# Energy Community Technical Working Group on Climate and MRV

Mitigation, Energy, NDCs, LTLEDS

04 July 2023



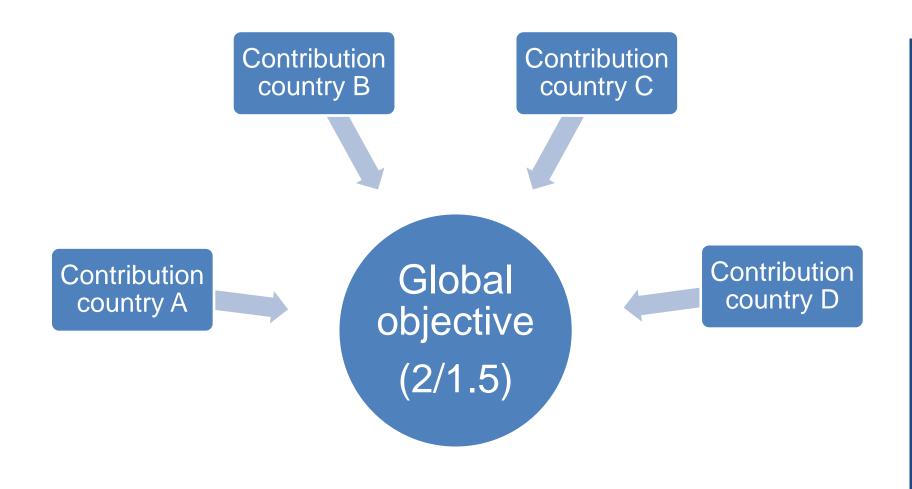
Bernd Hackmann, Team Lead, NDCs, LTLEDS, Sectoral Support Unit, Mitigation Division, UNFCCC

## **NDCs under the Paris Agreement**

Article 4.2 "Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions."

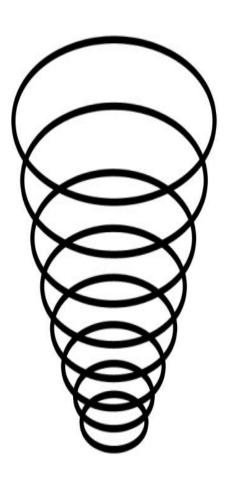






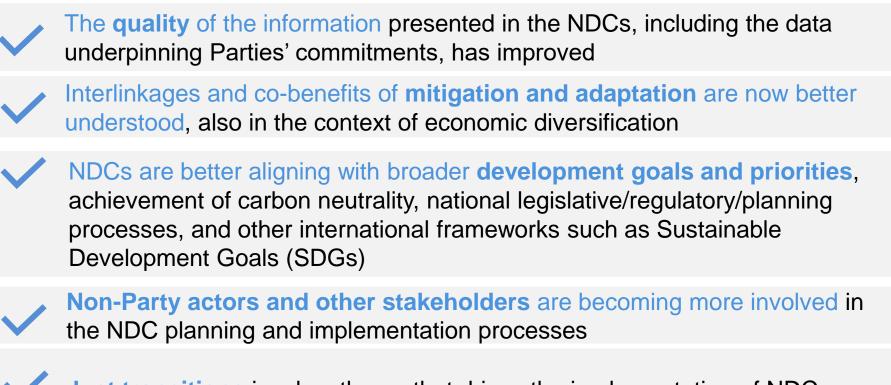


## Increasing ambition over time - Reaching the long-term objectives



- The Paris Agreement recognizes that its objectives will be achieved **through time**
- It builds on aggregate and individual progression/ambition
- It establishes a mandatory cycle of NDCs:
  - First submission by 2020 with 2030 targets
  - Enhanced ambition submitted every 5 years
  - Next NDCs are due in 2025
- Feedback Mechanisms
  - o Global Stocktake
  - Enhanced Transparency Framework

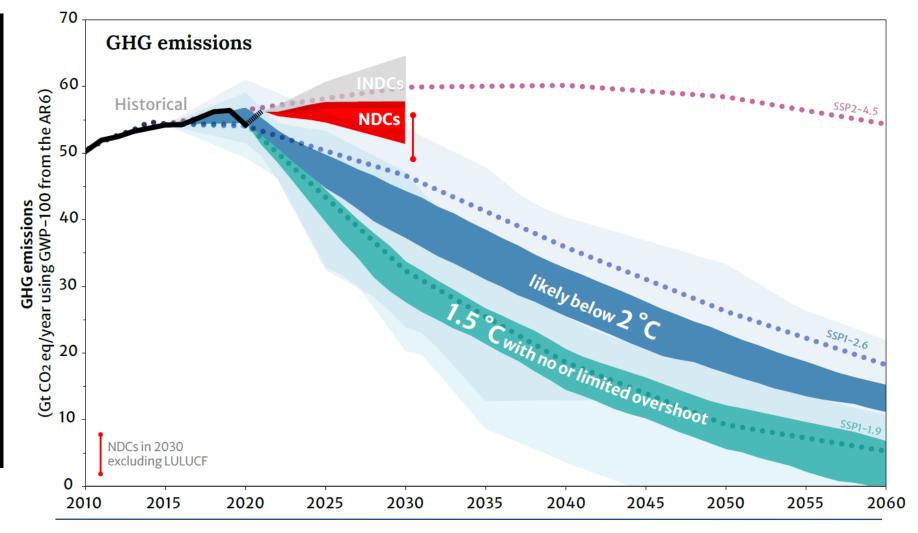




Just transitions is a key theme that drives the implementation of NDCs

**On adaptation:** Adaptation is moving towards more integrated national frameworks, with national adaptation plans being established as the main instrument for national-level planning

**On mitigation:** Renewable energy is the most frequent mitigation option in the NDCs, followed by energy efficiency improvement of buildings and multisectoral energy efficiency improvements





The **2022 NDC Synthesis report** estimates total global GHG emissions (without LULUCF) in **2030** to be around **52.4 Gt CO<sub>2</sub> eq**;

- 10.6 % higher than in 2010,
- 0.3 % lower than in 2019, and
- 1.9 % lower than the estimated level for 2025
- This is in contrast with the reduction levels by 2030 compared to 2019 identified by the IPCC AR6 WG III as compatible with keeping the global temperature increase below 1.5°C (-43%) or 2°C (-27%)
- The estimates indicate for global emissions to peak before 2030, when all NDCs are fully implemented on time (including support)
- Combined pledges could put the world on track for around 2.5 degrees Celsius of warming by the end of the century (range from about 2.1 to 2.9).



## Energy

- Immediate, deep, rapid and sustained reductions in GHG emissions across all sectors, including through increase in low-emission and renewable energy, just energy transition partnerships and other cooperative actions;
- Global energy crisis underlines the urgency to rapidly transform energy systems to be more secure, reliable, and resilient, including by accelerating clean and just transitions to renewable energy during this critical decade;
- Enhancing a clean energy mix, including low-emission and renewable energy, at all levels as part of diversifying energy mixes and systems;



## **The Mitigation Work Programme**

## Sharm el-Sheikh mitigation ambition and implementation work programme (MWP)

## Objective

 to urgently scale up mitigation ambition and implementation in this critical decade in a manner that complements the global stocktake

## Mandate

- Organizing two global dialogues focusing on an exchange of views, information and ideas and investment related events to bring together a multitude of stakeholders. <u>Other dialogues may be</u> <u>held in conjunction with existing events</u>, such as the regional climate weeks.
- Negotiating sessions under the SBs and the CMA to have annual decision to consider progress, including key findings, opportunities and barriers in implementing the work programme.
- 3. <u>SB Chairs to appoint Co-chairs who decide topics based on submission and make a presentation</u> on the annual report at the annual high-level ministerial round table on pre-2030 ambition

### Key issues

- Ensure that the dialogues and investment-focused events become an impactful tool to drive ambition and implementation, facilitative and inspiring and bring together the "right" participants.
- Guide a meaningful negotiation process towards a CMA decision that advances the MWP towards delivering more ambition and implementation.



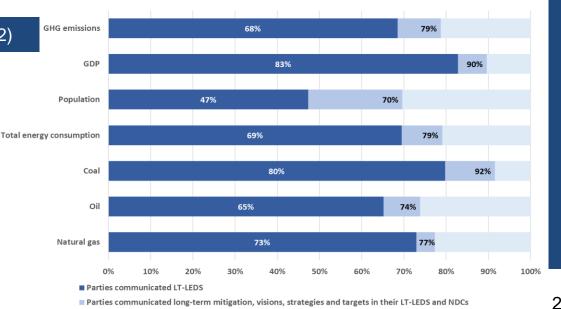
## LT-LEDS synthesis report

#### Long-Term Low Emission Development Strategies (LT-LEDS)

- The Paris Agreement stated that all Parties should strive to formulate and communicate LT-LEDS.
- Glasgow Climate Pact (2021) and Sharm el-Sheikh Implementation Plan (2022) urged Parties that have not yet done so to communicate LT-LEDS towards just transitions to net zero emissions by or around mid-century and to align NDCs with LT-LEDS.

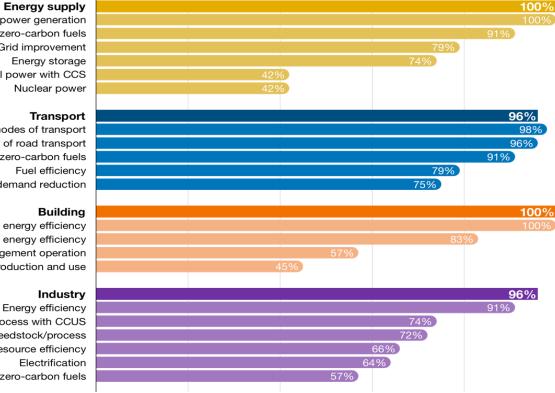
#### Synthesis report on LT-LEDS (26 October 2022)

 The report synthesized information from the 53 latest available LT-LEDS, representing 62 Parties to the Paris Agreement, including 4 updated LT-LEDS, recorded on UNFCCC website as at 23 September 2022





## Frequently communicated mitigation options in LT-LEDS (1) (Findings in LT-LEDS synthesis report)



Renewable power generation Shift to low-/zero-carbon fuels Grid improvement Energy storage Fossil fuel power with CCS Nuclear power

#### Transport

Shift to more efficient modes of transport Electrification of road transport Shift to low-/zero-carbon fuels Fuel efficiency Travel demand reduction

#### Building

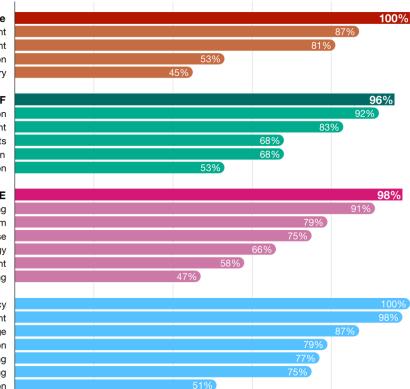
Building envelope energy efficiency Appliances energy efficiency Improved building management operation On-site renewable energy production and use

#### Industry

Energy efficiency Industrial process with CCUS Shift to low-/zero-carbon feedstock/process Material and resource efficiency Electrification Shift to low-/zero-carbon fuels



## Frequently communicated mitigation options in LT-LEDS (2) (Findings in LT-LEDS synthesis report)



#### Agriculture

Cropland and fertilizer management Livestock and grazing land management Food loss and waste reduction Agroforestry

#### LULUCF

Afforestation and reforestation Sustainable forest management Harvested wood products Soil carbon sequestration Peatland and wetland restoration

#### WASTE

Waste recycling Improved landfill system Waste reuse Waste-to-energy Improved wastewater treatment Composting

Multisector energy efficiency Multisector research and development Multisector behavioural change Circular economy promotion Urban spatial planning Multisector carbon pricing Multisector fluorinated gas reduction



# Thank you for joining!

# bhackmann@unfccc.int



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## Bonn outcomes and plans for COP28

04 July 2023



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## Sharm el-Sheikh mitigation ambition and implementation work programme

- Objective: Urgently scale up mitigation ambition and implementation in this critical decade
- Topic for 2023: Accelerating just energy transition
- Global Dialogue: First **Global Dialogue** (3 and 4 June 2023)
- Focus of discussions: **Opportunities, Actionable Solutions and Technologies** as well as **Barriers, challenges, and financing issues**
- Next steps:
  - Report on GD 1
  - GD 2 and IFE 2
  - Report on GD 2
  - Annual report
  - CMA decision on MWP



## Mitigation elements at COP 28



# Thank you for joining!

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