 2019, was a conclusive step forward in Oman's commitment to join the international efforts to combat climate change. The Sultanate of Oman has engaged through its Intended Nationally Determined Contributions (INDCs) to reduce their absolute GHG emission by 2% by 2030. Climate Change is at the forefront of public and government consciousness due to the accelerated pace of Changing climatic patterns being experienced in Oman. The country is well-known for its sweltering summers and low annual rainfall, and it has become even hotter over the past five years. Oman was the location of the world's hottest low temperature ever recorded. On June 26, 2018, and over 24 hours, the temperature in the coastal city of Quriyat (situated 60 Km east of Muscat, the capital of Oman), never dropped below 41.9 Celsius, most likely the highest minimum temperature ever observed on Earth. Detailed climate simulation reveals that the Arabian Gulf and the Sultanate of Oman form a particular regional hotspot where climate change is likely to cross the survivability threshold in the absence of drastic carbon cuts. Moreover, much of Oman's population, infrastructure, and economic activity are located in coastal zones and are vulnerable to sea-level rise, salt-water intrusion, and more frequent extreme tropical cyclones.

The energy sector emitted the most greenhouse gases in 2015, making up 64% of total emissions, primarily due to the emissions from the oil and gas, transportation and electricity generation using natural gas and diesel. The second-largest GHG emitter with 30% of the total nationwide emission is the industrial processes and product uses. Over the period 2000-2015, Oman's economic carbon intensity increased slightly from 1.1 to 1.4 Kg CO₂ per US dollar of output, and the emission of the CO₂ equivalent per capita reached 22.9 tons in 2015.

Over the last five years (2015-2019), Oman has developed a national strategy for adaptation and mitigation to climate change 2020-2040 to accelerate climate actions' pace and scale. The strategic context for adaptation is rooted in Oman's ineluctable exposure to intensifying tropical cyclones, increasing temperatures, and rising sea levels. Understanding land use, climate, water resources, and agriculture/fisheries are an essential context for identifying, designing, and implementing preparedness/response measures to reduce the vulnerability of communities, resources, and systems. The mitigation strategy basis is rooted in recognizing the need to control a trend of greenhouse gas emissions growth. A review of population growth, economic trends, and energy supply/demand represents the essential context for prioritizing, finance, and implementing cost-effective efficiency and renewable energy strategies to slow the growth in national greenhouse gas emissions.

From 2017 to 2019, the Sultanate of Oman has established a strategic framework for engagement with the GCF through the Country's Programme on Climate Change initiatives and priorities. Six thematic areas (i) Water resources, (ii) Agriculture, (iii) Marine, and Fisheries, (iv) Urban Areas, (v) Health, (vi) Energy efficiency) have been identified in the country engagement program for the GCF to finance over the medium-term. The Sultanate of Oman has prepared the National Adaptation Plan (NAP) proposal with GCF from 2018-2020.

The Sultanate of Oman has embarked on serious structural reforms and transformative policies to lay the groundwork for a low carbon economy and shift to low-emission sustainable development pathways over the last five years. The country has developed a comprehensive "2040 Vision" policy to further liberalize and diversify the economy by increasing investments in tourism, financial services, and port logistics. Additionally, the National Energy Strategy established an audacious goal of generating a significant portion of electricity from renewable sources by 2030. The Ministry of Energy and Minerals, the Authority for Public Services Regulation and the Oman Power and Water Procurement Company (OPWP) are the government

entities responsible for implementing and catalyzing public and private investments in the renewable energy plan.

The Covid19 pandemic outbreak has triggered a world economic shock and plunged the national economy into an unprecedented recession. The Sultanate of Oman continues to address health emergencies and secure core public services in conjunction with comprehensive policies to foster long-term development, including enhancing governance and business climate and expanding and increasing investment outcomes in education and public health. However, as the Covid19 pandemic continues, the socio-economic repercussion will likely last for some time and could further slow down real GDP growth in the years to come.

Despite the still considerable uncertainty around the ultimate course of the Covid19 pandemic, the Sultanate of Oman continues to move ahead with the same determination to implement the 2030 Agenda for Sustainable Development since its announcement in 2015. Five years (2015-2019) have seen the Sultanate of Oman constantly pursue international commitments by incorporating them into long- and short-term policies and initiatives while using the UN's 2030 Agenda as a core pillar. 'Oman's Vision-2040 and the ninth Five-Year Plan (2016-2020) attest to the Sultanate's dedication to the 2030 Agenda for Sustainable Development being accomplished on time. In July 2019, the Sultanate of Oman submitted its first Voluntary National Review (VNR) to the United Nations High-Level Political Forum on Sustainable Development. The first Oman VNR represents the country's progress towards achieving its 17 Sustainable Development Goals (SDG) in an integrated manner. It outlines national strategies and plans explicitly formulated to achieve these goals, describes obstacles and plans for achieving SDGs, and reviews existing practices and programs that lead to achieving the objectives and priorities of national sustainable development.

2. Vision 2040: Oman's strategy towards a low carbon economy

Since mid the nineties, the Sultanate of Oman was a pioneer country in the Gulf region to formulate a long-term development strategy in a "Vision" document. The Oman vision 2020 was the first transition plan from the over-reliance on hydrocarbons to macroeconomic stability by isolating the economy from fluctuations of oil prices and providing a solid economic diversification base. With the Paris Agreement in place, economic diversification has regained urgency in the Sultanate of Oman. In 2020, the Oman Vision 2040 was officially endorsed to guide the nation over the next two decades to an advanced nation's position by focusing on four keys themes:

- A society of creative individuals: This calls for a society whose members are creative and proud of their identity, innovative and globally competitive, enjoying a decent life and sustainable well-being.
- A competitive economy: This calls for a productive and diversified economy characterized by a competitive structure; founded on innovation, the integration of roles, and equal opportunities, driven by the private sector and delivering inclusive and sustainable development.
- Responsible state agencies: This calls for a country that enjoys an accountable apparatus, integrated governance, efficient oversight, and a swift judiciary.
- An environment with sustainable components entails keeping a safe and well-preserved environment with effective and balanced ecosystems and renewable resources to support the National Economic.

The Sultanate of Oman adopted a strategic alignment between their NDC adaptation goals with the NAP process to foster resilient climate development's coherence and efficiency. The need for Oman to cope with climate threats is enormous, and the resources to address this are limited. Therefore, mobilizing climate finance from a variety of sources is a top priority of the NAP process that will be implemented over 2021-

2024 with GCF to address the financial needs of the Sultanate to cope with climate change in a context of a fast, fair, and just transition to a resilient, low carbon economy.

According to the 2040 vision, the strategic economic direction is toward a diverse and sustainable economy anchored on technology, knowledge, and innovation that operates within integrated frameworks, ensures competitiveness, embraces industrial revolutions, and achieves fiscal sustainability. The Omani economy is heading for the next 20 years to expand the production and export base, diversify trading partners, deepen investment in high value-added sectors, and enhance non-oil sectors' contribution to the GDP. The Oman vision 2040 includes several benchmarks and Key Performance Indicators for economic diversification and shifting to a low carbon economy. In 2017, the oil share of GDP was 39%, while non-oil sources accounted for 61%. The Sultanate aims to reduce the oil share of GDP to 16% in 2030 and 8.4% by 2040.

In contrast, the non-oil share of GDP is expected to hit 91.6 percent by 2040 (Table 1). Furthermore, the Sultanate has set a target to raise the energy intensity (GDP per unit of energy) from 6.92 in 2014 to 14.57 in 2030 and 17.3 in 2040. The 2040 vision data also revealed an ambitious target to raise the penetration of renewable energy in the energy mix to 20% in 2030 and up to 35-39% in 2040 (Table 2).

Table 1. Key Performance Indicators for Economic Diversification and Fiscal Sustainability in Oman Vision 2040 (Source: Oman vision document 2040).

Key Theme	Economy and Development		
	Priority	Economic Diversification and Fiscal Sustainability	
Key Performance Indicators	Baseline Values	2030 Target	2040 Target
Economic Complexity Index	Value: -0.004 (-3 – 3) Rank: 62/126 (2016)	Value > 1.186 or Top 20 Countries	Value > 1.577 or Top 10 Countries
Networked Readiness Index	Value: 4.31 (1 – 7) Rank: 52/139 (2016)	Value > 5.4 or Top 20 Countries	Value > 5.6 or Top 10 Countries
Readiness for Future of Production - Drivers of Production	Value: 5.13 (0 – 10) Rank: 45/100 (2018)	Value > 6.73 or Top 20 Countries	Value > 7.2 or Top 10 Countries
Readiness for Future of Production - Structure of Production	Value: 4.00 (0 – 10) Rank: 69/100 (2018)	Value > 6.21 or Top 20 Countries	Value > 7.34 or Top 10 Countries
Oil Share of GDP	39% (2017)	16.1%	8.4%
Non-Oil Share of GDP	Non-Oil: 61% (2017)	83.9%	91.6%
Current Account Deficit or Surplus to GDP Ratio	Value: -14.8% (2017)	-7% Deficit	-1.5% Deficit
Total Public Expenditure to GDP Ratio	Value: 45.1% (2017)	34%	25%
Non-Oil Revenue to GDP Ratio	Value: 9.5% (2017)	15%	18%
Gross Debt to GDP Ratio	Value: 44% (2017)	Does not Exceed 60%	

Table 2. Key Performance Indicators for Environment and Natural Resources in Oman Vision 2040 (Source: Oman vision document 2040).

Key Theme	Economy and Development		
Priority	Environment and Natural Resources		
Key Performance Indicators	Baseline Values	2030 Target	2040 Target
Environmental Performance Index	Value: 51.32 (0 – 100) Rank: 116/127 (2018)	Value > 65.46 or Top 40 Countries	Value > 74.69 or Top 20 Countries
GDP Per Unit of Energy Use	Value: 6.92 Int'l Dollar (fixed 2011) Rank: 97/130 (2014)	Value > 14.57 or Top 20 Countries	Value > 17.3 or Top 10 Countries
Oman Water Index	Value: 395 million cubic meter per person (2015)	550 - 600	650 - 700
Renewable Energy Consumption percentage of total consumption	Value: 0% Rank: 200/210 (2015)	20%	35% - 39%

3. 2030 Carbon Control Target Plan

3.1. Large scale renewables and energy efficiency plan

The Government Carbon Control Target Plan is rooted in the Oman vision 2040 and the National Energy Strategy to support a gradual transition to a low carbon economy and an energy matrix significantly lower in carbon emission by 2030. The massive deployment of renewable energy and the deepening of energy efficiency actions are the pillars of the 2030 carbon control plan in the Sultanate. The National Energy Strategy has set an ambitious target to derive 20% of electricity from renewables by 2027 (Figure 1). Over the period 2021-2027, the Renewable energy plan aimed to secure at least 2,660 MW. The plan relies mainly on solar PV with 79% and wind of about 21% (Table 3). The power generation decarbonization plan has already started since the third quarter of 2019 with the first wind farm of 49 MW in the Sultanate of Oman and the Gulf region. Commercial operations for the Sultanate's first large-scale solar PV project of 500 MW are due to begin at the end of 2021.

The National Energy strategy further enhances the gas-fired plant's overall energy efficiency in conjunction with the clean energy plans. The energy efficiency of the gas fired plants' has improved by 13% between 2004 and 2015 (from 26% in 2005 to 39% in 2015). Between 2015 and 2020, the improvement was even more significant at 15.63% (from 39% in 2015 to 55% in 2020). The continuous increase in overall energy efficiency was attributed to the older, less productive plants' shut-down, technical advances in the gas-fired plants, and a switch to combined-cycle plants. The gas-fired plants' efficiency will continue to improve over the next five years (2021-2025) by about 11% (from 55% in 2020 to 63% in 2027) (Figure 2).

As energy consumption is a leading cause of rising GHG emissions over the coming years, The Sultanate of Oman has initiated in 2016 of series of fiscal improvements to enhance energy conservation and to promote the culture of the energy-saving by liberalizing the prices of petroleum products and phasing out gradually the subsidies on water and electricity over five years (2021-2025). In tandem with these fiscal improvements, the Sultanate of Oman has activated a social protection system for fuels, electricity, and water to support eligible families.

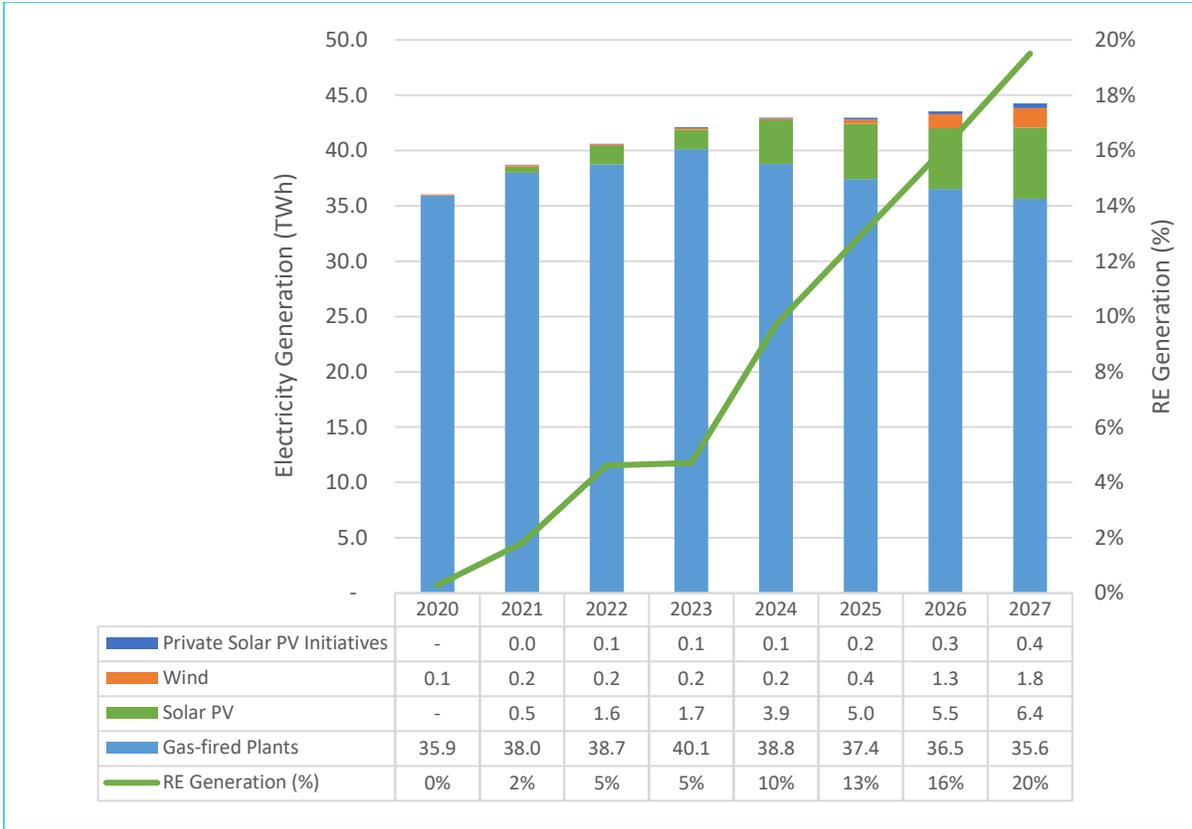


Figure 1. Fuel Shares in the Electricity Generation by 2027

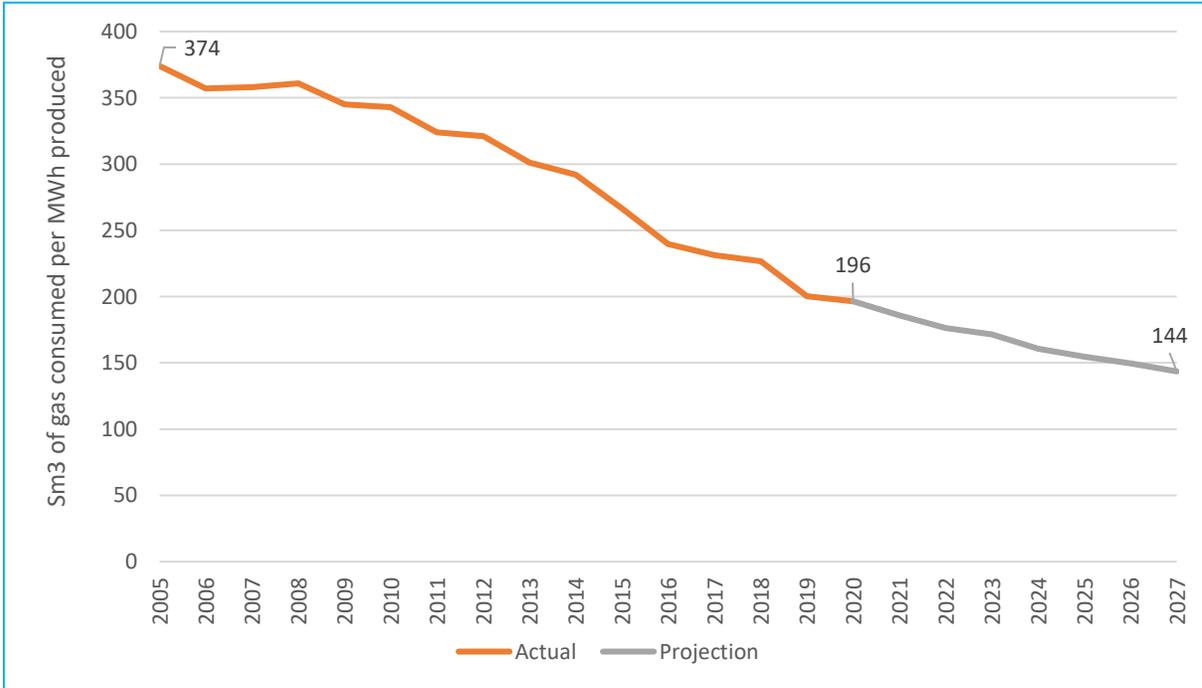


Figure 2: Gas Required per Unit of Electricity Generation in the Main Interconnected System

Table 3. Renewable Energy Plan in the Sultanate of Oman by 2027

a. Main Interconnected System (MIS)

	2021	2022	2023	2024	2025	2026	2027
Contracted Projects	MW ^(a)						
Ibri II Solar IPP	-	500	500	500	500	500	500
Total Contracted	-	500	500	500	500	500	500
Planned Projects							
Manah I Solar IPP	-	-	-	500	500	500	500
Manah II Solar IPP	-	-	-	-	500	500	500
MIS Solar IPP 2025	-	-	-	-	500	500	500
Jalaan Bani Bu Ali Wind IPP 2025	-	-	-	-	-	100	100
Solar PV 2027	-	-	-	-	-	-	600
Total Planned	-	-	-	500	1,500	1,600	2,200

(a) The year in which capacities are reported to represent the year in which the project is anticipated to contribute to peak demand requirements.

b. Ad Duqm Power System

	2021	2022	2023	2024	2025	2026	2027
	MW						
Duqm Wind IPP 2025 ^(a)	-	-	-	-	-	200	200
Duqm II Wind IPP 2027 ^(a)	-	-	-	-	-	-	160 ^(b)
Total - Installed Capacity	-	-	-	-	-	200	360

(a) Estimated capacity contribution for this project is tentatively set at 50%, pending the assessment of ground-measured wind data.

(b) Expected capacity for the Duqm II Wind IPP is anticipated to change following further site and resource assessments.

C. Dhofar Power System

	2021	2022	2023	2024	2025	2026	2027
Non-firm Contracts Renewables							
Dhofar I Wind IPP	49	49	49	49	49	49	49
Dhofar II Wind IPP	-	-	-	-	-	100	100
Total - RE Capacity Contribution ^(b)	25	25	25	25	25	75	75

^(b) Capacity contribution of 50% is currently assumed for Dhofar I & II Wind IPPs.

In 2018, the Sultanate of Oman made mandatory the GCC Standard No. (GSO) 2530/2016 (E) on energy efficiency regulations and minimum energy efficiency requirements for air conditioners. The standard is intended to help reduce the electricity consumption of split units (split) and window air conditioners, as air conditioners are one of the most energy-intensive devices. As stipulated by the regulations, energy efficiency cards were prominently displayed on the interfaces of all air conditioners to enlighten consumers and give them information that guides them in selecting the most energy-efficient air conditioners. Energy

efficiency is measured by the number of stars on the card, with more stars indicating that the air conditioner consumes less energy. Shortly, the energy efficiency regulation will be expanded to include additional home appliances such as refrigerators, refrigerator-freezers, freezers, water heaters, LED lighting, and washing machines.

The proposed renewable energy projects, energy efficiency plans, and energy conservation initiatives would enable the Sultanate of Oman to slow GHG emission growth and reduce them by 7% in 2030, compared to the BAU scenario, which is predicted at about 125.254 MTCO₂e assuming a sustained moderate GDP growth rate at 3% per year, a total population of 6.3 million by the year 2030. Additionally, the BAU scenario covers only confirmed primary industries planned for the following decade as per the available statements of June 2021, such as petrochemical, mining, and metals.

The Sultanate of Oman is concerned with the decarbonization of the transportation sector, which has been the fastest-growing major contributor to GHG emissions between 2000 and 2015. The transportation sector's diverse characteristics and various impacts necessitate extensive research to achieve even greater outcomes and impacts in sustainability and carbon emission reduction. Therefore, the Sultanate of Oman's priority over the next few years will be to perform studies that will create frameworks and plans of action with realistic strategies to ensure transportation sustainability and decarbonization.

3.2. Carbon reduction plan for the oil and gas industry

Oil and Gas upstream operators in Oman are increasingly determined to play their part in mitigating climate change to the degree required and to join the national efforts to achieve more ambitious carbon cuts in a world that demands a cleaner energy future. Oman's upstream oil and gas industry has set an ambitious aim to reduce the carbon intensity of operations through improving the efficiency in the existing facilities, reducing gas flaring, innovation, implement renewable energy projects designed to meet the challenge to mitigate climate change. The envisaged carbon reduction plan from Oman's oil and gas upstream industry focus on the following notable areas:

- Shifting to renewable energy as a power source
- Significantly reduce gas flaring
- Improving the efficiency in the existing facilities
- Reducing methane and fugitive emissions
- Electrifying equipment

The upstream oil and gas sector in Oman is evaluating ambitious target of zero emissions by 2050. The strategy's major components include a substantial investment in renewable and alternative energy sources and a commitment to achieve Zero Routine Flaring by 2030. Oman's upstream oil and gas industry has already signed up to the World Bank's Zero Flaring Initiative which is urging governments, businesses, and development organizations to work cooperatively to end continuous flaring by 2030. As part of this commitment, Oman's upstream oil and gas industry is developing economically viable solutions to phase out routine flaring as quickly as possible and ahead of the World Bank's target date.

IV. Climate Preparedness and Resilience

The Sultanate of Oman has stepped up its efforts in advancing its expertise and methodologies to better manage the climate change risks over the past five years. The adaptation efforts are underway, and the status of adaptation planning is still at a nascent stage. Through its recently developed Climate Change Strategy, national stakeholders have begun to identify climate-resilient opportunities within a set of key vulnerable sectors, namely water resources, marine biodiversity, and fisheries; agriculture; urban areas, tourism & infrastructure; and public health. However, several gaps/barriers hinder reaching NDC adaptation goals related to effective adaptation planning for climate-resilient development, including (i) Limited data, information, and knowledge available for undertaking vulnerability. (ii) Limited experience

with methods and tools to support climate risk-informed decision-making in critical sectors. (iii) Insufficient national budgets to address the scope and magnitude of climate change impacts effectively. (iv) Insufficient national regulatory frameworks in place to support effective adaptation planning.

The Sultanate of Oman adopted a strategic alignment between their NDC adaptation goals with the NAP process to foster resilient climate development's coherence and efficiency. The National Adaptation Plan's objective is to integrate the adaptation into development planning in Oman, resulting in low carbon, climate-resilient development priorities, projects, and transition pathways. Climate economics and finance are central in dealing with this objective. National Adaptation Plan will build a national system for developing project pipelines that help Oman mobilize local funds (public and private) and access climate finance from international funds to implement climate-resilient and transition pathways. The NAP will also help to build local capacity and improve data management.

Climate change-related threats to the Sultanate of Oman have increased in recent years, evidenced by changes in the number, duration, and intensity of tropical cyclones. The Sultanate of Oman is no longer a stranger to severe tropical cyclones, as recently witnessed by the Category 3 Tropical Cyclone (TC) Mekunu, which hit the southern part of Oman on May 26, 2018. TC cyclone Mekunu is estimated to have impacted 150,000 people, killed 7, and caused hundreds of millions of US dollars' worth of damage. Despite the economic recession of the last five years, the Sultanate of Oman continues protecting its vulnerable cities from the devastating impacts of tropical cyclones and flash flooding and takes several adaptation measures, such as :

- The continuous improvement of the storm drainage network infrastructure through the constructions of large dams.
- Elaboration of a comprehensive National Spatial Strategy 2020-2040 to anticipate the impact of climate change on urban areas and infrastructures and incorporate adaptation and mitigation measures into new developments where necessary while ensuring future flexibility and responding to climate change.

Oman has also adopted significant climate change adaptation measures in the area of food security. This sector has risen to prominence as a high-priority sector for government investment due to the considerable threat that Climate change poses to global food security. Adaptation measures to alleviate food insecurity in Oman prioritize domestic production through investment in mega-projects in agriculture and fisheries and groundwater improvement for agricultural purposes through recharge dams to reduce salinity and raise groundwater levels near coastal areas.

V. Means of Implementation

The Sultanate of Oman is committed to reducing GHG emissions by 7% by 2030 relative to BAU. 4% of this commitment will be based on national efforts, and the remaining 3% would necessitate grants and other forms of concessional financing and assistance as well as capacity building, institutional strengthening and access to appropriate technologies. International climate finance is a crucial element for the Sultanate of Oman to further bend the GHG emission growth curve over the next decade. Article 6 of the Paris Agreement is an additional mechanism for the Sultanate of Oman to achieve cost-efficient emission reductions, facilitate the transfer of carbon mitigation technology, and deliver significant sustainable development co-benefits. Such co-benefits would reduce air pollutants', create jobs, and lay the ground for the just transition to a climate-resilient economy and society.

The need for the Sultanate of Oman to cope with climate threats is enormous, and the resources to address this are limited. Mobilizing climate finance from a variety of sources is a top priority of the NAP process that will be implemented over 2021-2024 with GCF to address the financial needs of the Sultanate to cope with climate change in a context of a fast, fair, and just transition to a resilient, low carbon economy. The Sultanate of Oman foresees support from multilateral and bilateral organizations, including the Green Climate Fund, multilateral agencies, and bilateral agreements. These funds will be used to leverage the

limited national financial and technological capability available for climate change mitigation and adaptation.

VI. Information Necessary for Clarity, Transparency, and Understanding of the Second NDC

1 Quantifiable information on the reference point (including, as appropriate, a base year):		
a	Reference year(s), base year(s), reference period(s) or other starting point(s);	GHG 2030 Business-as-Usual Emissions Projection.
b	Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year;	Oman's net GHG emissions in 2030 relative to BAU are estimated to be 125.254 MTCO _{2e} .
c	For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or policies and measures as components of nationally determined contributions where paragraph 1(b) above is not applicable, Parties to provide other relevant information;	Not applicable.
d	Target relative to the reference indicator, expressed numerically, for example in percentage or amount of reduction;	Reduction of 7% in 2030 relative to BAU, with total GHG emissions capped to 116.486 MTCO _{2e} in 2030.
e	Information on sources of data used in quantifying the reference point(s);	<p>The following data sources were used to calculate the reference points:</p> <ul style="list-style-type: none"> • National energy strategy, 2015. • National Strategy for Adaptation and Mitigation to Climate Change: 2020-2040, 2019. • Second Communication of the Sultanate of Oman to UNFCCC, 2019. • Biennial Update Report of Oman to UNFCCC, 2019. • The Oman Power and Water Procurement Company (OPWP), 7 years statement, Issue 13 (2019-2025), 2019. • First Voluntary National Review to the United Nations High-Level Political Forum on Sustainable Development, 2019. • Oman vision 2040, 2020. • Oman at a glance (Large scale planned projects), 2020.

		<ul style="list-style-type: none"> National Centre for Statistics and Information, "Population Projections in the Sultanate of Oman, 2017-2040", (in Arabic); Population Statistics Bulletin, Issue 7. A Quarterly magazine issued by the Special Economic Zone Authority at Duqm 9th Issue - July 2017.
f	Information on the circumstances under which the Party may update the values of the reference indicators.	The base year for the 2030 BAU emissions is predicted at about 125.254 MTCO _{2e} , assuming a sustained moderate GDP growth rate of 3% per year, a total population of 6.3 million by 2030. The BAU scenario covers only confirmed primary industries planned for the following decade as per the available statements of June 2021, such as petrochemical, mining, and metals. The base year for 2030 may be recalculated and updated based on the covid-19 pandemic and further methodological improvements. The Biennial Transparency Report (BTR) will provide details on updates made.
2 Time frames and/or periods for implementation:		
a	Time frame and/or period for implementation, including start and end date, consistent with any further relevant decision adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA);	2021-2030.
d	Whether it is a single-year or multi-year target, as applicable	Single-year target in 2030.
3 Scope and coverage:		
a	General description of the target;	Oman's economic target to reduce 7% compared to BAU by 2030 covers the energy sector, which is the primary emission source.
b	Sectors, gases, categories and pools covered by the nationally determined contribution, including, as applicable, consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines;	<p>Sectors :</p> <p>Please refer to section III. 2030 Carbon Control Target Plan</p> <p>Gases:</p> <ul style="list-style-type: none"> Carbon Dioxide (CO₂). Methane (CH₄). Nitrous Oxide (N₂O).

c	How the Party has taken into consideration paragraph 31(c) and (d) of decision 1/CP.21; (indicating how the Party is striving to include all sources and sinks, and why any categories are excluded).	The energy sector emitted the most greenhouse gases in 2015, making up 65% of total emissions. This emission pattern will continue in the next decade, primarily due to the emissions from the oil and gas supply chain and electricity generation using natural gas and diesel. By 2030, the planned renewable power plants and energy efficiencies will reduce emissions from electricity generation. Over the following years, the Sultanate of Oman will continue working to lay the ground for expanding the scope of its NDC coverage to other categories of anthropogenic emissions.
d	Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans, including description of specific projects, measures and initiatives of Parties' adaptation actions and/or economic diversification plans.	Please refer to section II. Vision 2040: Oman's strategy towards a low carbon economy

4 Planning processes:

a	Information on the planning processes that the Party undertook to prepare its nationally determined contribution and, if available, on the Party's implementation plans, including, as appropriate:	The enhanced target results from a comprehensive impact evaluation, analysis of the future vision and strategies 2040, and stakeholder feedback gathered through public consultation.
b	Specific information applicable to Parties, including regional economic integration organizations and their Member States, that have reached an agreement to act jointly under Article 4, paragraph 2, of the Paris Agreement, including the Parties that agreed to act jointly and the terms of the agreement, in accordance with Article 4, paragraphs 16–18, of the Paris Agreement;	Not applicable
c	How the Party's preparation of its nationally determined contribution has been informed by the outcomes of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement;	Oman's climate change strategy was formulated in light of the best available science. The IPCC Special Report on 1.5C has served as the basis for the evaluation of the second NDC.
d	Each Party with a nationally determined contribution under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation co-benefits consistent with Article 4, paragraph 7, of the Paris Agreement	Please refer to the following sections : I. National Circumstances II. Vision 2040: Oman's strategy towards a low carbon economy

		IV. Climate Preparedness and Resilience
5	Assumptions and methodological approaches, including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals:	
a	Assumptions and methodological approaches used for accounting for anthropogenic greenhouse gas emissions and removals corresponding to the Party's nationally determined contribution, consistent with decision 1/CP.21, paragraph 31, and accounting guidance adopted by the CMA;	The Sultanate of Oman uses IPCC methodology and guidelines 2006 as guided by 1/CP.21 Article 4, paragraph 13 of the Paris Agreement for the inventory of their GHG emissions and removals.
b	Assumptions and methodological approaches used for accounting for the implementation of policies and measures or strategies in the nationally determined contribution;	The Sultanate of Oman will use appropriate methods and assumptions when reporting its progress in implementing the second NDC in its Biennial Transparency Report.
c	If applicable, information on how the Party will take into account existing methods and guidance under the Convention to account for anthropogenic emissions and removals, in accordance with Article 4, paragraph 14, of the Paris Agreement, as appropriate;	Please see 5(a) above.
d	IPCC methodologies and metrics used for estimating anthropogenic greenhouse gas emissions and removals;	Please see 5(a) above—tier 1 method of the IPCC methodologies and guidelines 2006.
e	Sector-, category- or activity-specific assumptions, methodologies and approaches consistent with IPCC guidance	Not applicable. There is no forest in the Sultanate of Oman.
f	Other assumptions and methodological approaches used for understanding the nationally determined contribution and, if applicable, estimating corresponding emissions and removals, including:	Please see 5(a) above.
g	The intention to use voluntary cooperation under Article 6 of the Paris Agreement, if applicable	Reduction of 7% in 2030 relative to BAU. 4% of this commitment will be based on national efforts, and the remaining 3% would necessitate grants and other forms of concessional financing and assistance with capacity building and institutional strengthening and access to appropriate technologies. Furthermore, article 6 of the Paris Agreement is an additional mechanism for the Sultanate of Oman to achieve cost-efficient emission reductions, facilitate the transfer of carbon mitigation technology, and deliver significant sustainable development co-benefits.
6	How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances:	

a	How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances;	The Sultanate of Oman is a non-annex I country with a vision to shift to a low carbon economy by 2040 and believes that the NDC's ambitious target conforms to Article 2 of the Convention. The NDC is an ambitious economy-wide goal that is consistent with the best available science and evidence.
b	Fairness considerations, including reflecting on equity;	Please refer to 6(a) above.
c	How the Party has addressed Article 4, paragraph 3, of the Paris Agreement;	Please refer to 4(d) above.
d	How the Party has addressed Article 4, paragraph 4, of the Paris Agreement	Please refer to 4(d) above.
e	How the Party has addressed Article 4, paragraph 6, of the Paris Agreement.	Please refer to 4(d) above.
7	How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2:	
a	How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2;	Please see 6(a) above.
b	How the nationally determined contribution contributes towards Article 2, paragraph 1(a), and Article 4, paragraph 1, of the Paris Agreement.	Please see 6(a) above.