

Going beyond energy systems analysis – how can the long-term energy scenarios be more relevant to climate policy making?

2019 International Forum on
Long-term Energy Scenarios for the Clean Energy Transition
10–12 April 2019, Berlin, Germany



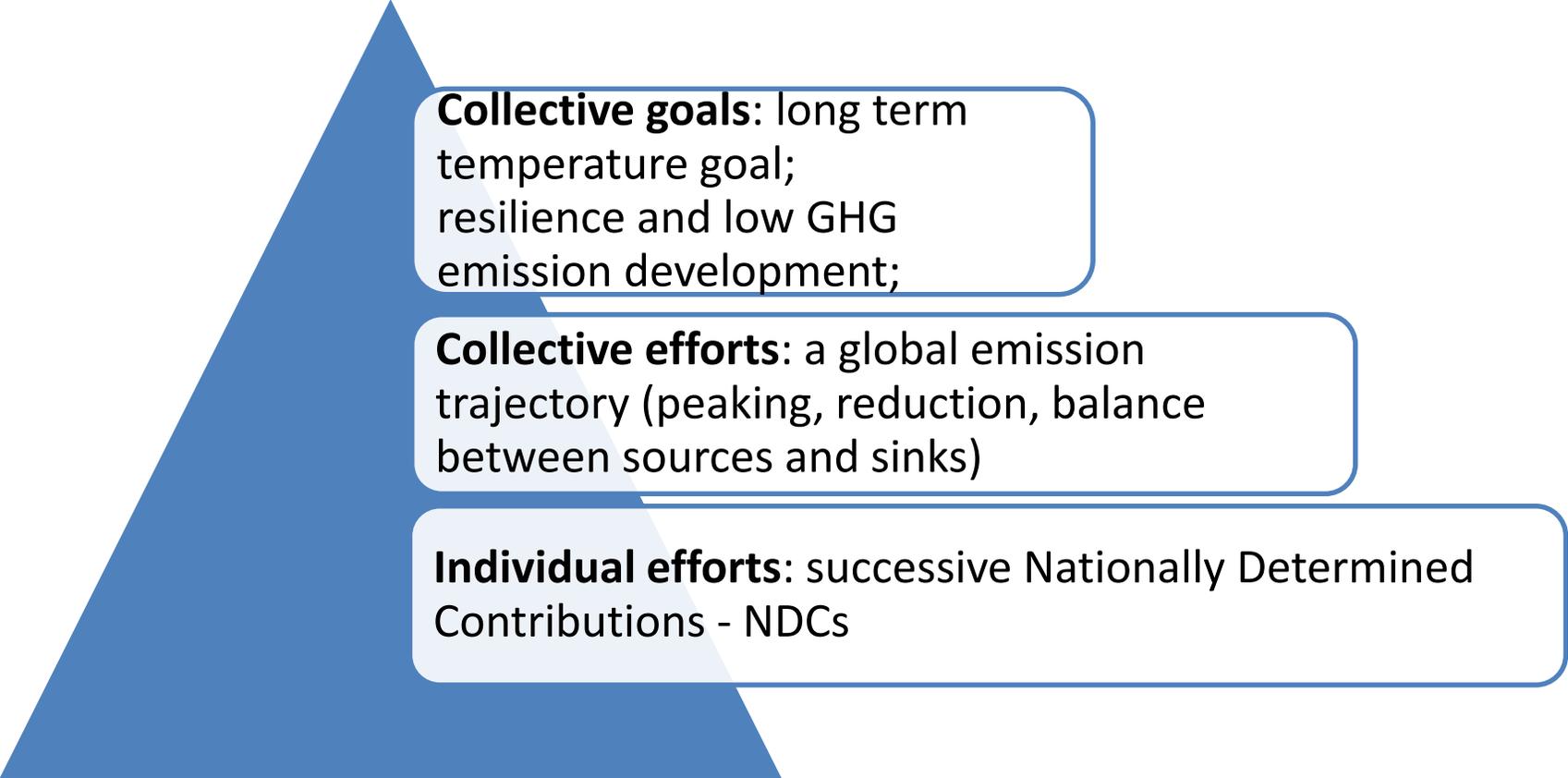
- The Paris Agreement and NDCs?
- LT-LEDS – Long-term Development Agendas
- Role of Renewable Energy in Climate Policy



The Paris Agreement and NDCs



The Paris Agreement and its purpose



Collective goals: long term temperature goal; resilience and low GHG emission development;

Collective efforts: a global emission trajectory (peaking, reduction, balance between sources and sinks)

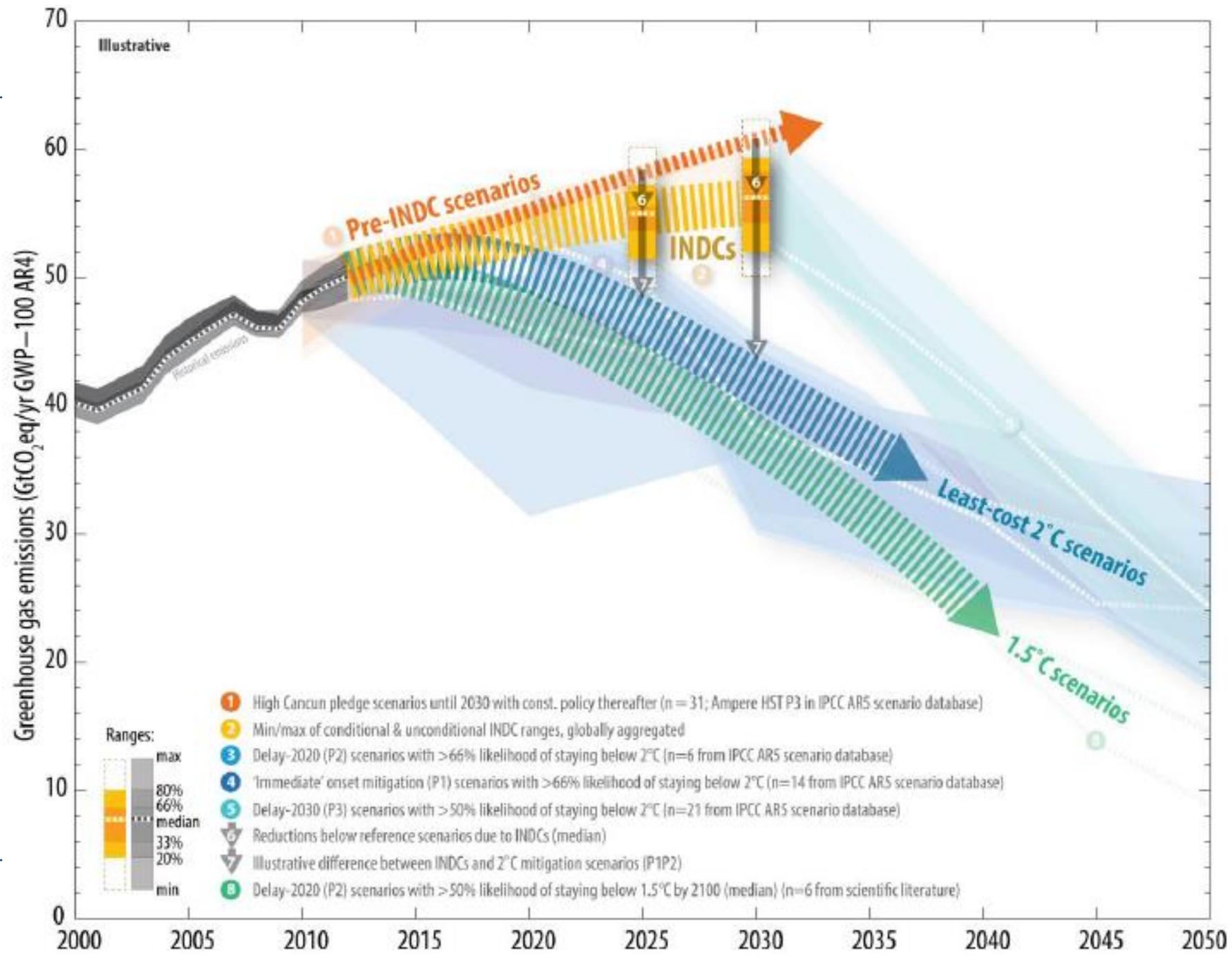
Individual efforts: successive Nationally Determined Contributions - NDCs



NDCs – a central element of the Paris Agreement

“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.”





Reaching Long Term Objectives

A

LONG TERM OBJECTIVE

The Paris Agreement recognizes that objectives will be achieved **through time**. It builds on aggregate and individual **progression/ambition**

B

HIKE IN AMBITION - MANDATORY NDC PROCESS

NDCs due by 2020 with enhanced ambition submitted **every 5 years**, together with a synthesis report published before the COP. LT-LEDS are also due by 2020.

C

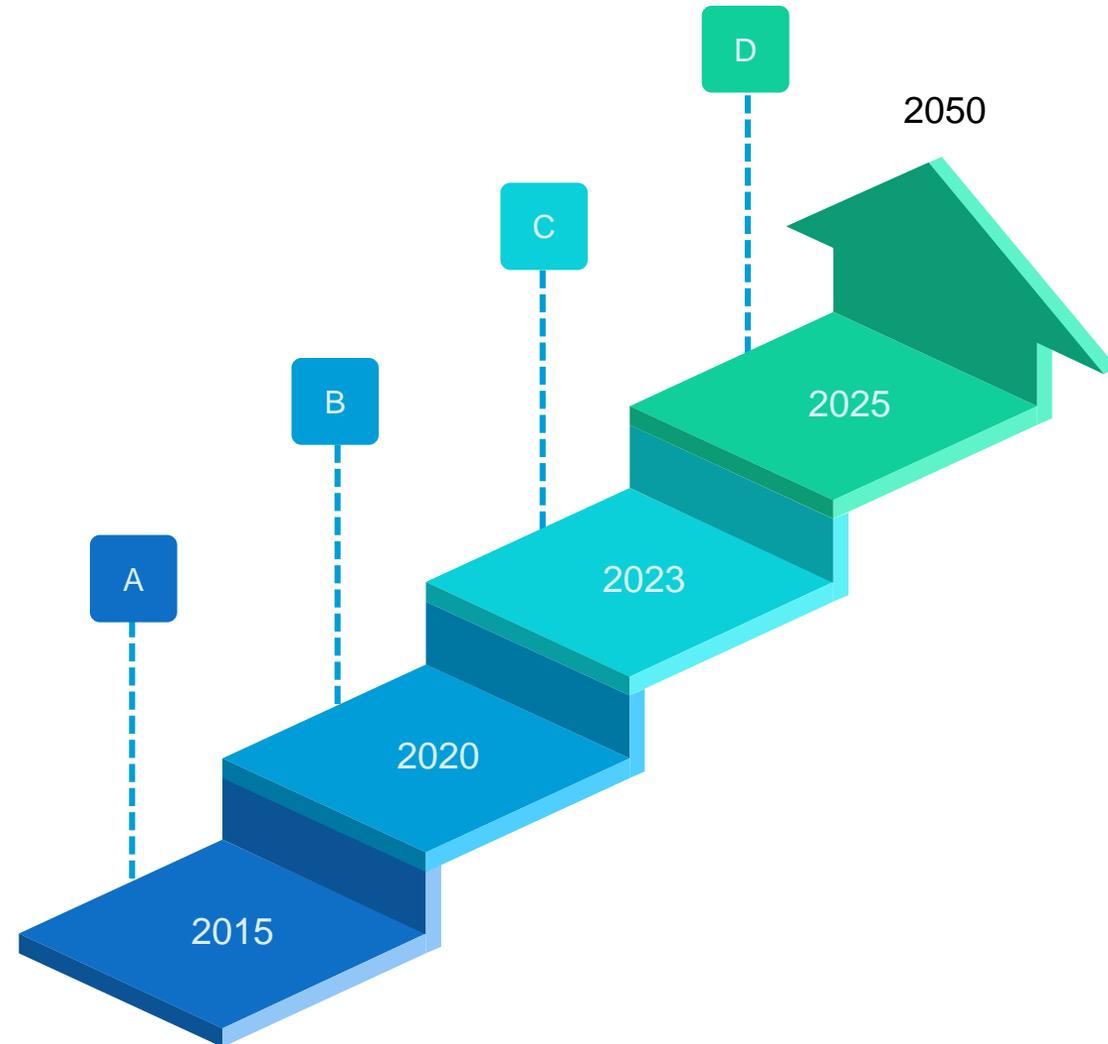
FEEDBACK MECHANISM

A **Global Stocktake** every 5 years and **biennial transparency reports** by all governments.

D

FEEDBACK MECHANISMS

Second round of NDCs due and continually ratcheted every five years.

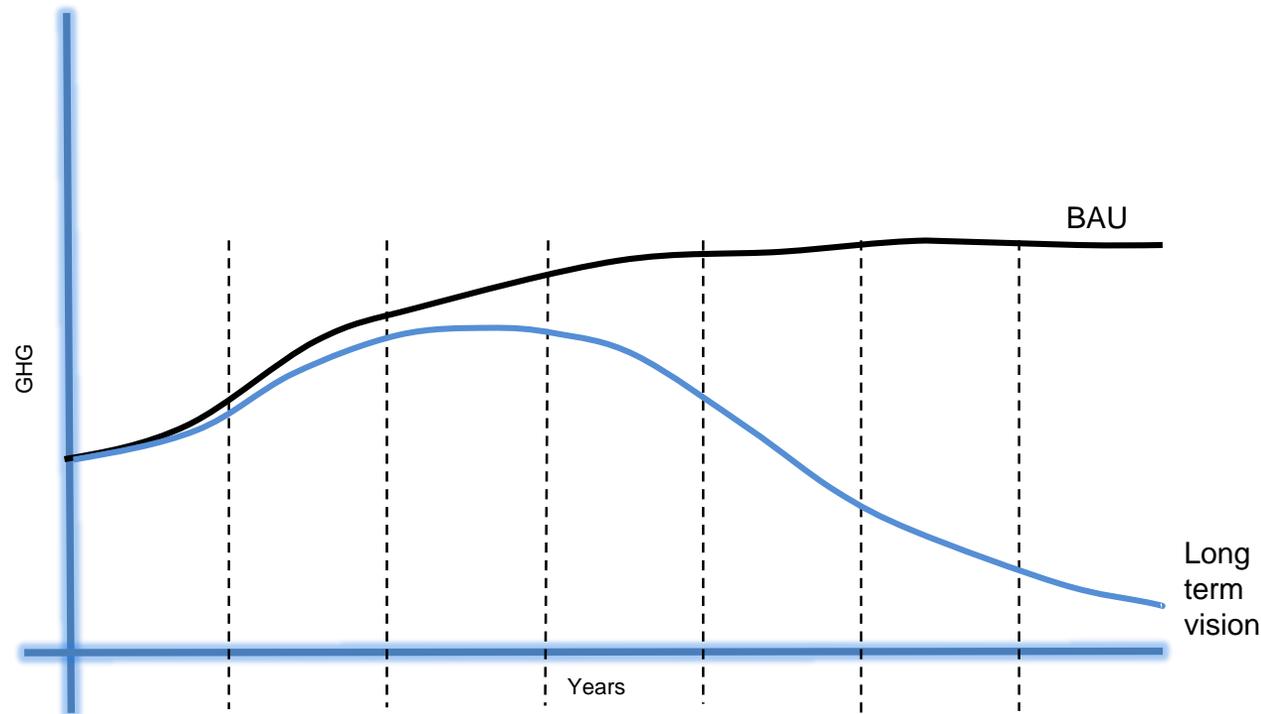


LT-LEDS – long-term development agendas



Formulating LT-LEDS

“All Parties should strive to formulate and communicate **long-term low greenhouse gas emission development strategies**, mindful of Article 2 taking into account their common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.” Article 4.19 → due in 2020



11 Parties have submitted their LT-LEDS: Benin, Canada, Czech Republic, France, Fiji, Germany, Mexico, , RMI, UK, Ukraine, US.

EXPLORATION

Model-based exploration of long-term outcomes

- + Contribution of various technologies to low-carbon
- + Alternative choices on land-use
- + Different global scenarios
- + Initiate domestic discussion

(US, Can, Mex, Cz, Ukr, EU)

VISION & PATHWAY

Starting from a long-term vision and 'back-casting' from there

- + Starts from a quantified objective (e.g. '*carbon neutrality*' by year X)
- + Explores sectoral strategies / roadmaps
- + Builds a low-carbon emission and growth trajectory

(Fiji, France, RMI)

DECLARATION OF INTENT

Multi-stakeholder and sectoral consultation

- + Lays out existing policies
- + Identify sectoral challenges and opportunities
- + A manifesto that opens a discussion domestically

(Germany, UK)

→ *Indicate near-term actions to stay on track*



INTERNATIONAL

- LT-LEDS part of Paris Agreement
- Contribute to affirming and assessing global ambition (pathways to "carbon neutrality")
- Align short-term objectives with with long-term goals (i.e. using LT-LEDS to inform enhancement of *NDCs*)

→ *Consider global ambition by 2020*

DOMESTIC

- Unpack long-term drivers of emissions and identify room to maneuver
- Focus policy discussions with a quantified objective (peak, carbon neutrality)
- Assess risk and opportunities
 - Vulnerability to climate impacts
 - Economic vulnerability (e.g. GHG-intensive exports)
 - Co-benefits (econ., env., societal)
- Set a direction of travel to plan sectoral and policy transitions



Role of Renewable Energy





Energy in NDCs

- 183 Parties have submitted their 1st NDC
- 180 NDC covered the energy sector



RE in NDCs

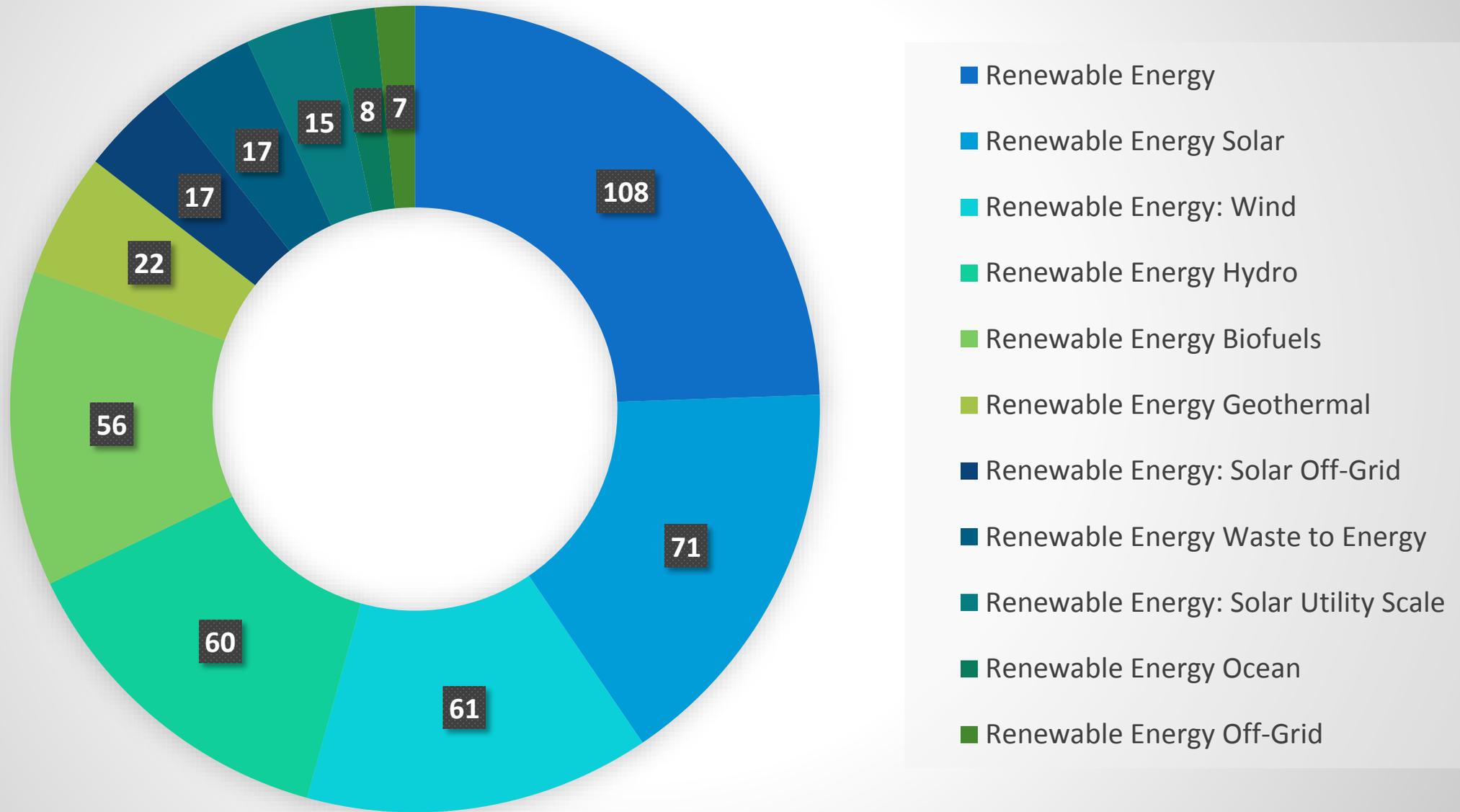
- 118 Parties (65%) have included related actions to RE
- 108 Parties (60%) have mentioned RE as priority area with high mitigation potential
- 75 Parties (45%) have included a quantified RE target



RE in LT-LEDS

- All LT-LEDS rely heavily on the RE and on energy scenarios

Breakdown of NDC RE Target Types



Relevance of long-term energy scenarios for climate policy making

Relevance of long-term energy scenarios for climate policy making

- Achieving the objectives of the Paris Agreement requires a global long-term “carbon neutral” vision
- Energy planning and renewable energies are the back-bone of climate policies towards
- Energy scenarios provide tools for policy makers that can drive domestic and international ambition – these scenarios show the “how”

What are the next steps under the Paris Agreement

- By 2020 governments will submit new/updated NDCs as well as LT-LEDS
- Between now and 2020 is the opportunity for climate specialists, policy makers, planners and the energy community to work jointly on ambitious and feasible climate policies and targets

What governments are doing right now:

- Aligning NDC actions with new policy priorities
- Refining/Updating the analysis underpinning the NDC
- Improve the Regulatory Framework/Institutional Framework
- Identifying and Prioritising Policies and Measures
- Preparing LTLEDS – including public consultaion processes, modelling exercises,



Thank You!

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