



Embedding Transparency Practices in NDC 3.0 for the Countries of Eurasia, Central Asia and the Caucasus, the Middle East, and North Africa.

Lebanon's Experience

February 18,, 2025
Beirut, Lebanon

Project Manager/Advisor: Lea Kai



What strategies has your country adopted to ensure the timely submission of NDC 3.0? and what is the current status of NDC 3.0 preparation in your country?

1. Build on NDC 2.0

Mitigation Targets

Unconditional targets 2020¹

- A GHG emission reduction of 20% compared to the Business-As-Usual (BAU) scenario in 2030, (*amounting to 7,790 Gg. CO₂eq.*).
- 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.
- A 3% reduction in power demand through energy-efficiency measures in 2030 compared to the demand under the BAU scenario.

Conditional targets 2020²

- A GHG emission reduction of 31% compared to the Business-As-Usual (BAU) scenario in 2030 (*amounting to 12,075 Gg. CO₂eq.*).
- 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.
- A 10% reduction in power demand through energy-efficiency in 2030 compared to the demand under the BAU scenario.

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.

²The 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.

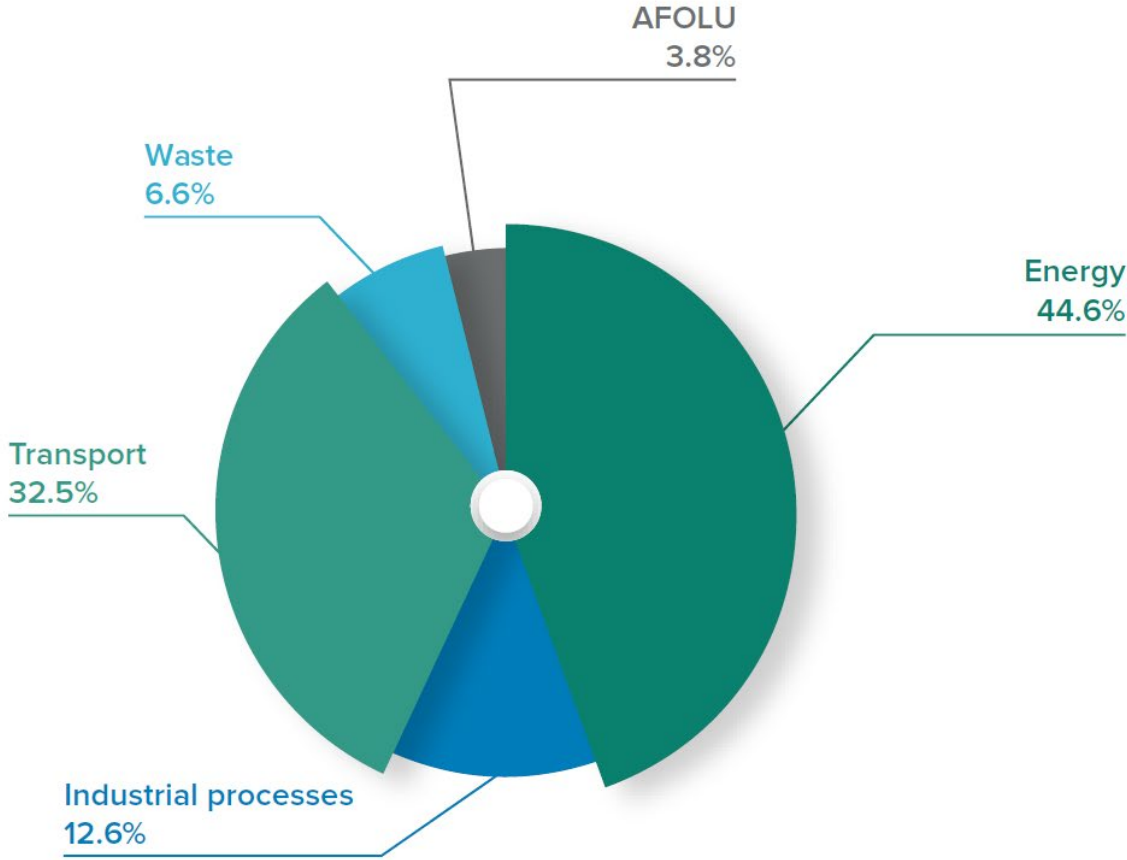
Adaptation guiding principles

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

1. Strengthen the agricultural sector's resilience to enhance Lebanon's agricultural output in a climate-smart manner.
2. 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.
3. Structure and develop sustainable water services, including irrigation, in order to improve people's living conditions.
4. Value and sustainably manage Lebanon's terrestrial and marine biodiversity for the preservation and conservation of its ecosystems and habitats and the species they harbor in order to adequately respond to anthropogenic and natural pressures and to ensure Lebanese citizens equal access to ecosystem goods and services.
5. Reduce the vulnerability of climate change impacts on coastal zones, especially in cities.
6. Ensure overall public health and safety through climate-resilient health systems.
7. Reduce disaster risk and minimize damage by mitigating and adapting to climate-related natural hazards and extreme weather.

2. Build on BTR1 results



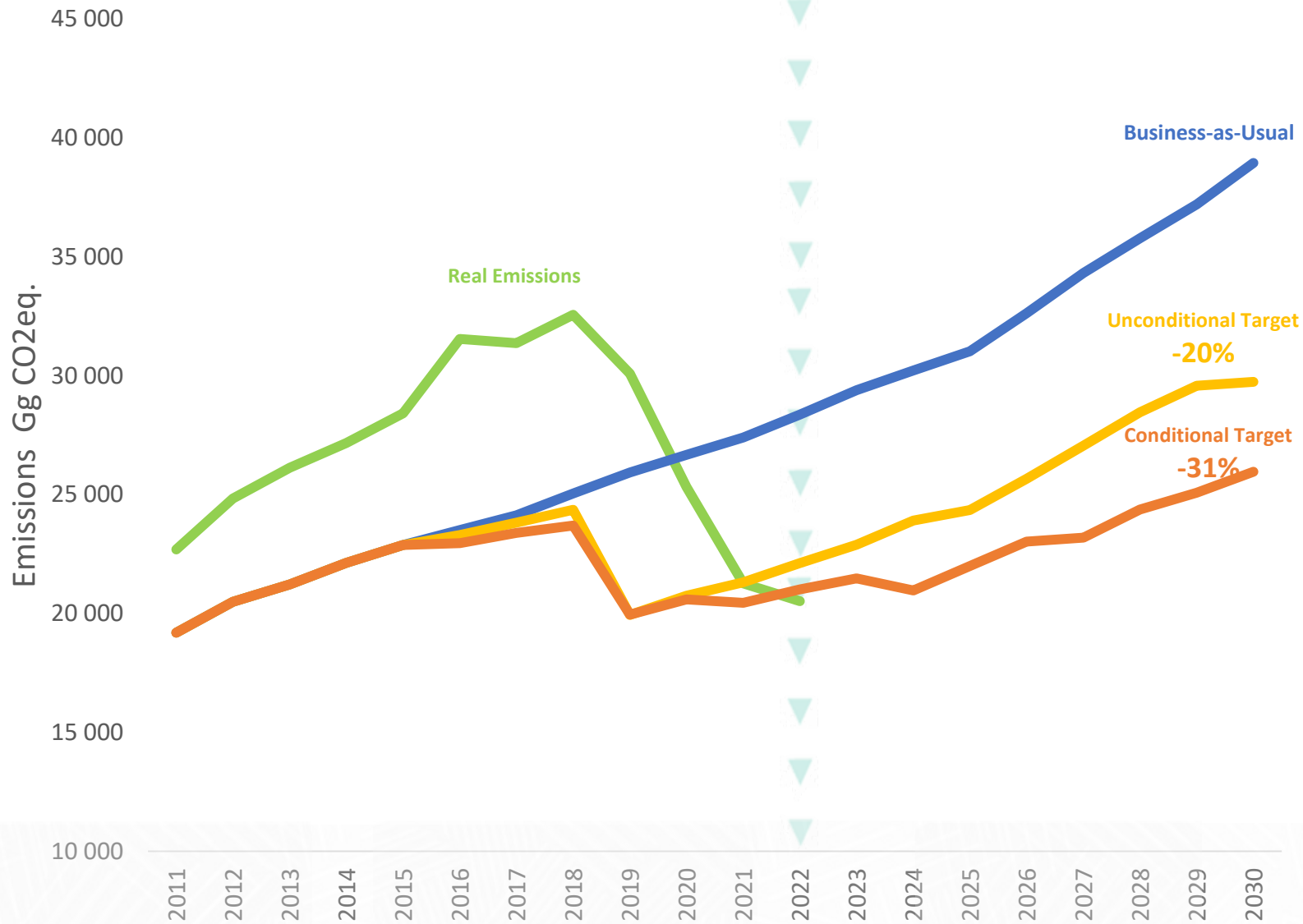
2022

Lebanon's emissions
20.5 Million
tonnes CO₂eq.

Source: Lebanon's First Biennial Transparency Report (BTR1)

-32%

Decrease in emissions
Compared to 2019



Source: Lebanon's First Biennial Transparency Report (BTR1)

Lessons Learned BTR

Enhance formulation of NDC targets to facilitate reporting:

Old Target: **Strengthen the agricultural sector's resilience to enhance Lebanon's agricultural output in a climate-smart manner –**

How to measure the “strengthened” impact?

What are the priority agricultural outputs ?

What is a climate smart manner?

New Potential Target/activities:

Restore the livelihoods and productive capacity of farmers and producers, through restoring or deploying climate-smart infrastructure (i.e. irrigation systems, water distribution systems, water reservoirs, terraces, greenhouses, hydroponic systems, animal husbandry infrastructure, beehives, aquaculture infrastructure, etc.)

Increase agricultural production and productivity by providing incentives and outreach on climate-adapted genetic material for animals and plants

Lessons Learned BTR

Clarify the conditions and unconditional, be simple and straightforward.

Do we compare to the BAU scenario?

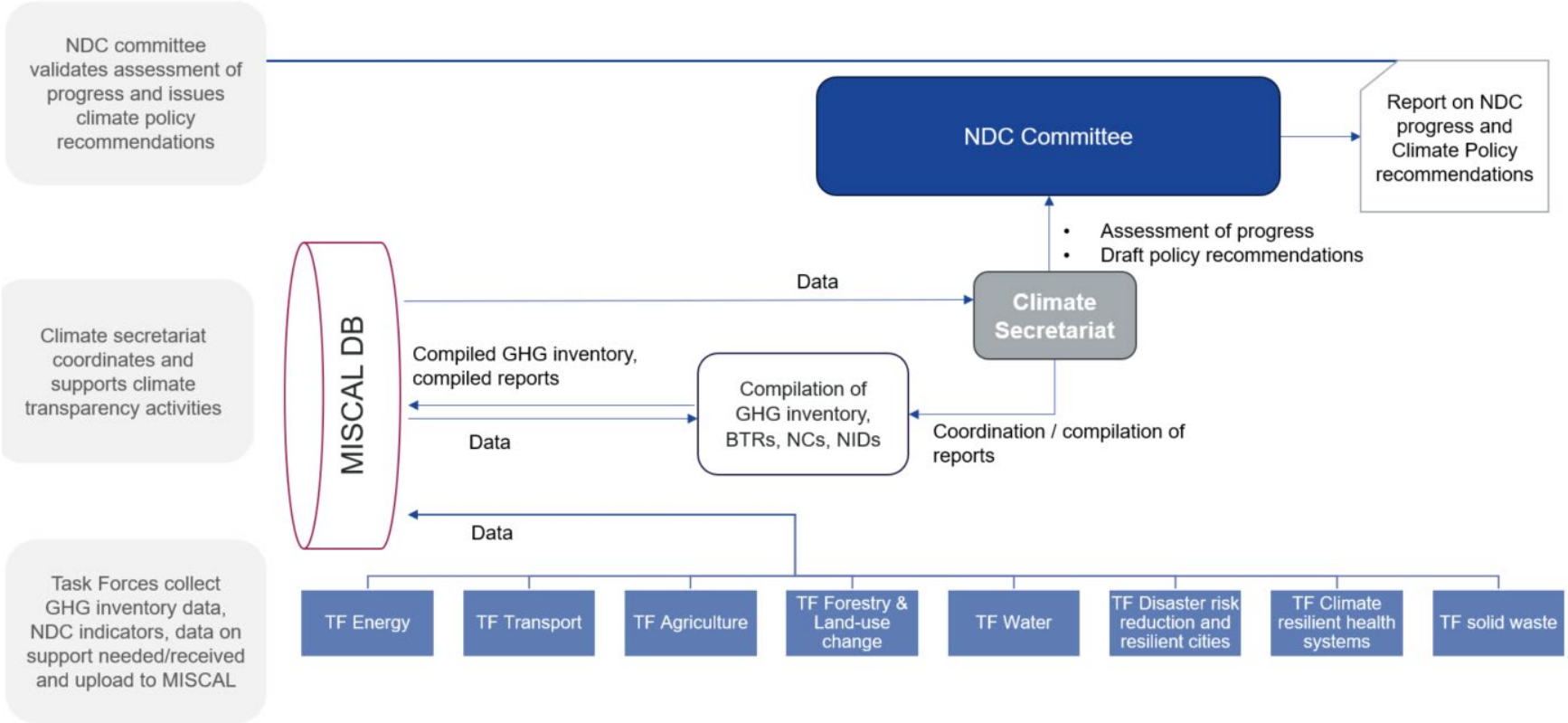
To the unconditional scenario?

Do we report in terms of % decrease? Or GWh? Or CO2 eq?

Compared to what?

| Indicator(s) | Unit, as applicable | Reference point(s), level(s), baseline(s), base year(s) or starting point(s), as appropriate (paras. 67 and 77(a)(i) of the MPGs) | Implementation period of the NDC covering information for previous reporting years, as applicable, and the most recent year, including the end year or end of period (paras. 68 and 77(a)(ii-iii) of the MPGs) | | | | Target level | Target year or period | Progress made towards the NDC, as determined by comparing the most recent information for each selected indicator, including for the end year or end of period, with the reference point(s), level(s), baseline(s), base year(s) or starting point(s) (paras. 69-70 of the MPGs) |
|--|-------------------------------|---|--|-----------|-----------|-----------|--------------|-----------------------|--|
| | | | 2011 | 2020 | 2021 | 2022 | | | |
| <i>Indicator(s) selected to track progress of the NDC or portion of NDC under Article 4 of the Paris Agreement (paras. 65 and 77(a) of the MPGs)</i> | | | | | | | | | |
| 1. Total greenhouse gas emissions (without LULUCF and F-gases) | kt CO ₂ equivalent | | 19,194 | 23,488.24 | 19,545.84 | 18,863.20 | 31,159.91 | 2030 | |
| BAU emissions baseline scenario (measured as kt CO ₂ equivalent) | kt CO ₂ equivalent | | 26,669.35 | 27,401.73 | 28,362.69 | 26,669.35 | | | Lebanon total emissions in 2022 (excluding LULUCF and F-gases) is 18,863 Gg CO ₂ eq., which is 33% under the reference BAU level in 2022 (28,362 Gg CO ₂ eq.). |
| Difference: BAU emissions baseline scenario - Total greenhouse gas emissions | kt CO ₂ equivalent | | 3,181.11 | 7,855.89 | 9,499.49 | 3,181.11 | | | |
| BAU emissions baseline scenario (measured as kt CO ₂ equivalent) | % | | 12.00 | 29.00 | 33.00 | 12.00 | | | |
| Where applicable, total GHG emissions and removals consistent with the coverage of the NDC (para. 77(b) of the MPGs) | kt CO ₂ equivalent | | | 23,488.24 | 19,545.84 | 18,863.20 | | | |
| Contribution from the LULUCF sector for each year of the target period or target year, if not included in the inventory time series of total net GHG emissions and removals, as applicable (para. 77(c) of the MPGs) | kt CO ₂ equivalent | | | -2,896.00 | -3,018.00 | -3,243.00 | | | |
| 2.1 Percentage of renewable energy in Electricity/power demand | % | 5 | | 5.00 | 4.00 | 12.00 | 18.00 | 2030 | In 2022, 12% renewable energy as share of total electricity demand. |
| Renewable energy generated | GWh | | | 1,163.00 | 902.00 | 1,913.00 | | | |
| 2.2 Percentage of heat demand in the building sector by RE sources | % | | | NA | NA | NA | | | |
| 3. Percentage reduction in power demand | % | 0 | | -1.00 | -14.00 | -38.00 | 3.00 | 2030 | 38% reduction in 2022, compared to the BAU 2022 demand. |

3. Build on CBIT Institutional arrangements



Suggested institutional framework for Lebanon's Climate Transparency Framework

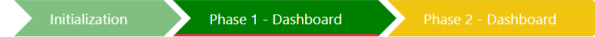
Source: Lebanon's First Biennial Transparency Report (BTR1)

Initialization

- TF - ENERGY
- TF - TRANSPORT
- TF - AGRICULTURE
- TF - FOLU
- TF - WATER
- TF - DRRRC
- TF - CRHS
- TF - SOLID_WASTE

TF TRANSPORT: Transport

| | | |
|--|--|--------------------------|
| Account Name | Password | |
| Guest | <input type="text"/> | <input type="password"/> |
| Data Entry | <input type="text"/> | <input type="password"/> |
| Validation | <input type="text"/> | <input type="password"/> |
| Coordinator | Please select coordinator <input type="text"/> | |
| <input type="text" value="Search for Users"/> <input type="button" value="→"/> | | |
| | Guest | Data Entry |



DASHBOARD - Taskforces

| Taskforce | Indicators to be filled | Started | On going | Completed |
|-----------------|-------------------------|------------|----------|------------|
| TF: SECRETARIAT | 0 | 2025-01-29 | 100% | 2025-01-29 |
| TF: TRANSPORT | 2 | 2025-02-04 | 100% | 2025-02-11 |
| TF: FOLU | 17 | 2025-02-11 | 100% | 2025-02-11 |
| TF: DRRRC | 25 | 2025-02-11 | 100% | 2025-02-11 |
| TF: SOLID_WASTE | 5 | 2025-02-11 | 100% | 2025-02-11 |
| TF: ENERGY | 45 | 2025-01-29 | 100% | 2025-02-11 |
| TF: AGRICULTURE | 25 | 2025-02-09 | 100% | 2025-02-11 |
| TF: WATER | 8 | 2025-02-11 | 100% | 2025-02-11 |
| TF: CRHS | 9 | 2025-02-11 | 100% | 2025-02-11 |

Management Information System for Climate Action in Lebanon (MISCAL) platform

3. Build on NAP GCF project

Launch GHG projections exercise to feed into NDC 3.0 preparation

Launch preparation of Adaptation Section

Launch assessment of Loss and Damage

Same data needs

Same stakeholder consultations

Same sectors

Different timelines

3. Build on BTR and NAP prodocs

Launch GHG projections exercise to feed into NDC 3.0 preparation

Launch preparation of Adaptation Section

Launch assessment of Loss and Damage

Adaptation gaps assessments and mapping

NAP roadmap and CCA strategy

Same data needs

Same stakeholder consultations

Same sectors

Different timelines

4. Initiate new activities for NDC 3.0 proposal

Prepare an assessment analysis of status of NDC activities at national level and progress vis-a-vis with the targets

Conduct Projections and 2035 Target Development, formulation of the NDC 3.0

Develop a Financial, Investment, and Implementation Strategy for NDC 3.0

Design Climate Change Governance Architecture

NDC 3.0: more ambition?

We will try to be more ambitious, in line with the new government plans

Time challenges because we might not have the new strategies in place by august.

Given the national circumstances,

do we change the BAU?

How will be develop in the near future?

What risks should we take into account?

How to capture the conflict and damage?



Thank you

lea.kai@undp.org

<https://climatechange.moe.gov.lb/publications>

