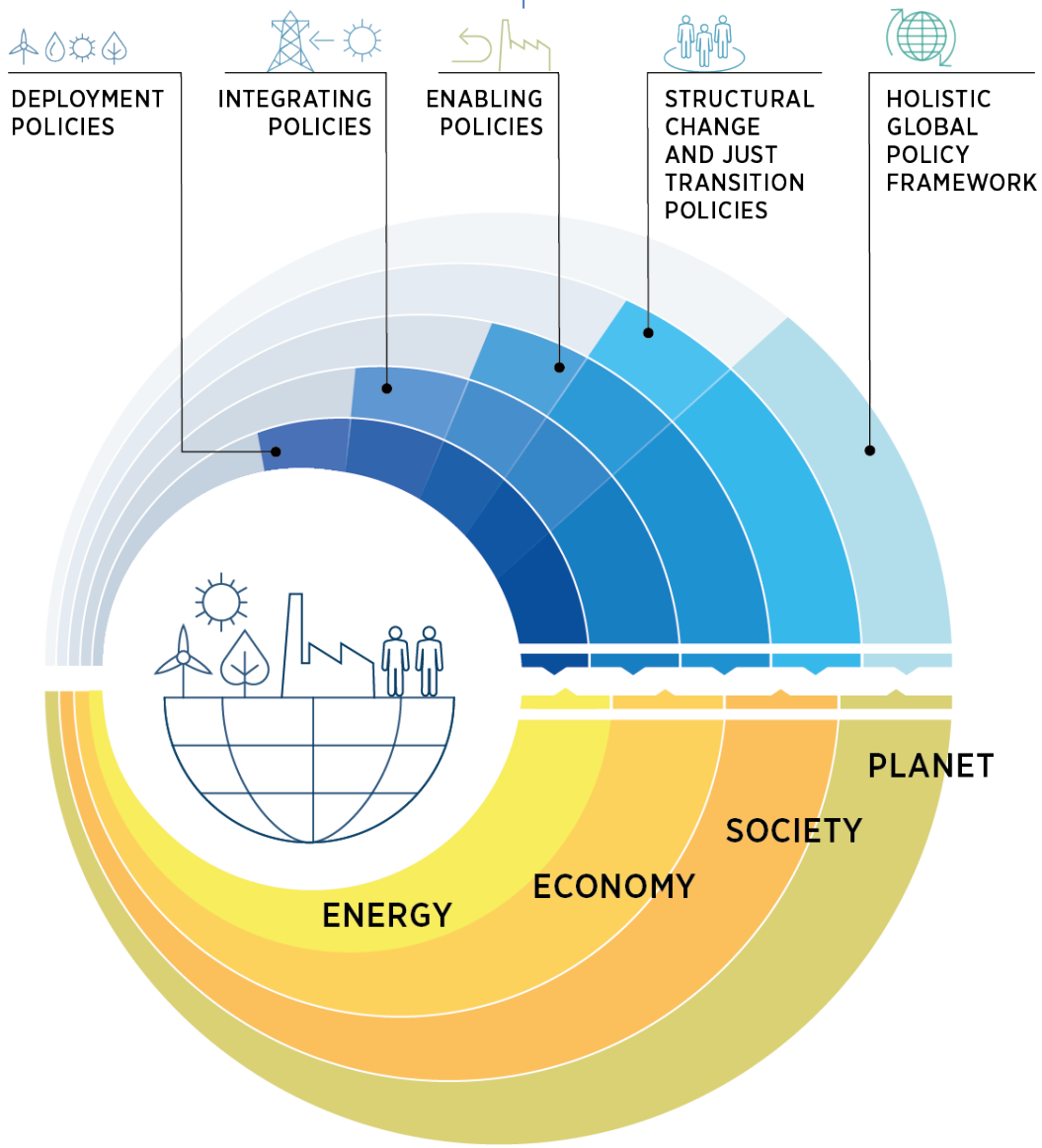
NDCs and Renewable Energy Targets

IRENA's policy framework for the energy transition

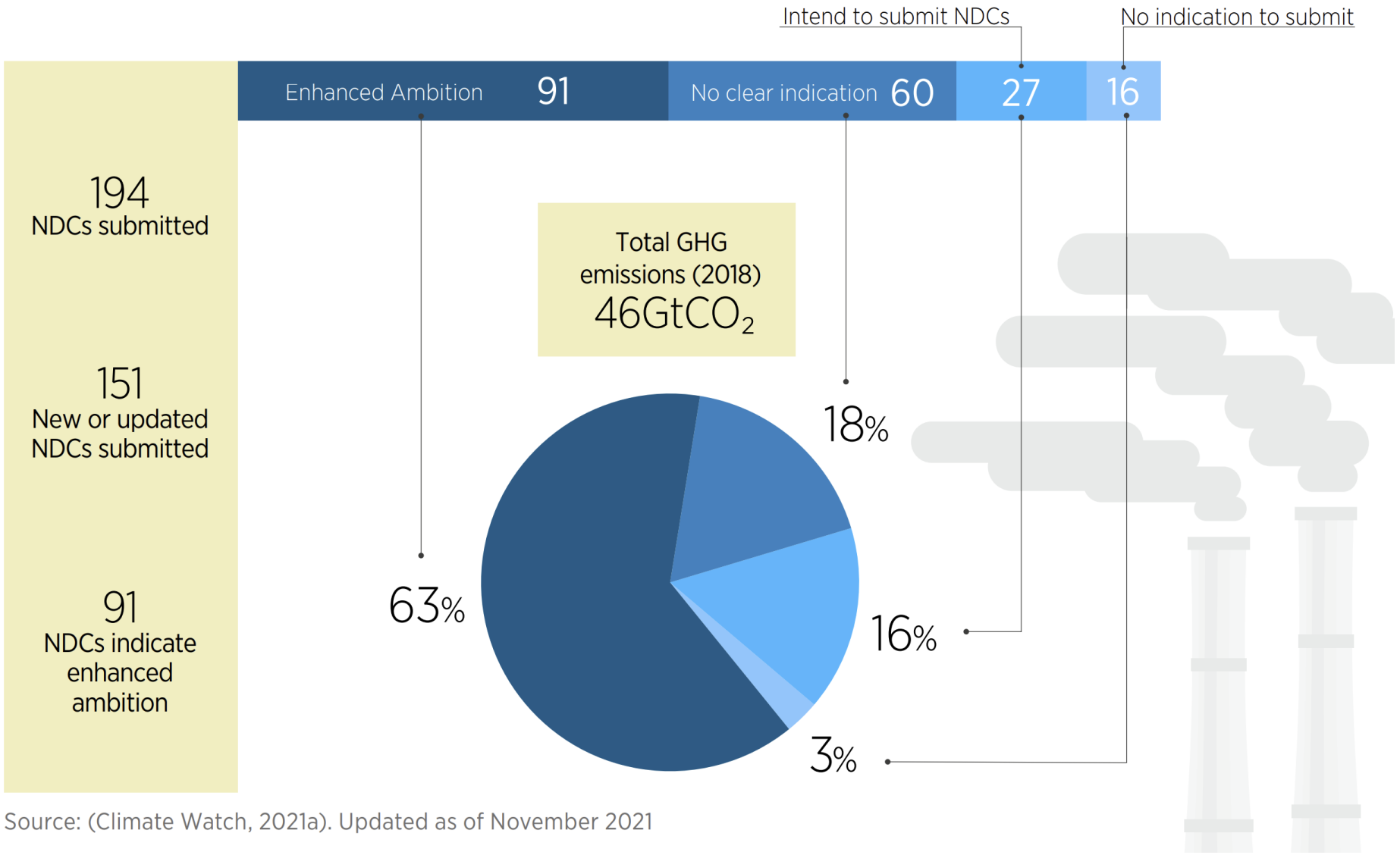
e.g., high ambition in NDCs and national plans.

Enabling policies

- Raise ambition in commitments to the energy transition
- Phase out fossil fuels
- Eliminate distortions and incentivize energy transition solutions
- Foster innovation
- Raising awareness among consumers and citizens



NDCs by ambition and share of emissions



Source: (Climate Watch, 2021a). Updated as of November 2021

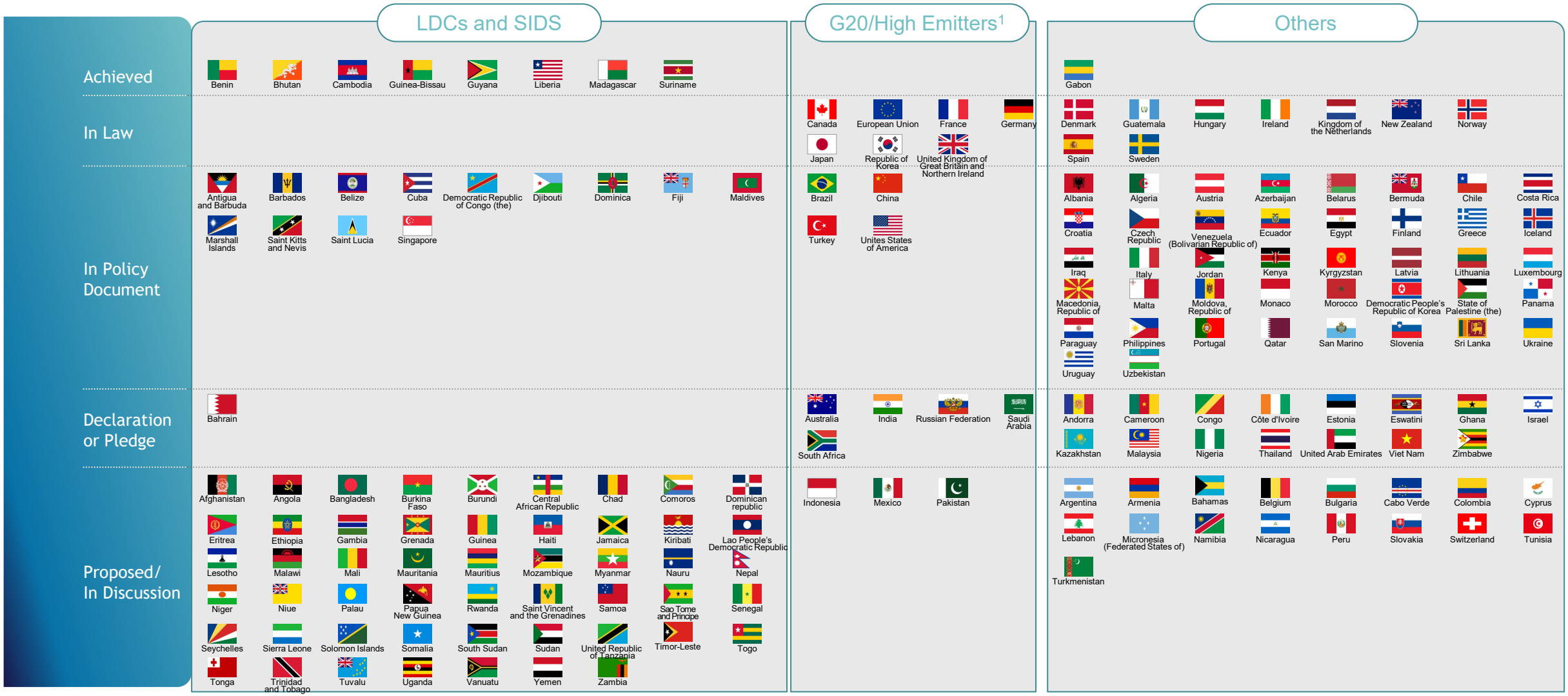
Note: As of mid-November 2021

Highest and lowest emitters

	G20	LDCs/SIDS
Share of global GHG emissions (2018)	75%	>7%
NDCs (new and updated)	**19** Parties (90%) submitted new NDC pledges	**55** Parties submitted new pledges (70% of all LDCs and 68% of all SIDS)
Comparison to previous pledges	11 Parties submitted stronger pledges	More than 35 Parties submitted stronger pledges although most remain conditional on international support

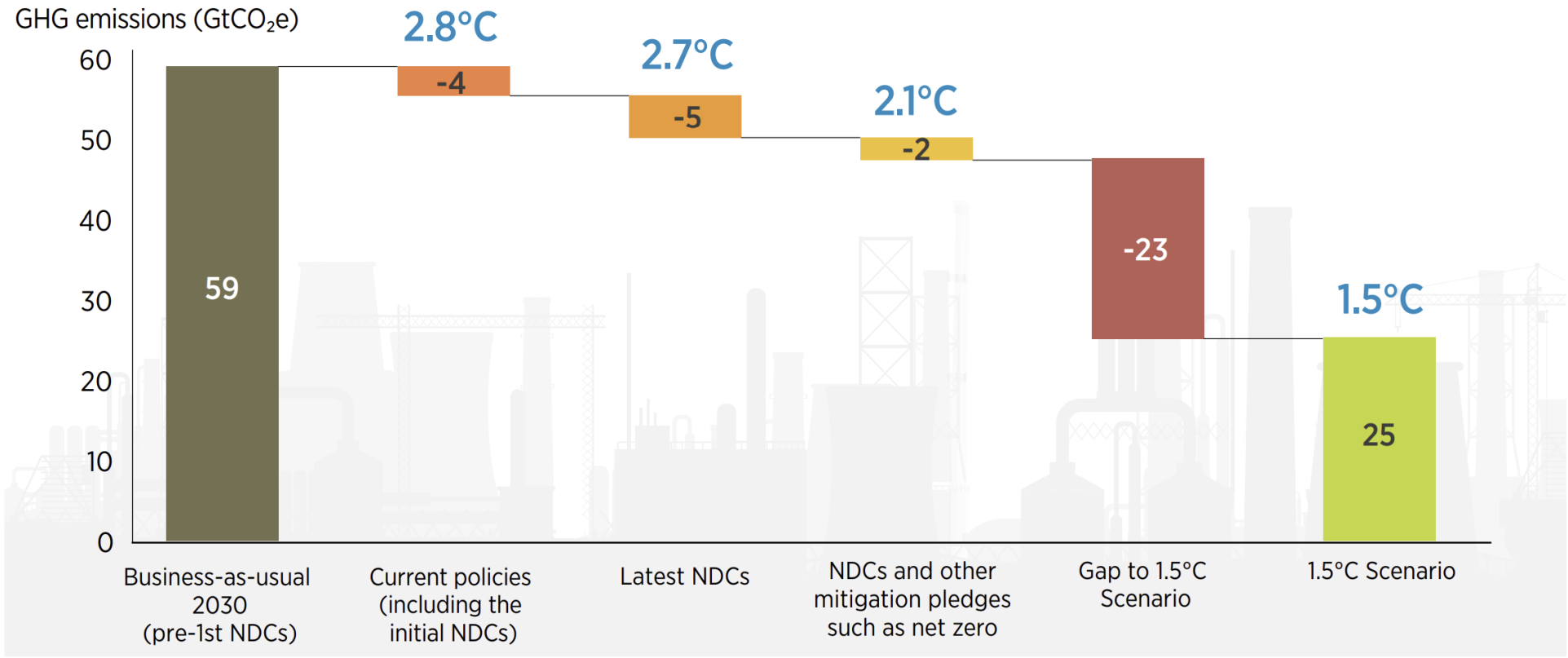
Overall, more than 160 parties plan to reduce energy sector emissions through renewable energy-based mitigation (UNFCCC, 2021)

Net Zero Targets – closing the gap to 1.5° C



Top 20 highest GHG emitters based on World Bank GHG Emissions (2018) data
Source: Net Zero Tracker; Climate Watch Data; United Nations; BCG Analysis (2021)

Contribution of NDCs and other pledges



Note: Updated as of 4 November 2021.

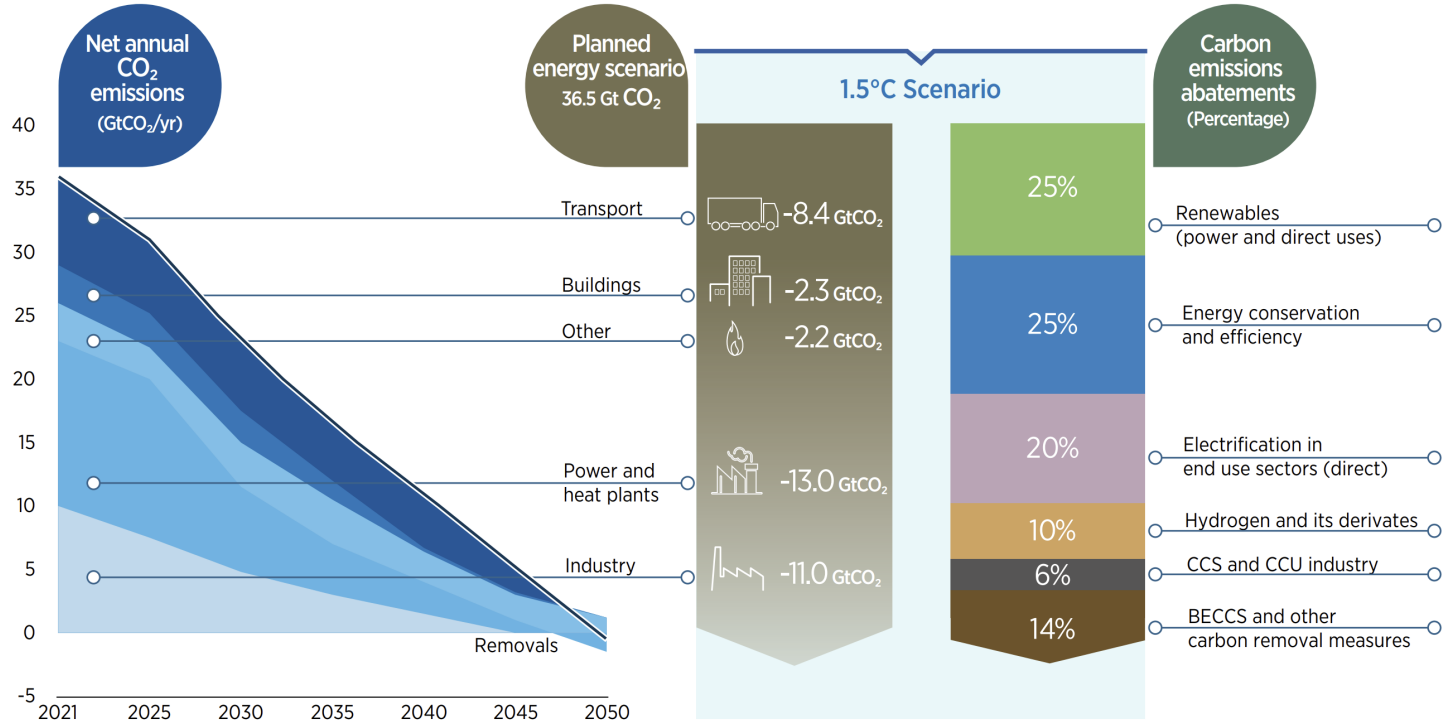
Overall GHG emissions in 2030

Gap in GHG emissions to achieve 1.5° C scenario

Renewable energy as a key mitigation strategy

- The Paris Agreement objectives can be met through a global transformation of the energy system towards clean energy
- This requires significant scaling-up of renewable energy deployment, enhanced energy efficiency, and electrification of end-use sectors

Global CO_2 emissions abatement under IRENA's 1.5° C Scenario and required energy solutions



Source: (IRENA, 2021a).

Renewable energy component of NDCs

194
NDCs submitted

182
NDCs mention renewables

144
NDCs with quantified RE targets

182 NDCs — Total renewables mentions

144 NDCs — Renewables targets

109 NDCs — Power targets

30 NDCs — Non - power targets

13 NDCs — Energy mix targets

Renewable power targets up to 2030 in NDCs

109 NDCs — **Power targets**

- **49 NDCs** — Capacity and output based
- **41 NDCs** — Share-based
- **19 NDCs** — Combination

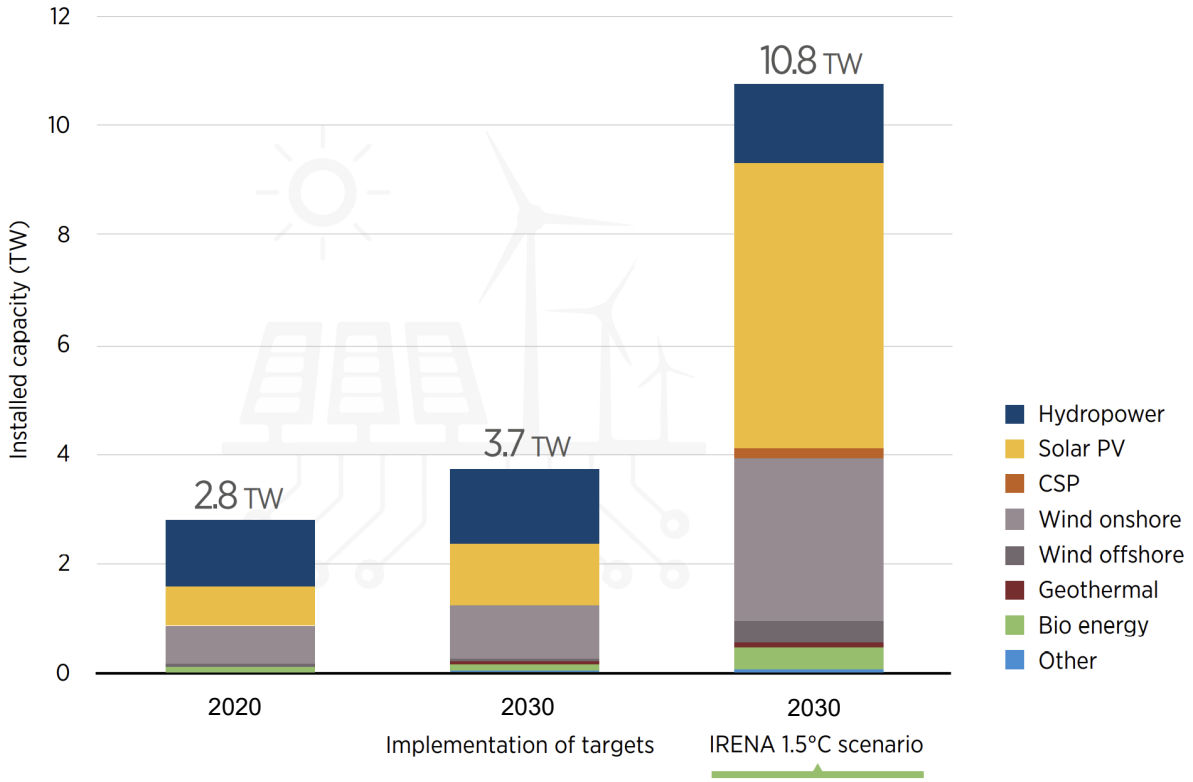
Renewable share in the electricity mix

11 NDCs	13 NDCs	22 NDCs	14 NDCs
90-100%	60-89%	25-59%	0-24%

National plans are still not ambitious enough

- Targets can be more effective when translated into national laws, policies and measures
- Implementing current national targets would bring only 0.9 TW of RE installed capacity by 2030, meeting a third of the capacity required for the 1.5 ° C Pathway (10.8 TW)
- Targets must be part of a robust long-term policy framework combining various aspects including deployment and enabling policies, and financing

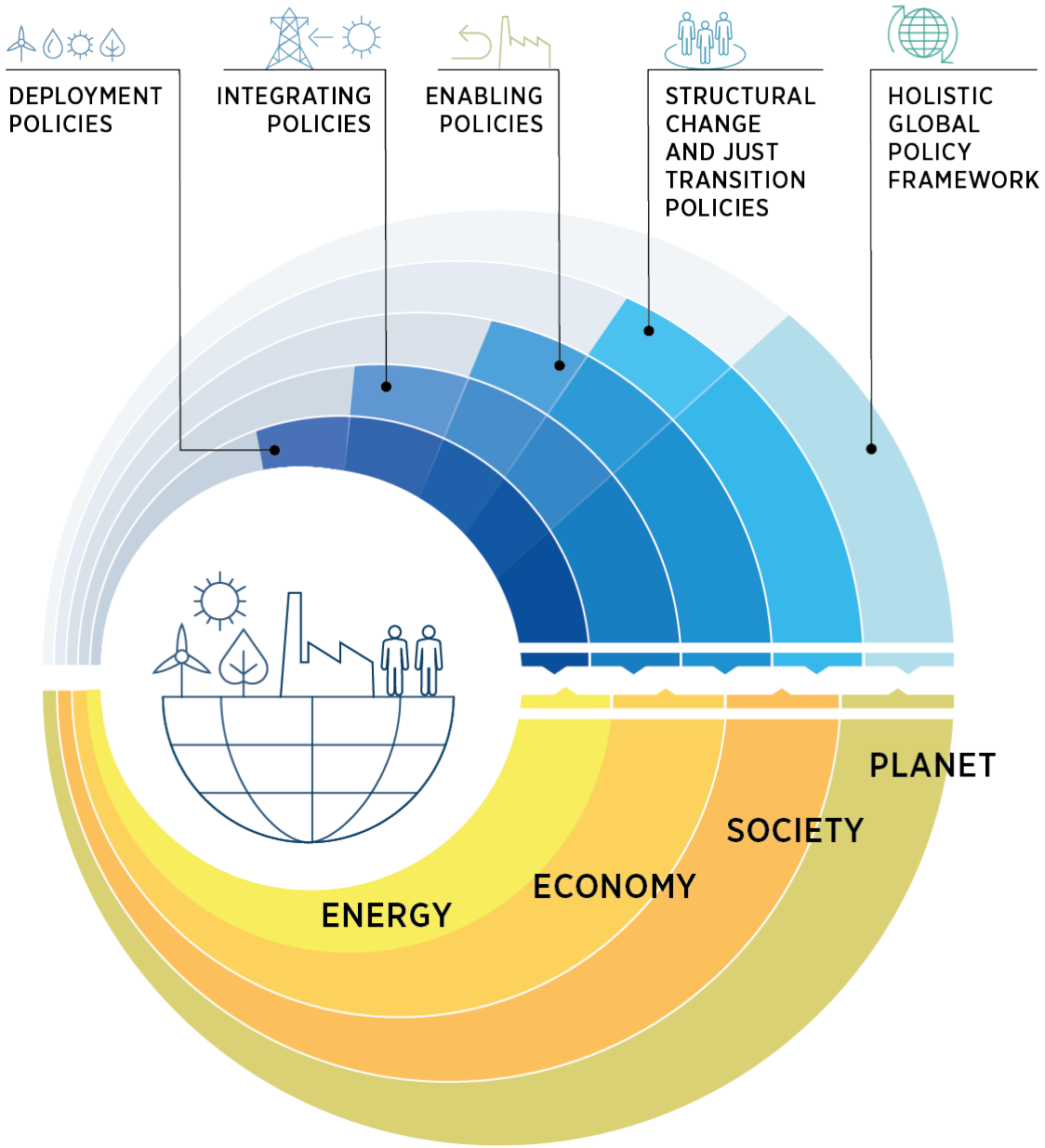
Implementation of national renewable power targets up to 2030



Source: (IRENA, forthcoming 2022), based on (IRENA, 2021a).

Note: Analysis conducted as of early 2021

Comprehensive policy framework for a just energy transition



A policy framework for a just energy transition includes:

- A host of **cross-cutting enabling policies,** including policies that set ambitions and issue clear signals to stakeholders, eliminate distortions, incentivise the uptake of solutions and facilitate access to affordable financing, among others.
- **Deployment policies** to support all the essential technological avenues supporting market creation, thus facilitating deployment, reducing technology costs and increasing adoption at levels aligned with energy transition needs.
- **Integrating policies** enable the integration of energy transition related technologies into the energy system, the economy, society and planet.
- The energy transition will bring benefits, as well as challenges in the form of potential misalignments in finance, labour markets, power systems and the energy sector itself. A set of **structural and just transition policies** is required to manage potential misalignments.
- A **holistic global policy framework** brings countries together to commit to a just transition that leaves no one behind and strengthens the international flow of finance, capacity and technologies in an equitable manner.

Climate financing needs for 1.5° C

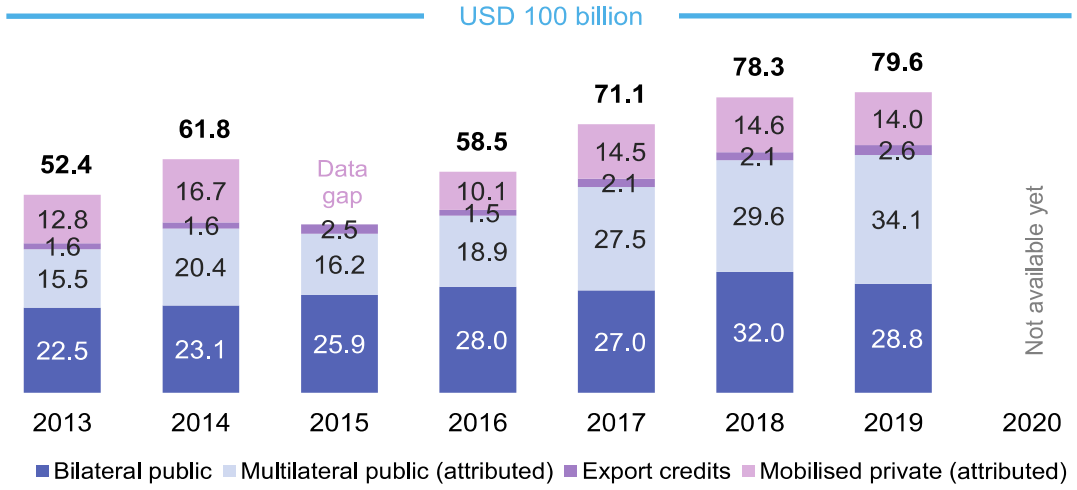
Current trends

- Global climate flows in 2019/2020 - USD 632 billion
- Adaptation finance in 2019 - USD 46 billion

Investment needs

- Over USD 5 trillion/year by 2050 (energy, transport, land-use, industry, infrastructure, and water)
- USD 140-300 billion/year to cover adaptation costs by 2030

Climate financing provided and mobilized by developed countries



Source: OECD

IRENA
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Thank you

Merci