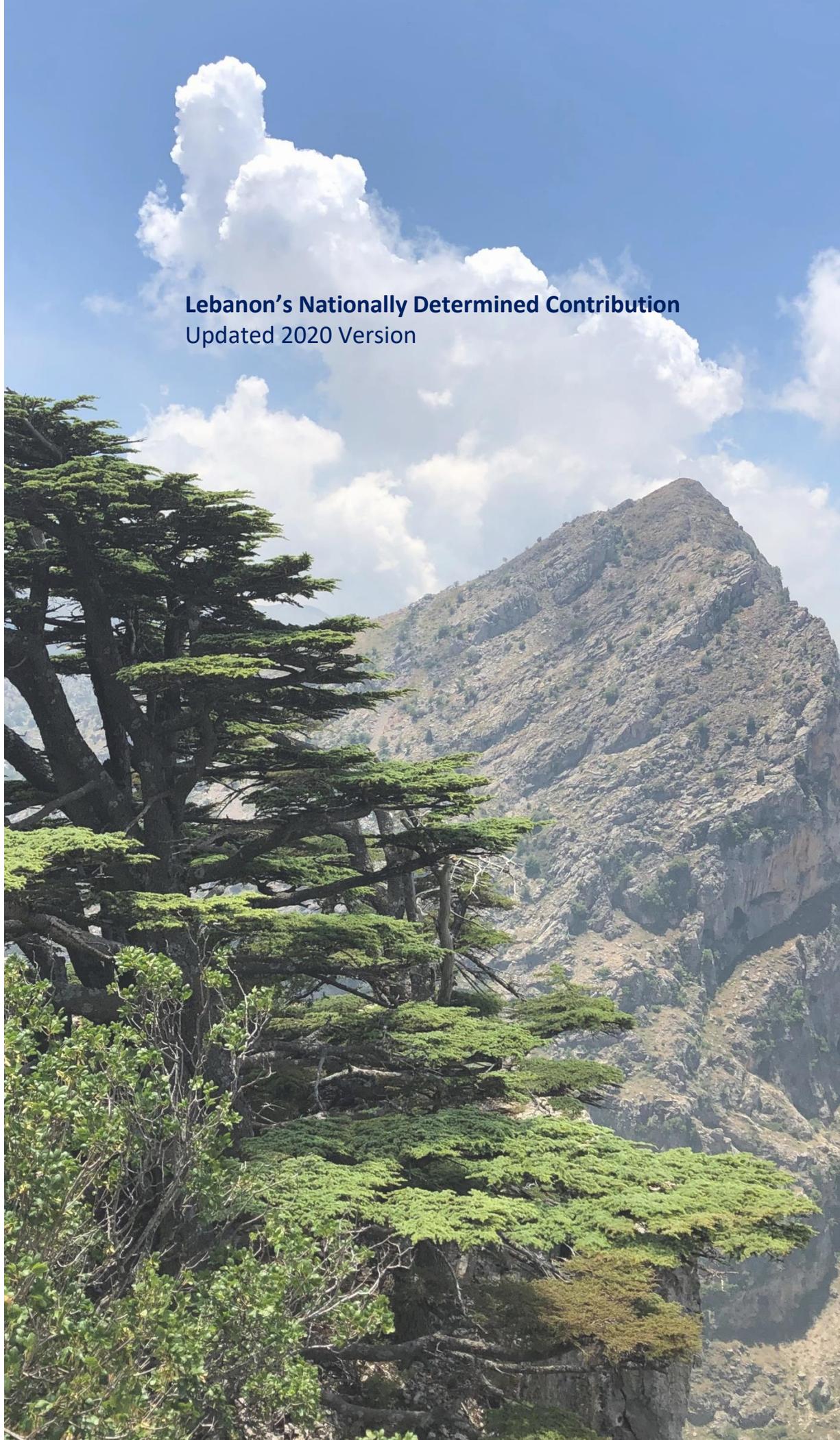




# Lebanon's Nationally Determined Contribution

Updated 2020 Version



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## Executive Summary

Amid the significant gap between the aggregate effect of greenhouse gas emission reductions announced in the 2015 Nationally Determined Contributions (NDCs) and the emissions pathway consistent with the Paris Agreement goal, the global call for ambition should be met with an increase in climate action efforts. Moreover, the IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways clearly calls for stronger mitigation measures, as well as enhanced resilience, in order to avoid catastrophic climate changes.

**The Republic of Lebanon is submitting an update to its 2015 Nationally Determined Contribution (NDC)** in accordance with Article 4.9 of the Paris Agreement (and Law 115/2019) to respond to this call for enhancement and to meet the goals of the Agreement. Lebanon firmly believes in combatting the climate crisis by adopting a pathway towards sustainable development.

**This update comes at a time when Lebanon is facing economic, financial, monetary, and banking crises which significantly impact economic output, livelihoods, and development.** Several reforms packages are under development to bring Lebanon onto a more sustainable and positive development path. Lebanon will need international support to successfully overcome the economic downturn, and to sustainably rebuild its economy and the resilience of its society.

**Despite its hardships, Lebanon remains committed to fighting the climate crisis.** This will entail policy and fiscal reforms to enable the improvement of the energy and transport sectors through energy efficiency, the sustainable use of Lebanon's land and water resources, the reduction of polluting practices in agriculture, waste, and industry, and enhancing the resilience of communities and infrastructure. These solutions go in tandem with Lebanon's economic recovery and would increase revenue to the government, which are crucial steps to emerge from the current crisis. **This NDC update is therefore aligned with the economic recovery effort and while providing complementary sustainable solutions to Lebanon's challenges.**

Moreover, Lebanon prioritizes the consideration of the socio-economic status of the most vulnerable through a gender lens. Finally, this NDC will be achieved only if all national stakeholders (including non-state actors such as municipalities) cooperate and the international community supports Lebanon during these difficult times.

The most notable updates of this 2020 NDC are:

Increase in mitigation  
ambition and transparency

Lebanon commits to unconditionally increase its greenhouse gas emission reduction target relative to the Business-as-Usual (BAU) scenario from 15% to 20%, and conditionally increasing its GHG emission reduction target relative to the BAU scenario from 30% to 31%.

Lebanon commits to unconditionally generate 18% of its power demand (i.e. electricity demand) and 11% of its heat demand (in the building sector) from renewable energy sources in 2030, compared to a combined 15% in 2015. Moreover, Lebanon conditionally commits to generate 30% of its power demand (i.e. electricity demand) and 16.5% of its heat demand (in the building sector) from renewable energy sources in 2030, compared to a combined 20% in 2015.

This NDC provides additional information on the mitigation targets through the guidance on Information to provide Clarity, Transparency and Understanding (ICTU) in Decision 4/CMA.1.

Increase in adaptation action clarity

More clarity is provided on Lebanon's adaptation guiding principles and priorities, forming part of its adaptation communication.

Adaptation priorities include strengthening of the agricultural sector's resilience, sustainable use of natural resources, developing sustainable water services, managing terrestrial and marine biodiversity, reducing vulnerability of coastal zones, ensuring public health safety and reducing disaster risk.

Enhance synchronization

Lebanon's NDC targets and implementation are synchronized with the 2030 Agenda for Sustainable Development, as well as other related conventions to maximize efficiency and partnerships.

Improve integration and inclusiveness

The importance of a whole-of-society approach has been considered in this NDC by prioritizing vulnerable groups in climate action.

## 1. National Circumstances

Lebanon faces an unprecedented **economic, financial, monetary, and banking crisis**. An accumulation of large budget deficits has significantly increased the debt-to-GDP ratio. Moreover, the **Lebanese Pound has devalued, while inflation rates soared**, impacting the Purchasing Power Parity (PPP) of Lebanese citizens. The fact that Lebanon relies on imports for most of its food and energy supplies has aggravated the situation even further. The **COVID-19 pandemic** has exacerbated conditions whereby the government-imposed lockdowns that further lowered economic activity.

On August 4<sup>th</sup>, 2020, **an explosion** occurred at the port of Beirut which damaged the Port infrastructure, and surrounding area; the cost of damage is estimated between 3.8 and 4.6 billion US Dollars<sup>1</sup>. This further sets back an already struggling economy and has halted a large area of commercial activity and essential services: the consequent physical capital losses of the blast are expected to cause an additional decline in GDP, estimated at 0.4 to 0.6 percentage points<sup>1</sup>.

Since 2011, Lebanon has been dealing with a crippling humanitarian crisis due the **displaced Syrian population**, which has stretched an already fragile public infrastructure with demands exceeding the capacity of institutions to meet the required needs. The lack of security caused by the regional turmoil adds another layer of paralysis. Therefore, Lebanon once again considers that the achievement of its targets presumes:

- The reinstatement, as soon as possible, of the prevailing national circumstances prior to the latest regional crisis, a matter considered as Lebanon's legitimate right;
- The absence of the emergence of any new crisis which could adversely affect Lebanon's national circumstances.

Lebanon is experiencing a multi-faceted crisis, which will only worsen with climatic impacts. Therefore, **Lebanon's priority for the next decade is to spur sustainable growth through the creation of decent jobs and improve the well-being of its population through welfare programmes and protection of natural resources**. Consequently, the implementation of this NDC consists of inherent components in Lebanon's economic recovery path, while reaffirming Lebanon's commitment to the climate fight.

It is under these circumstances, and in accordance with Article 4.9 of the Paris Agreement and Law 115/2019, that Lebanon presents its updated 2020 NDC, which can only be achieved through the cooperation of all national stakeholders and the invaluable support of the international community during these difficult times.

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<sup>1</sup> Beirut Rapid Damage and Needs Assessment (RDNA), World Bank (2020)

## 2. Climate Action for Sustainable Development and a Green Economy

Lebanon's roadmap to macroeconomic stability amid the number of challenges it is facing will need to be green, inclusive, and conform with the **leave no one behind** principle. The aim is to drive sustainable, low-emission growth, as well as increase the resilience of the economy, communities and ecosystems to sustain any future shocks, including climate events. The government has put forth several plans and reforms agendas to attract foreign investments and aid to put the country on a long-term sustainable growth trajectory, including the CEDRE-CIP (Conference Economique pour le Développement par les Reformes avec les Entreprises – Capital Investment Program)<sup>2</sup>, the Lebanon Economic Vision (LEV)<sup>3</sup> and the Government Financial Recovery Plan<sup>4</sup>. Moreover, several ministerial strategies are shifting their missions by reiterating the priority to drive sustainable economic growth. Moreover, a climate-proofing analysis of the above plans has been conducted to secure harmonization with the Paris Agreement mandate.

**This NDC update is synchronized with these plans and reforms** and most of the proposed courses of action are already stated in endorsed ministerial strategies and plans, which together form Lebanon's international commitment.

Lebanon's NDC, in addition to reducing national greenhouse gas emissions, will also improve air quality, enhance food security, reduce poverty and vulnerability, create job opportunities, protect the environment and green cities, and improve social welfare and boost economic growth. Moreover, in the energy sector it will increase its robustness, security, reliability, sustainability and independence, which will reduce the burden on the government budget and alleviate the fiscal deficit.

Furthermore, climate action enables the move to a green and blue economy by removing barriers to clean investments and solidifying demand for greener products and services through sound economic incentives and regulation. Moving towards a green economy in Lebanon satisfies the concept of sustainable development since it aims for high human development, with a reduced ecological impact. Lebanon's draft Low Emission Development Strategy's (LEDS) objectives are in line with this principle, by visualizing a circular economy, enhanced research and development, and decoupled economic growth and GHG emissions. **This NDC is a steppingstone to achieving the LEDS objectives in 2050.**

**Lebanon prioritizes a just transition through the consideration of the socio-economic status of the most vulnerable, adopting a gender-responsive approach.** This is in line with the Government of Lebanon's adherence to the Secretary-General's 2019 Climate Action Summit declaration on Social and Political drivers, which aims at "ensuring that the economic, environmental and social aspects of the transformation of economies and societies towards greater sustainability are managed in ways that maximize opportunities of decent work for all, reduce inequalities, promote social justice, and enhance country's efforts to improve the people's health."

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<sup>2</sup> CEDRE – CIP (2018) (<http://www.pcm.gov.lb/Admin/DynamicFile.aspx?PHName=Document&PageID=11231&published=1>)

<sup>3</sup> LEV, McKinsey (2018) (<https://www.economy.gov.lb/media/11893/20181022-1228full-report-en.pdf>)

<sup>4</sup> Government Financial Recovery Plan (2020) (<http://finance.gov.lb/en-us/EventPdfs/English/The%20Lebanese%20Government%20Financial%20Recovery%20Plan.pdf>)

### 3. Climate Action Enablers

Measures for sustainable development and climate action are most effective if based on robust governance mechanisms, regulations and partnerships. Lebanon therefore views these elements as Climate Action Enablers which are crucial to sustained and more ambitious actions to achieve the NDC. Moreover, these enablers contribute to the achievement of numerous Sustainable Development Goals, including SDGs 16 (Peace, Justice and Strong Institutions) and 17 (Partnerships for the Goals). Several enablers below are already underway, and others have been prioritized for implementation.

#### *CAE1: Improved Governance and Institutional Capacities*

Lebanon prioritizes climate governance as the enabling of institutions to plan, prepare and react to climate change. Building the needed institutional capacities to reform, analyze, coordinate and regulate climate and sustainable development action is essential. This is particularly important for climate policy coherence, efficiency, integration and mainstreaming, which are the building blocks of effective and informed green reforms.

#### *CAE2: Incentivized Action and Fiscal Reform*

Lebanon strives to derisk climate-relevant investments both for the public and private sectors, as it is of the essence to accelerate the deployment of climate-friendly technologies, especially renewable energy<sup>5</sup>. Additionally, fiscal incentives and disincentives are necessary to operationalize the “Polluter Pays Principle” across all relevant emitting sectors to fast-track the shift to greener options, such as Decree 167/2017 which reduces corporate tax/customs fees based on clean technology uptake, Article 55 of 2018 Budget Law which provides tax exemptions for electric vehicles and tax reductions for hybrid vehicles, and Law 77/2018

and its amended version 192/2020, where the Water Code lists penalties for polluters. Finally, climate-proofing public and private investments and projects is necessary to avoid climate-negative projects.

#### *CAE3: Strengthened Partnerships*

The role of Non-State Actors (NSAs), including the private sector and Civil Society Organizations is primordial to implement climate action. It is therefore important to scale-up the existing partnerships with NSAs to enable their increased involvement in mitigation and adaptation actions, as well as climate advocacy. Moreover, the Government of Lebanon is prioritizing the ease of doing business as depicted in its financial recovery plan, which will contribute to increased contributions from the private sector.

#### *CAE4: Innovative Research and Development Encouraged*

Lebanon aims to reduce the carbon intensity of its economy through stimulating Research and Development for low carbon and sustainable technologies. In addition, Lebanon needs to improve its scientific aptitude to better guide decision-making. It is therefore important to foster an innovative environment by sustainably enhancing the capabilities of the private sector, driving large public investments for research and piloting, partnering with academic bodies to provide the needed readiness for transformational change, and encouraging innovation labs.

#### *CAE5: Comprehensive Integration*

Integrated solutions to the climate crisis, as well as economic recovery, cannot be performed without the effective inclusion of gender institutions, youth groups and vulnerable communities. Lebanon plans to revise its policy-making process to include these groups which are key to the success of the NDC and are the most impacted by climate impacts.

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<sup>5</sup> UNDP (2017). *Lebanon: Derisking Renewable Energy Investment*. New York,

NY: United Nations Development Programme

*CAE6: Enhanced Monitoring and Transparency*

Clarity and effectiveness of action can only be guaranteed through a robust monitoring and transparency framework, tackling climate and sustainable development action, as well as support. In order to enhance the impacts of policymaking, and to successfully participate in

tracking the global progress of the climate fight, a transparency framework will be established to improve institutional arrangements, data availability and periodicity, as well as monitoring and evaluation of mitigation and adaptation projects.

#### 4. Mitigation Contribution

Lebanon is updating the mitigation targets included in its 2015 Nationally Determined Contribution (NDC) in accordance with paragraphs 9 of Article 4 of the Paris Agreement and Law 115/2019, paragraph 24 of Decision 1/CP.21 and paragraphs 5, 6 and 7 of Decision 1/CMA.2, to respond to the urgent global call for enhanced ambition in order to meet the Paris Agreement's goals, considering Common but Differentiated Responsibilities (CBDR) in light of national circumstances, and in line with the Secretary-General's Climate Action Summit declaration on Mitigation Strategy, which Lebanon joined in 2019.

**This NDC represents a progression beyond Lebanon's 2015 NDC** by unconditionally increasing its Greenhouse Gas (GHG) emission target relative to the Business-As-Usual (BAU) scenario from 15% to 20%, and conditionally increasing its GHG emission target relative to the BAU scenario from 30% to 31%. Moreover, Lebanon commits to unconditionally generate 18% of the power demand (i.e. electricity demand) and 11% of its heat demand (in the building sector) from renewable energy sources in 2030, compared to a combined 15% in 2015. Conditionally, Lebanon commits to generate 30% of the power demand (i.e. electricity demand) and 16.5% of its heat demand (in the building sector) from renewable energy sources in 2030, compared to a combined 20% in 2015 (guided by the IRENA Renewable Energy Outlook: Lebanon<sup>6</sup>). Lebanon believes that enhanced climate ambition is needed from all countries despite climate vulnerability, as increased mitigation leads to a decrease in adaptation needs.

The NDC GHG targets have been methodologically updated to reflect the national GHG inventory with the use of the 2006 IPCC Guidelines and the 100-year time-horizon GWP values from the IPCC Fifth Assessment Report.

**Most of the proposed courses of action to implement the mitigation NDC are already alluded to in endorsed ministerial strategies and plans, as well as reports,** such as the Policy Paper for Electricity sector (PPES) 2019, the 2020 National Water Sector Strategy (NWSS), the 2020 Ministry of Agriculture Strategy, the Oil and Gas Strategic Environmental Assessment, and the 2020 IRENA Renewable Energy Outlook: Lebanon, the National Cooling Plan (NCP), among others, which together form Lebanon's international commitment. Lebanon's GHG target is economy-wide, and includes mitigation efforts from the energy, transport, forestry, agriculture, waste and industrial sectors to achieve its NDC. Moreover, almost all planned mitigation actions have sustainable development co-benefits.

The implementation of the above-mentioned Climate Action Enablers is crucial to the achievement of the targets put forward in this update.

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<sup>6</sup> IRENA Renewable Energy Outlook: Lebanon ([https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Jun/IRENA\\_Outlook\\_Lebanon\\_2020.pdf](https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Jun/IRENA_Outlook_Lebanon_2020.pdf))

<p><b>Unconditional targets 2015<sup>7</sup></b></p> <ol style="list-style-type: none"> <li>1. A GHG emission reduction of 15% compared to the Business-As-Usual (BAU) scenario in 2030 (amounting to 6,222 Gg. CO<sub>2</sub>eq.)</li> <li>2. 15% of the power and heat demand in 2030 is generated by renewable energy sources.</li> <li>3. A 3% reduction in power demand through energy-efficiency measures in 2030 compared to the demand under the BAU scenario.</li> </ol>	<p><b>Unconditional targets 2020<sup>8</sup></b></p> <ol style="list-style-type: none"> <li>1. A GHG emission reduction of 20% compared to the Business-As-Usual (BAU) scenario in 2030, (amounting to 7,790 Gg. CO<sub>2</sub>eq.).</li> <li>2. 18% of the power demand (i.e. electricity demand) and 11% of the heat demand (in the building sector) in 2030 is generated by renewable energy sources.</li> <li>3. A 3% reduction in power demand through energy-efficiency measures in 2030 compared to the demand under the BAU scenario.</li> </ol>
<p><b>Conditional targets 2015<sup>7</sup></b></p> <ol style="list-style-type: none"> <li>1. A GHG emission reduction of 30% compared to the Business-As-Usual (BAU) scenario in 2030 (amounting to 11,860 Gg. CO<sub>2</sub>eq.).</li> <li>2. 20% of the power and heat demand in 2030 is generated by renewable energy sources.</li> <li>3. A 10% reduction in power demand through energy-efficiency in 2030 compared to the demand under the BAU scenario.</li> </ol>	<p><b>Conditional targets 2020<sup>9</sup></b></p> <ol style="list-style-type: none"> <li>1. A GHG emission reduction of 31% compared to the Business-As-Usual (BAU) scenario in 2030 (amounting to 12,075 Gg. CO<sub>2</sub>eq.).</li> <li>2. 30% of the power demand (i.e. electricity demand) and 16.5% of the heat demand (in the building sector) in 2030 is generated by renewable energy sources.</li> <li>3. A 10% reduction in power demand through energy-efficiency in 2030 compared to the demand under the BAU scenario.</li> </ol>

Lebanon will track progress and achievement of the unconditional and conditional targets listed above in its first Biennial Transparency Report (BTR) and onwards, contingent on adequate support.

**Additional information on the mitigation targets is provided in the Annex to this submission. Lebanon has used the guidance on Information to provide Clarity, Transparency and Understanding (ICTU) in Decision 4/CMA.1.**

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<sup>7</sup> GHG emission reductions recalculated as per the 2006 IPCC Guidelines and AR5 GWPs. Numbers reflect rounding.  
<sup>8</sup> The unconditional mitigation scenario includes the impacts of mitigation actions which Lebanon can nationally implement, and through international support in the form of loans or other repayable instruments.  
<sup>9</sup> The conditional mitigation scenario covers the mitigation actions under the unconditional scenario, as well as further mitigation actions which can be implemented upon the provision of additional international support in the form of grants.

## 5. Adaptation

### Impacts of Climate Change in Lebanon

Climatic changes are expected to have diverse implications on Lebanon's environment, economy, and social conditions. Extreme weather events are and will continue to impact public health, human settlements, infrastructure, agricultural output, power supply and the economy at large. The fragile biodiversity, ecosystems, and natural habitats will be threatened by increased forest fires, pest outbreaks sea level rise, storm intensity and drought.

Moreover, a decrease in snow cover, water availability, agricultural productivity, including fisheries and aquaculture, and tourism would impose heavy economic costs. Moreover, studies show that for particularly dry years, when total annual precipitation is low, overall GDP is estimated to have lost more than 60% compared to years when total precipitation reached its optimal.

These effects, in turn, would lower incomes for households and businesses, reduce revenues and increase costs to the government.

**Therefore, adverse climate impacts will add an additional layer of challenges and sets back any improvement in the Lebanese socio-economic status. Lebanon views climate change as a threat multiplier to its current struggles which makes tackling the climate crisis a global priority, and swift adaptation a national one.**

### Adaptation Priorities

**Lebanon will increase its resilience to climate change in tandem with enhancing resilience against economic shocks and other possible disasters.** Therefore, Lebanon is prioritizing the synchronization of adaptation action with the implementation of the Sendai Framework for Disaster Risk Reduction, the Agenda 2030 for Sustainable Development, the United Nations Convention to Combat Desertification, and the United Nations Convention on Biological Diversity. Moreover, Lebanon acknowledges that vulnerable groups, especially women, are disproportionately impacted by climatic events, and will therefore commit to render climate adaptation action gender responsive.

Below are guiding principles and sectoral adaptation priorities which, together, aim **to preserve and restore the natural capital and enhance and protect the built capital, as well as livelihoods, to ensure sustainable growth and resilience to climate change.**

Moreover, **these principles and priorities are in line with the relevant national sectoral strategies** and will inform Lebanon's National Adaptation Plan (NAP), w. Furthermore, the most relevant SDGs are listed per sectoral priority; Lebanon considers the SDGs 5 (gender equality), 13 (climate action), 16 (peace, justice and strong institutions) and 17 (partnerships for the goals) to be inherent in the successful achievement of the adaptation priorities and are therefore considered relevant to all actions.

**The achievement of the different adaptation priorities is highly interactive.** Moreover, the implementation of the above-mentioned Climate Action Enablers is crucial to the achievement of the adaptation priorities.

Finally, as per paragraph 11 of Article 7 of the Paris Agreement, Law 115/2019 and paragraph 11 of Decision 9/CMA.1, the below priorities correspond to *(c) National adaptation priorities, strategies, policies, plans, goals and actions* of the Annex of Decision 9/CMA.1 (Further guidance in relation to the adaptation communication, including, inter alia, as a component of nationally determined contributions, referred to in Article 7, paragraphs 10 and 11, of the Paris Agreement and Law 115/2019). **Therefore, the below priorities constitute part of Lebanon’s Adaptation Communication in accordance with paragraph 10 of Article 7 of the Paris Agreement and Law 115/2019.**

Lebanon’s adaptive capacity and resilience depend on international support in the form of finance, technology transfer, capacity-building, and technical assistance.

### Guiding Adaptation Principles

1. Achieve food and water security through the sustainable management of resources
2. Enhance the resilience of the infrastructure, urban and rural areas to subsist climate-related disasters
3. Ensure and protect public health, well-being and safety of all communities through climate-resilient systems
4. Incorporate Nature-Based Solutions as a first line of defense from adverse impacts of climate change
5. Combat desertification and land degradation by achieving Land Degradation Neutrality
6. Substantially reduce the risk of climate and non-climate related disasters to protect lives, the economy and physical and natural assets

## Adaptation priorities

<b>Adaptation priority 1</b>	<b>Strengthen the agricultural sector’s resilience to enhance Lebanon’s agricultural output in a climate-smart manner</b>
Mitigation co-benefit(s)	Climate-smart agriculture includes GHG reducing measures such as managing quantities and types of fertilizers
Most relevant SDGs	SDGs 1, 2, 3, 5, 8, 12, and 15
Key activities	<ul style="list-style-type: none"> <li>· Restore the livelihoods and productive capacity of farmers and producers;</li> <li>· Increase agricultural production and productivity;</li> <li>· Enhance efficiency and competitiveness of agri-food value chains including fisheries;</li> <li>· Encourage private investment along the agri-food value chain including innovative technical solutions and improved access to climate finance and insurance;</li> <li>· Strengthen the enabling institutional environment;</li> <li>· Increase resilience of households with reference to food and nutrition security.</li> </ul>
Reference document	Ministry of Agriculture’s 2020-2025 Strategy

<b>Adaptation priority 2</b>	<b>Promote the sustainable use of natural resources, restore degraded landscapes, and increase Lebanon’s forest cover while meeting the ecological, social and economic needs of sustainable forest management</b>
Mitigation co-benefit(s)	Reforestation, afforestation and land restoration activities enhance carbon sinks
Most relevant SDGs	SDGs 1, 8, 12, and 15
Key activities	<ul style="list-style-type: none"> <li>· Achieve the goals listed in the Brummana Declaration for the Role of Mediterranean Forests to Fulfil the NDCs<sup>10</sup>;</li> <li>· Adapt forest systems to climate change by halting land degradation, controlling erosion of topsoil, improving water quality and soil productivity;</li> <li>· Establish sites with improved production capacity linking with the development of wood and non-wood forest product processing industry and with the people’s needs in terms of goods and services and improved employment opportunities;</li> <li>· Promote sustainable rangeland management;</li> <li>· Reduce the risk of intense and frequent forest fires through the development of fire prevention measures and early warning systems;</li> <li>· Manage pest and disease outbreaks to protect forests and forest resources.</li> </ul>
Reference document	Ministry of Agriculture’s National Forest Program (NFP), National Strategy for Forest Fire Management and the National Afforestation/Reforestation Programme 40 Million Forest Trees Planting Programme (NARP)

<sup>10</sup> <https://vi-med.forestweek.org/sites/default/files/resources/files/brummana-declaration.pdf>

<b>Adaptation priority 3</b>	<b>Structure and develop sustainable water services, including irrigation, in order to improve people's living conditions</b>
Mitigation co-benefit(s)	Irrigation using clean energy sources reduces GHG emissions
Most relevant SDGs	SDGs 1, 3, 8, 9, 11, 12, 15
Key activities	<ul style="list-style-type: none"> <li>· Implement the Beirut Water Declaration<sup>11</sup>;</li> <li>· Enhance the efficient use of irrigation water and expand the supply of surface water sources for irrigation;</li> <li>· Encourage and support the use of renewable energy in agricultural irrigation and in drinking water supply;</li> <li>· Build an operational and sustainable legal and institutional framework to ensure a proper management of the water sector allowing the development of sustainable and efficient services;</li> <li>· Develop financing tools for the sector to set-up financial mechanisms allowing the sustainability and the financial balance of the services;</li> <li>· Involve all actors in the service chain and establish sustainable mechanisms for collaboration and coordination to improve the sector monitoring and transparency.</li> </ul>
Reference document	Ministry of Energy and Water's National Water Sector Strategy (NWSS) and Ministry of Agriculture's 2020-2025 Strategy

<b>Adaptation priority 4</b>	<b>Value and sustainably manage Lebanon's terrestrial and marine biodiversity for the preservation and conservation of its ecosystems and habitats and the species they harbour in order to adequately respond to anthropogenic and natural pressures and to ensure Lebanese citizens equal access to ecosystem goods and services</b>
Mitigation co-benefit(s)	Biodiversity management contributes to carbon sinks and the blue economy
Most relevant SDGs	SDGs 2, 4, 11, 12, 14 and 15
Key activities	<ul style="list-style-type: none"> <li>· Identify the status of 75% of known flora and fauna species and implement conservation actions on 50% of threatened species;</li> <li>· Protect at least 20% of natural terrestrial and marine ecosystems and represent all types of ecosystems in the protected areas network;</li> <li>· Increase the total percent coverage of nature reserves to reach at least 5% of Lebanon's area;</li> <li>· Sustainably manage 50% of all natural ecosystems and properly consider them in spatial planning implementation;</li> <li>· Alleviate the gap between Lebanon's ecological footprint and biocapacity is to reach an equal state;</li> </ul>

<sup>11</sup> <https://www.riob.org/en/file/280436/download?token=plghHCp>

	<ul style="list-style-type: none"> <li>· Establish effective measures to control the introduction and diffusion of non-indigenous biodiversity into the environment;</li> <li>· Identify vulnerable ecosystems to climate change and develop and implement appropriate adaptation plans;</li> <li>· Implement rehabilitation plans in at least 20% of degraded sites so that they can safeguard the sustained delivery of ecosystem services.</li> </ul>
Reference document	Ministry of Environment’s National Biodiversity Strategy and Action Plan (NBSAP) and the “Assessment of Climate Change Impact on Lebanon Coastal Zone” report

<b>Adaptation priority 5</b>	<b>Reduce the vulnerability of climate change impacts on coastal zones, especially in cities</b>
Most relevant SDGs	SDGs 6, 9, 10 and 14
Key activities	<ul style="list-style-type: none"> <li>· Assess the sea-water intrusion in the major coastal aquifers;</li> <li>· Enhance the Artificial Recharge of some selected aquifers;</li> <li>· Refresh the water budgeting of all aquifers progressively;</li> <li>· Perform the modelling of the karstic, saline and porous aquifer;</li> <li>· Increase the protective capacity of coasts against storm surges and sea-level rise;</li> <li>· Promote sustainable use of natural resources, such as fisheries.</li> </ul>
Reference document	Ministry of Energy and Water’s National Water Sector Strategy (NWSS) and Ministry of Agriculture 2020-2025 Strategy

<b>Adaptation priority 6</b>	<b>Ensure overall public health and safety through climate-resilient health systems</b>
Most relevant SDGs	SDGs 3, 6, 10, and 11
Key activities	<ul style="list-style-type: none"> <li>· Assess the vulnerability of public health sector to climate change, identifying the current and future health effects and establishing early warning systems</li> <li>· Build the capacity of health sector professionals in the identification of health impacts from other sectors (e.g. transport, energy, food, water, housing and urban development);</li> <li>· Empower and ensure sustainability of existing environmental health functions and services to face challenges of water security for health, water quality degradation, droughts, heat waves, food security and safety, vectors redistribution, air quality degradation, floods and other climate related natural disasters;</li> <li>· Upgrade epidemiological surveillance to incorporate new health outcomes in the Epidemiological Surveillance Unit;</li> <li>· Develop a mechanism to incorporate climate data in the national health information system;</li> <li>· Develop health system response strategies, plans and projects and integrate them into national health strategies.</li> </ul>
Reference document	The National Health and Environment Strategy 2016-2021, MoPH, WHO,

<b>Adaptation priority 7</b>	<b>Reduce disaster risk and minimize damages by mitigating and adapting to climate-related natural hazards and extreme weather</b>
Most relevant SDGs	1, 2, 3, 9, 10 and 11
Key activities	<ul style="list-style-type: none"> <li>· Conduct a multi-hazard risk assessment;</li> <li>· Update/revisit flood, fire and drought risk maps;</li> <li>· Upgrade and develop an early warning platform for multi-hazards;</li> <li>· Coordinate the updating of the National Forest fire management strategy.</li> </ul>

## 6. Support Needed for NDC Implementation and Achievement

The NDC's implementation depends on adequate and predictable climate and sustainable development finance, as well as economic and political stability, and the enhanced capacity of Lebanese institutions.

Therefore, **Lebanon is working towards the establishment of the Lebanon Green Investment Facility (LGIF)** as stipulated in the Government's Financial Recovery Plan, to provide climate and green finance through accessible and affordable finance instruments for both the public and private sectors, as well as to provide needed technical assistance to various entities to create bankable projects. The LGIF is foreseen to substantially contribute to the implementation of the NDC by increasing investments to climate-friendly projects, through strong donor and investor coordination mechanism and capitalization strategy.

Moreover, **Lebanon is currently developing a climate-proofing methodology** which aims to assess and reduce the impacts of climate-negative projects, as well as potentially guide the evaluation of investments, through a climate-lens. Ultimately, Lebanon intends to explore the possibility of greening foreign investments including Official Development Assistance (ODA) to accelerate the achievement of the NDC and avoid locking in carbon emissions on the long-term. Finally, the consideration of Environmental and Social Standards (ESS), as well as gender-responsiveness should be included in projects' evaluation and implementation.

**Further support is strongly needed from the international donor community to overcome the many challenges Lebanon is facing,** including mitigating and adapting to climate

change. This support includes finance, capacity-building and technology transfer.

**Capacity-building of government institutions and Non-State Actors to mitigate and adapt to climate change.** More importantly, capacity-building support is needed to operationalize the Climate Action Enablers which act as means of implementation for climate action and sustainable development. Capacity development for reform and recovery is of essence to put Lebanese institutions on track to carry-out the required actions.

In this period of economic rebuild, **technology transfer is essential to access the best available technologies to avoid additional GHG emissions and increase adaptive capacities.** Sectors such as industry, agriculture, waste, energy and buildings could greatly benefit from technologies which enhance resource and production efficiency to encourage circular economy. Moreover, **the innovative digitalization of climate action** is foreseen to maximize the efficiency and sustainability of the green transition.

**Lebanon plans to make its support needs clear, starting with the Green Climate Fund (GCF)'s country programme for Lebanon.** The programme plans to provide guidance for investors and donors on NDC priorities, which will be in line with the planned investments for economic recovery.

Furthermore, the **NDC Partnership Plans under development will deliver an overview of sectoral enabling activities and needs** for the implementation of the NDC, both for climate action and climate transparency.

Annex I: Information necessary for clarity, transparency and understanding (ICTU) of Lebanon’s mitigation part of the NDC

<b>Nationally Determined Contribution (NDC) of Lebanon</b>	
1.	Lebanon commits to unconditionally reduce its greenhouse gas emissions by 20% below its Business-As-Usual (BAU) scenario (amounting to 7,790 Gg. CO <sub>2</sub> eq.) and to conditionally reduce its greenhouse gas emissions by 31% below its Business-As-Usual (BAU) scenario in 2030 (amounting to 12,075 Gg. CO <sub>2</sub> eq.)
2.	Lebanon commits to unconditionally generate 18% of its power demand(i.e. electricity demand) and 11% of its heat demand (in the building sector) by renewable energy sources and to conditionally generate 30% (i.e. electricity demand) of its power demand and 16.5% of its heat demand (in the building sector) by renewable energy sources in 2030
3.	Lebanon commits to unconditionally reduce power demand through energy efficiency measures by 3% under the Business-As-Usual (BAU) scenario and to conditionally reduce power demand through energy efficiency measures by 10% under the Business-As-Usual (BAU) scenario in 2030

*Numbers reflect rounding*

<b>Information necessary for clarity, transparency and understanding (ICTU) of Lebanon's NDC</b>		
Para	Guidance in decision 4/CMA.1	ICTU guidance as applicable to Lebanon's NDC
<b>1</b>	<b>Quantifiable information on the reference point (including, as appropriate, a base year):</b>	
(a)	Reference year(s), base year(s), reference period(s) or other starting point(s)	<ol style="list-style-type: none"> <li>Reference point: GHG emissions level in the projected BAU scenario in 2030</li> <li>Reference point: power demand (i.e. electricity demand) and heat demand (in the building sector) in the projected BAU scenario in 2030</li> <li>Reference point: Power demand (i.e. electricity demand) in the projected BAU scenario in 2030</li> </ol> <p>The BAU scenario does not take into account mitigation actions implemented after 2011.</p>
(b)	Quantifiable information on the reference indicators, <b>their values in the reference year(s)</b> , base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year	<ol style="list-style-type: none"> <li>GHG emissions level in the projected BAU scenario in 2030: 38,950 Gg CO<sub>2</sub>eq.</li> <li>Power demand (i.e. electricity demand) in the projected BAU scenario in 2030: 34,742 GWh, and heat demand in the building sector in the projected BAU scenario in 2030: 18 PJ</li> <li>Power demand (i.e. electricity demand) in the projected BAU scenario in 2030: 34,742 GWh</li> </ol>
(c)	For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or polices 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	<ol style="list-style-type: none"> <li>1. Target: unconditionally reduce GHG emissions by 20% below the BAU scenario (amounting to 7,790 Gg. CO<sub>2</sub>eq.) and to conditionally reduce GHG emissions by 31% below the BAU scenario (amounting to 12,075 Gg. CO<sub>2</sub>eq.) in 2030</li> <li>2. Target: unconditionally generate 18% of the power demand (i.e. electricity demand) and 11% of the heat demand in the building sector by renewable energy sources and to conditionally generate 30% of the power demand (i.e. electricity demand) and 16.5% of the heat demand in the building sector by renewable energy sources in 2030</li> <li>3. Target: unconditionally reduce power demand through energy efficiency measures by 3% under the BAU scenario and to conditionally reduce power demand through energy efficiency measures by 10% under the BAU scenario in 2030</li> </ol>
(e)	Information on sources of data used in quantifying the reference point(s)	The sources of data used to quantify the reference points consist of Lebanon's Third National Communication (TNC)'s time series analysis, as well as information stemming from consultations with the different concerned ministries through consultations. Moreover, information included in ministerial strategies as well as estimates from international organizations have been used to quantify the reference points. The BAU and mitigation scenarios were developed for all sectors using the Low Emissions Analysis Platform (LEAP) software.
(f)	Information on the circumstances under which the Party may update the values of the reference indicators	The GHG emissions level for the BAU scenario, unconditional and conditional targets in 2030 may be updated and recalculated depending on methodological changes in the GHG inventory, such as recalculating the GHG inventory with the 2006 IPCC Guidelines or changes in Global Warming Potential (GWP) in IPCC Assessment Reports, or the adoption of the 2019 IPCC Refinement. Information on updates made will be included in the Biennial Transparency Reports (BTR).

*Numbers reflect rounding*

<b>2</b>	<b>Time frames and/or periods for implementation:</b>	
(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)	Lebanon has already begun implementing the actions and activities needed to meet this commitment. It will continue to do so until 2030.
(b)	Whether it is a single-year or multi-year target, as applicable	Single-year target in 2030

<b>3</b>	<b>Scope and coverage:</b>	
(a)	General description of the target	Please refer to 1 (d) above.
(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>Lebanon's NDC is an economy wide absolute GHG emissions target. Information provided in Lebanon's inventory as part of its Biennial Transparency Report (BTR) will be consistent with the IPCC guidelines.</p> <p><u>Sectors</u> Energy, industrial processes and product use, agriculture, forestry and land-use, and waste.</p> <p><u>Gases</u> Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O).</p> <p>The inclusion of perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>) will be added to the NDC coverage once included in Lebanon's GHG inventory.</p> <p>For agriculture, forestry and land-use, emissions and removals the following reporting categories are included: forest land, cropland, grassland, and wetland (wetland remaining wetland only from 2026), including land use changes between the categories, and between these categories and settlements and other land. The five carbon pools above-ground biomass, below-ground biomass, litter, dead wood and soil organic matters are included. In addition, the carbon pool harvested wood products is included.</p>
(c)	How the Party has taken into consideration paragraph 31(c) and (d) of decision 1/CP.21	Lebanon's inventory describes the sources considered insignificant and reported as not estimated. A similar approach, consistent with decision 18/CMA.1, will be used for reporting under the Paris Agreement.
(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	Not applicable.

<b>4</b>	<b>Planning processes:</b>	
(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:	
(i)	Domestic institutional arrangements, public participation and engagement with local communities and indigenous peoples, in a gender-responsive manner	<p>The NDC update has gone through an inter-ministerial validation process to ensure the unification of views on the way forward for Lebanon in the next 10 years.</p> <ol style="list-style-type: none"> <li>1. Meetings with sectoral mitigation experts from line ministries were conducted to assess where additional ambition in the NDC could be allocated.</li> <li>2. An adaptation expert meeting comprising ministerial experts, academia and technical consultants was conducted to assess the enhanced adaptation targets, and their appropriateness considering Lebanon's special circumstances.</li> <li>3. A Non-State Actors (NSA) consultation meeting which included academic experts, youth, the private sector and civil society organizations was also organized to ensure their participation in defining the 2020 NDC update.</li> <li>4. Gender representatives were engaged in the different consultation meetings.</li> <li>5. Finally, the results were presented to the official inter-ministerial NDC committee, headed by the Ministry of Environment. Once feedback was received, the NDC was sent to the Council of Ministers for official approval.</li> </ol> <p>The NDC implementation process is coordinated by the Ministry of Environment and the implementation of the numerous sectoral policies is the responsibility of the line ministries.</p>
(ii)	Contextual matters, including, inter alia, as appropriate:	
	<p>a. National circumstances, such as geography, climate, economy, sustainable development and poverty eradication</p> <p>b. Best practices and experience related to the preparation of the nationally determined contribution</p>	<p>Please refer to</p> <ol style="list-style-type: none"> <li>1. Section 1 of this NDC: National Circumstances</li> <li>2. Part I of Lebanon's Third Biennial Update Report (BUR3) submitted to the UNFCCC in October 2019. <a href="https://unfccc.int/sites/default/files/resource/LEBANON-%20Third%20Biennial%20Update%20Report%202019.pdf">https://unfccc.int/sites/default/files/resource/LEBANON-%20Third%20Biennial%20Update%20Report%202019.pdf</a></li> </ol> <ol style="list-style-type: none"> <li>1. The implementation of Lebanon's NDC, as well as the development of the Low-Emission Development Strategy (LEDS), has been mandated by the official economic recovery plan of Lebanon, prioritizing climate action in the reform process. Therefore, the integration of the NDC into higher-level governmentally endorsed</li> </ol>

c. Other contextual aspirations and priorities acknowledged when joining the Paris Agreement

plan enhances climate action.

2. This NDC highlights the important linkages between climate action and the 2030 Agenda for Sustainable Development. Lebanon assessed the relationship between the sectoral adaptation and mitigation policies and the 169 Sustainable Development Goals (SDGs) sub-targets which resulted in numerous synergies in implementation and tracking. This exercise contributes to fully synchronizing the planning of climate action and sustainable development, which is made clear in this NDC.

Agriculture	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=281">http://climatechange.moe.gov.lb/viewfile.aspx?id=281</a>
Forestry	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=285">http://climatechange.moe.gov.lb/viewfile.aspx?id=285</a>
Energy	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=282">http://climatechange.moe.gov.lb/viewfile.aspx?id=282</a>
Renewable Energy	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=288">http://climatechange.moe.gov.lb/viewfile.aspx?id=288</a>
Energy Efficiency	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=284">http://climatechange.moe.gov.lb/viewfile.aspx?id=284</a>
Solid Waste	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=290">http://climatechange.moe.gov.lb/viewfile.aspx?id=290</a>
Solid Waste NAMA	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=289">http://climatechange.moe.gov.lb/viewfile.aspx?id=289</a>
Public Transport	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=287">http://climatechange.moe.gov.lb/viewfile.aspx?id=287</a>
Private Transport	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=286">http://climatechange.moe.gov.lb/viewfile.aspx?id=286</a>
Water	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=292">http://climatechange.moe.gov.lb/viewfile.aspx?id=292</a>
Biodiversity	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=283">http://climatechange.moe.gov.lb/viewfile.aspx?id=283</a>
Industry	<a href="http://climatechange.moe.gov.lb/viewfile.aspx?id=291">http://climatechange.moe.gov.lb/viewfile.aspx?id=291</a>

3. Lebanon thoroughly assessed the extent of gender-responsiveness in its climate-related policies through a gender analysis. A set of recommendations for gender integration into strategies, including the NDC was produced to ensure that climate action is implemented through a gender lens. This NDC strives to fully integrate gender in order to enhance implementation and consider vulnerable groups.

Not applicable.

(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	The first global stocktake is to take place in 2023. Lebanon participated in the Talanoa Dialogue in 2018 where it committed to enhance the ambition of its NDC and welcomed the IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways.
(d)	<p>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 to submit information on:</p> <p>(i) How the economic and social consequences of response measures have been considered in developing the nationally determined contribution</p> <p>(ii) Specific projects, measures and activities to be implemented to contribute to mitigation co-benefits, including information on adaptation plans that also yield mitigation co-benefits, which may cover, but are not limited to, key sectors, such as energy, resources, water</p>	Not applicable.

	resources, coastal resources, human settlements and urban planning, agriculture and forestry; and economic diversification actions, which may cover, but are not limited to, sectors such as manufacturing and industry, energy and mining, transport and communication, construction, tourism, real estate, agriculture and fisheries	
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<b>5</b>	<b>Assumptions and methodological approaches, including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals:</b>	
(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	Lebanon is accounting for its anthropogenic GHG emissions and removals using the 2006 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories, and 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands (collectively, the "2006 IPCC Guidelines").
(b)	Assumptions and methodological approaches used for accounting for the implementation of policies and measures or strategies in the nationally determined contribution	See 5(a) above. Lebanon will also apply specific assumptions and methodologies, where relevant, when accounting for progress of various policies and measures in its Biennial Update Report or 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	See 5(a) above.
(d)	IPCC methodologies and metrics used for estimating anthropogenic greenhouse gas emissions and removals	The IPCC 2006 guidelines and parts of IPCC 2013 Wetlands Supplement is being used for estimating GHG emissions and removals. Global warming potentials (GWP) for a 100-year time horizon from the IPCC's fifth Assessment Report (AR5) is being used to calculate CO <sub>2</sub> equivalents.

(e)	Sector-, category- or activity-specific assumptions, methodologies and approaches consistent with IPCC guidance, as appropriate, including, as applicable:	
(i)	Approach to addressing emissions and subsequent removals from natural disturbances on managed lands	GHG emissions and removals from natural disturbances, if any, will be accounted for in accordance with the prescribed 2006 IPCC Guidelines.
(ii)	Approach used to account for emissions and removals from harvested wood products	GHG emissions and removals from harvested wood products, if any, will be accounted for in accordance with the prescribed 2006 IPCC Guidelines.
(iii)	Approach used to address the effects of age-class structure in forests	Not applicable.
(f)	Other assumptions and methodological approaches used for understanding the nationally determined contribution and, if applicable, estimating corresponding emissions and removals, including:	
(i)	How the reference indicators, baseline(s) and/or reference level(s), including, where applicable, sector-, category- or activity-specific reference levels, are constructed, including, for example, key parameters, assumptions, definitions, methodologies, data sources and models used	<p>1. To quantify the GHG emissions level in the projected BAU scenario in 2030, the following assumptions were made for emission growth drivers:</p> <p>Population growth was estimated to be 1.65% annually till 2030, based on World Bank estimates.</p> <p>Moreover, when it comes to energy emissions, it was assumed that electricity demand will increase by 3.5% annually and that electricity demand which cannot be satisfied by the installed generation capacity, continues to be largely satisfied through private diesel generators. Also, in the BAU scenario, electricity production is decreasing by 1.3% per year due to the degradation of power plants. Finally, exploration activities in the offshore oil and gas sector has started in 2020 with the drilling of the first deep water well. However emission-intensive production and development operations are not expected to start before 2028, potentially contributing to the increase in GHG emissions level.</p> <p>For transport emissions, it was assumed that the fleet will be increasing by 3% annually. As for agriculture, emissions remain stable in the BAU scenario. As for forestry, due to an increase in deforestation, increase in forest fires and urban sprawl, the LULUCF sink is limited at a rate of 1% per year. Both the agriculture and forestry assumptions were made based on the time series analysis. As for waste emissions, generation is estimated to increase with population growth and with waste generation per capita increasing from 1.05 to 1.30 kg/capita/day.</p>

		<p>Finally, industrial emissions are estimated to increase by 2.5% annually.</p> <p>2. To quantify the reference point, the following assumptions were made for heat and power demand (i.e. electricity demand) growth:</p> <ul style="list-style-type: none"> <li>● Heat demand: heat demand has been considered only for the building sector based on data availability.</li> <li>● Power demand: Electricity demand increases by 3.5% annually; the electricity demand which cannot be satisfied by the installed generation capacity, continues to be largely met through private diesel generators.</li> </ul> <p>3. To quantify the reference point, the following assumptions were made for power demand (i.e. electricity demand) growth: Electricity demand increases by 3.5% annually; the electricity demand which cannot be satisfied by the installed generation capacity, continues to be largely met through private diesel generators.</p>
(ii)	For Parties with nationally determined contributions that contain non greenhouse-gas components, information on assumptions and methodological approaches used in relation to those components, as applicable	Not applicable.
(iii)	For climate forcers included in nationally determined contributions not covered by IPCC guidelines, information on how the climate forcers are estimated	Not applicable.
(iv)	Further technical information, as necessary	Not applicable.
(g)	The intention to use voluntary cooperation under Article 6 of the Paris Agreement, if applicable	While at present, the use of Article 6 mechanisms is not envisaged, Lebanon does not exclude the possibility of making use of international market mechanisms to achieve its NDC targets.

<b>6</b>	<b>How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances:</b>																	
(a)	How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances	Considering Lebanon’s difficult national circumstances and its regional context as depicted in the national circumstances in this NDC, as well as its low share in global emissions, Lebanon therefore considers the targets put forward in this update as fair and ambitious.																
(b)	Fairness considerations, including reflecting on equity	<p>Moreover, Lebanon applied the ICTU guidance to this 2020 NDC in order to enhance its clarity, transparency and understanding.</p> <p>The NDC GHG targets have been methodologically updated to reflect the national GHG inventory with the use of the 2006 IPCC Guidelines and the 100-year time-horizon GWP values from the IPCC Fifth Assessment Report.</p>																
(c)	How the Party has addressed Article 4, paragraph 3, of the Paris Agreement	<p>This NDC represents a progression beyond Lebanon’s 2015 NDC by unconditionally increasing its GHG emission target relative to the BAU scenario from 15% to 20%, and conditionally increasing its GHG emission target relative to the BAU scenario from 30% to 31%. Moreover, Lebanon commits to unconditionally generate 18% of the power demand (i.e. electricity demand) and 11% of its heat demand in the building sector from renewable energy sources in 2030, compared to a combined 15% in 2015. Conditionally, Lebanon commits to generate 30% of the power demand (i.e. electricity demand) and 16.5% of its heat demand in the building sector from renewable energy sources in 2030, compared to a combined 20% in 2015.</p> <p>The BAU level in 2030 changed due to the use of the IPCC 2006 guidelines as opposed to the 1996 Revised IPCC Guidelines used in the 2015 NDC, adding 0.97 percentage points to the 15% 2015 unconditional target, and adding 0.45 percentage points to the 30% 2015 conditional target. Despite this change, the 2020 NDC targets have increased to reach 20% unconditionally and 31% conditionally, due to increased mitigation effort.</p> <table border="1" data-bbox="793 1157 1990 1380"> <thead> <tr> <th rowspan="2"></th> <th colspan="2">NDC 2015</th> <th>NDC 2020</th> </tr> <tr> <th>1996 IPCC Revised Guidelines</th> <th>2006 IPCC Guidelines</th> <th>2006 IPCC Guidelines</th> </tr> </thead> <tbody> <tr> <td><b>BAU Level in 2030</b></td> <td>43,484 Gg CO<sub>2</sub>eq.</td> <td>38,950 Gg CO<sub>2</sub>eq.</td> <td>38,950 Gg CO<sub>2</sub>eq.</td> </tr> <tr> <td><b>Unconditional reduction in 2030</b></td> <td>6,523 Gg CO<sub>2</sub>eq.</td> <td>6,222 Gg CO<sub>2</sub>eq.</td> <td>7,790 Gg CO<sub>2</sub>eq.</td> </tr> </tbody> </table>			NDC 2015		NDC 2020	1996 IPCC Revised Guidelines	2006 IPCC Guidelines	2006 IPCC Guidelines	<b>BAU Level in 2030</b>	43,484 Gg CO <sub>2</sub> eq.	38,950 Gg CO <sub>2</sub> eq.	38,950 Gg CO <sub>2</sub> eq.	<b>Unconditional reduction in 2030</b>	6,523 Gg CO <sub>2</sub> eq.	6,222 Gg CO <sub>2</sub> eq.	7,790 Gg CO <sub>2</sub> eq.
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		<b>Conditional reduction in 2030</b>	13,045 Gg CO <sub>2</sub> eq.	11,860 GgCO <sub>2</sub> eq.	12,075 Gg CO <sub>2</sub> eq.
(d)	How the Party has addressed Article 4, paragraph 4, of the Paris Agreement	Lebanon's 2020 NDC target pertaining to reducing its greenhouse gas emissions by 20% below its Business-As-Usual (BAU) scenario and to conditionally reduce its greenhouse gas emissions by 31% below its Business-As-Usual (BAU) scenario, is an economy-wide target.			
(e)	How the Party has addressed Article 4, paragraph 6, of the Paris Agreement	Not applicable.			

<b>7</b>	<b>How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2:</b>	
(a)	How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2	Lebanon's 2020 NDC contributes towards achieving the objective of the Convention as set out in its Article 2, the objective of the Paris Agreement as set out in its Article 2, and Article 4, paragraph 1, of the Paris Agreement through enhancing its mitigation efforts as per 6(c) above, therefore reducing GHG emissions further and accelerating the energy transition.
(b)	How the nationally determined contribution contributes towards Article 2, paragraph 1(a), and Article 4, paragraph 1, of the Paris Agreement	