Making Long-Term Low GHG Emissions Development Strategies a Reality

Ilka Starrost GIZ	Moderation
Thomas Day NewClimate	The case for ongoing revisions of LTSs beyond 2020
Julie Emmrich NewClimate	LTS development in country-specific contexts
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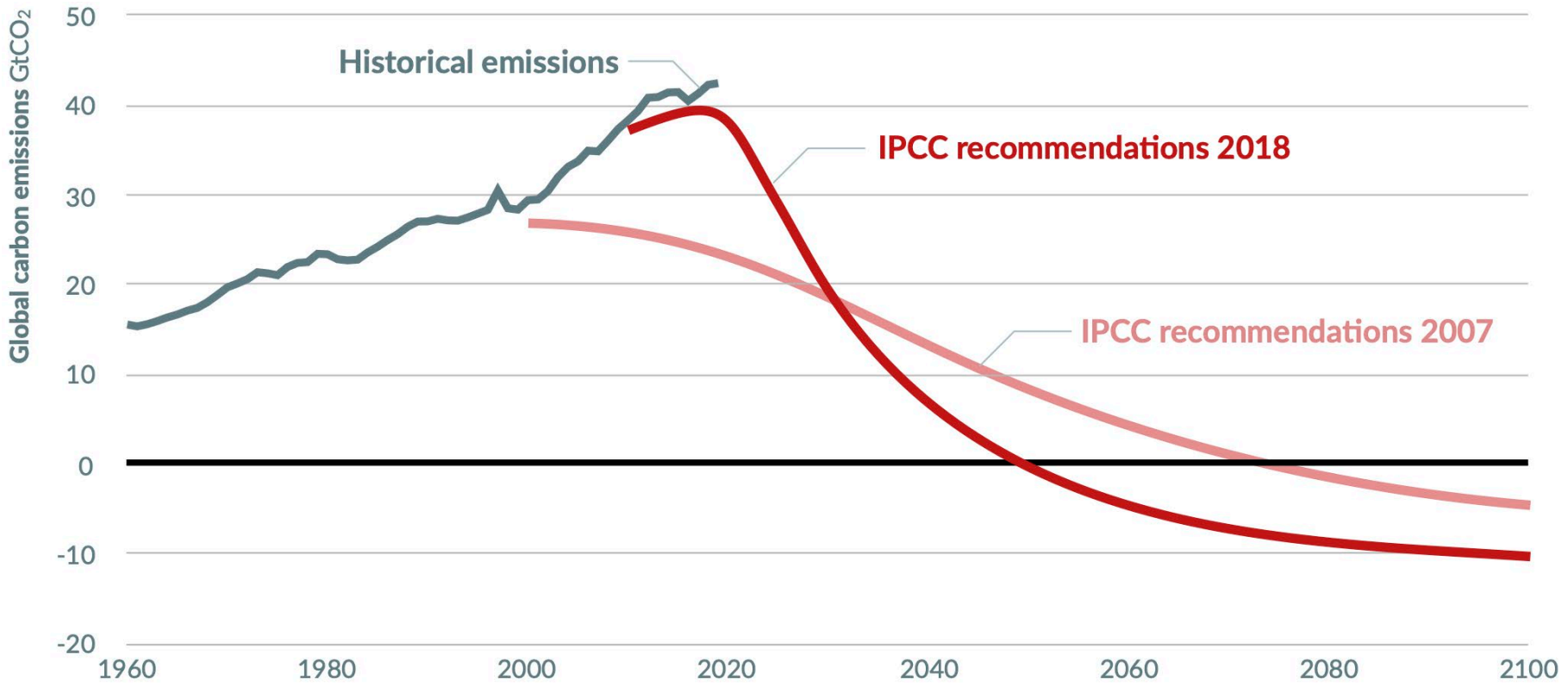
The case for ongoing revisions of LTSs beyond 2020

Harmonised revision cycles of LTSs and NDCs can improve the alignment of a country's long-term vision and medium-term targets and make sure that strategies are grounded in the latest science.

The Paris Agreement's temperature limit and science's call for action

The latest scientific evidence on long-term pathways unambiguously demonstrates the need to initiate a transition toward a decarbonised economy as fast as possible to limit global warming to 1.5°C above pre-industrial levels.



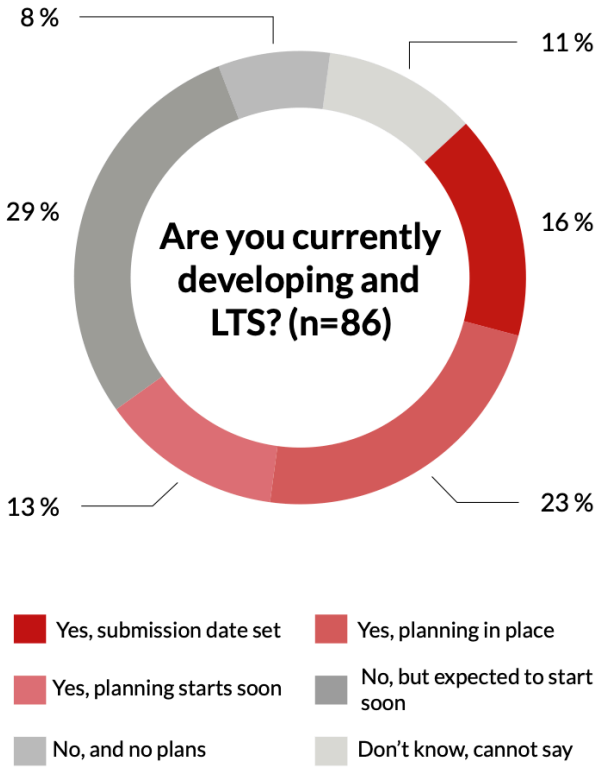
Context: Pathways of global CO_2 emissions recommended by the IPCC in the Fourth Assessment Report of 2007 (445 to 490 ppmCO_2eq leading to 2-2.4°C) and by the IPCC special report on 1.5°C in 2018 for low- and no-overshoot scenarios leading to 1.5°C increase (only the average of the ranges are shown).

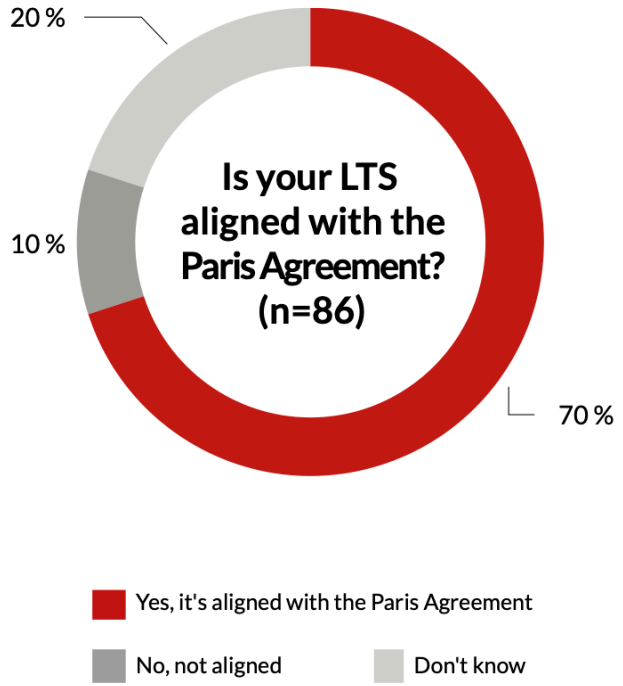
A responsibility under the Paris Agreement

- Article §4 of the Paris Agreement calls on Parties “to formulate and communicate long-term low greenhouse gas emission development strategies” (LTSs), mindful of the temperature goals, and submit these to the UNFCCC.
- The Paris Agreement’s articles and the Katowice Rulebook provide only vague guidelines on LTS development, and no guidelines regarding the role of LTSs and responsibilities for updates in the future.

The status quo of LTS development

Out of 86 respondents for governments worldwide in November 2019, the latest available survey in the NDC Update Report found that **52% of respondents' countries are in the process of developing an LTS or starting soon**.





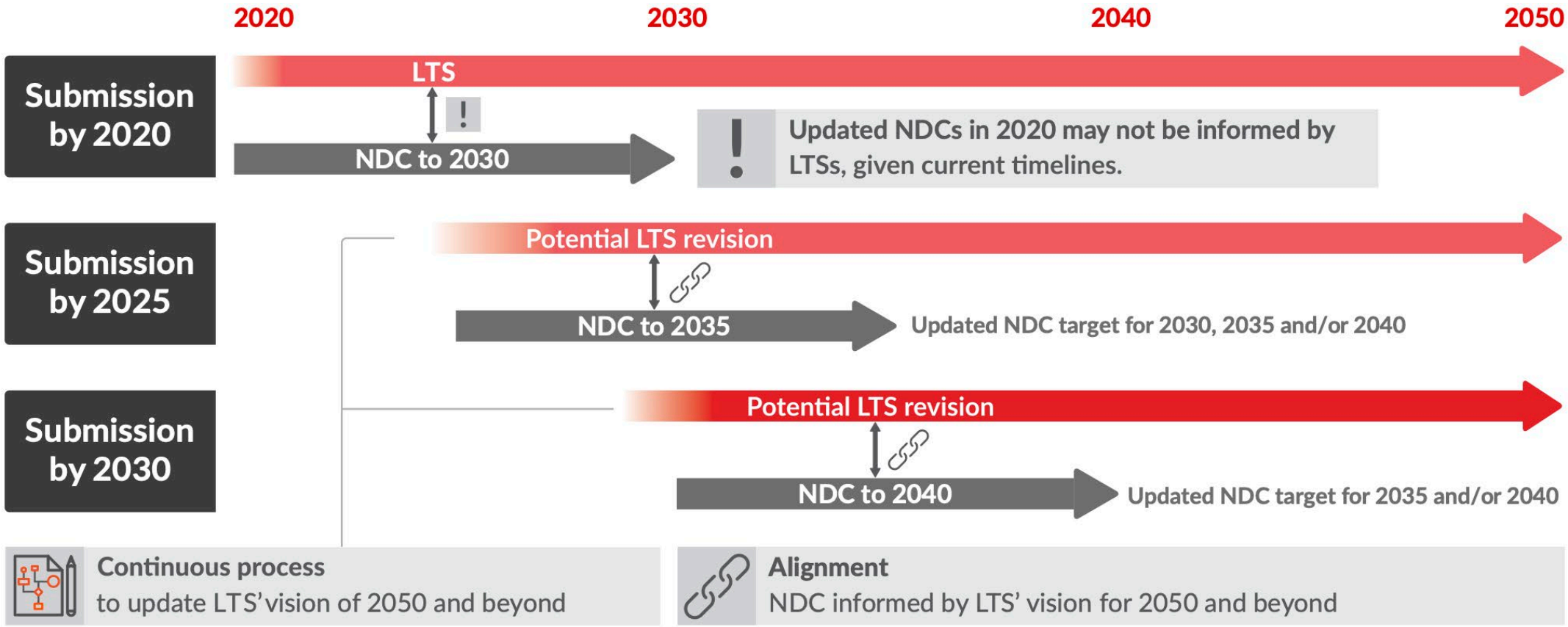
Source: NDC Update Report of November 2019 on LTS development and Paris Agreement alignment (Roeser et al., 2019)

Aligning future NDCs and LTSs through iterative revision cycles

- The five-year revision cycles for Parties to submit their NDCs to the UNFCCC provide an opportunity to improve the alignment of countries' long-term visions (LTSs) with their medium-term targets (NDCs).

- Future LTS revisions allow policy makers to keep a country's long-term planning up to date informed by the latest science and developments.
- The LTS submission can be a concise, strategic document, well aligned with other processes and strategies to avoid duplication.

A proposal for harmonised revision cycles of NDCs and LTSs



Key benefits for policy makers

1. Increased political consensus on the long- term direction makes it **easier to plan in the short and medium term**.
2. Providing the private sector with a clear long- term signal can **improve conditions for private sector investment** in line with the Paris Agreement's temperature limit.
3. International climate finance **might flow more easily** to a country with a clear long-term pathway and a pipeline of projects proven to be aligned with this national strategy.
4. Future climate planning for NDC revisions or sectoral climate action plans **become more streamlined and efficient processes** if occurring as part of an iterative process alongside an LTS.

LTS development in country-specific contexts

The approach for LTS development presented in the following sections aims to inform policy makers on how to develop and revise a country's LTS in a gradual iterative process acknowledging the countries' different starting points.

A concept to enhance LTS development over time (1/2)

The concept of three levels of comprehensiveness aims to acknowledge and account for the different starting points of countries to develop their LTS in 2020.

Three levels of comprehensiveness for LTS development

Base Version

Starting point for LTS development where limited resources are available

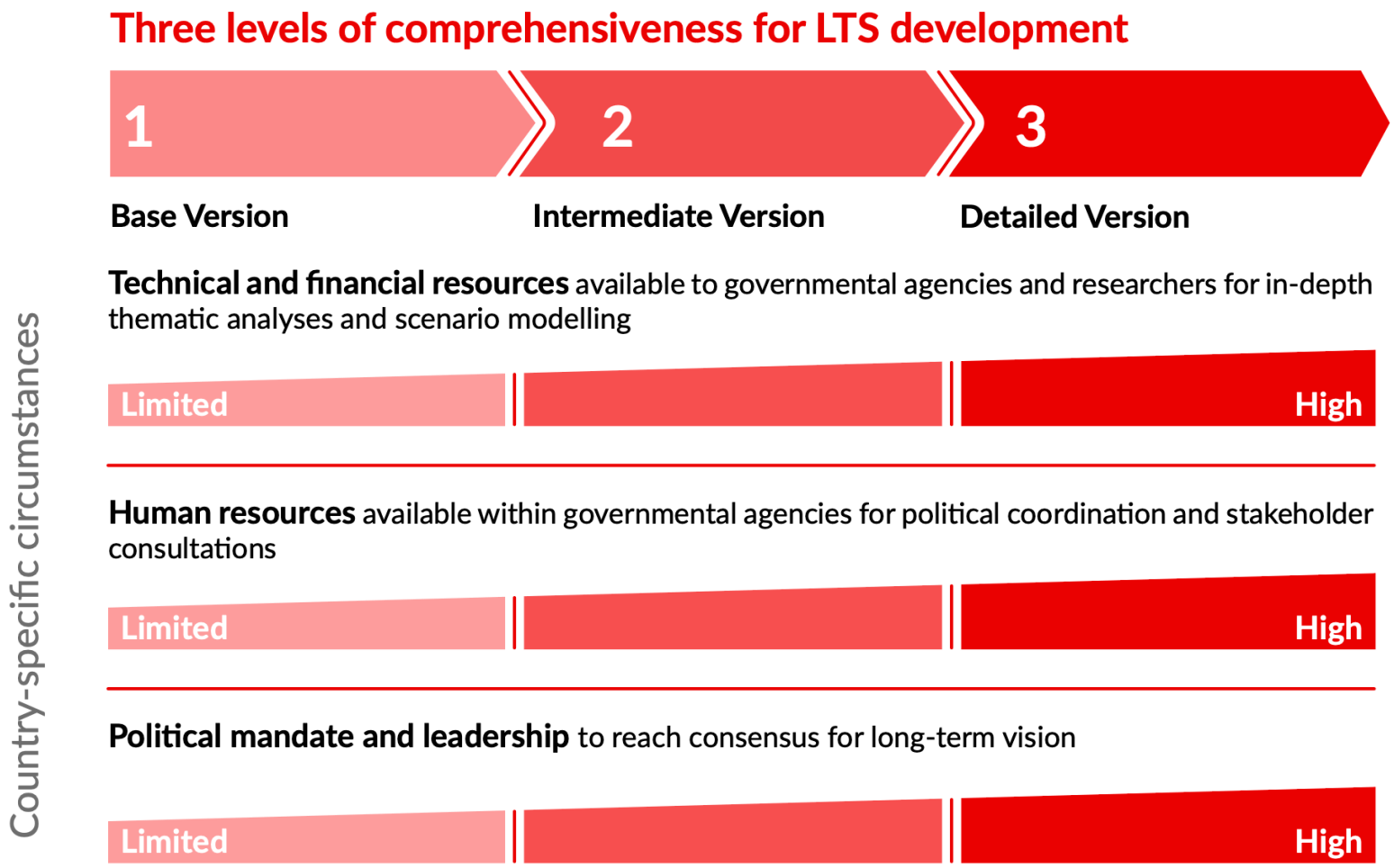
Intermediate Version

Elaborated version of LTS with indication of existing knowledge gaps on thematic areas that require further support/ work for next review cycle

Detailed Version

Comprehensive version of LTS based on in-depth underlying analysis

A concept to enhance LTS development over time (2/2)



Eight key LTS aspects for consideration

A differentiated approach on how policy makers can consider key aspects for LTS development accounting for their country's circumstances.

Introducing eight key LTS aspects for consideration

The concept of three levels of comprehensiveness can guide policy makers to address each aspect considering their country's circumstances.

Key aspects for consideration	Base Version	Intermediate Version	Detailed Version
Process			
Theoretical long-term scenario analysis			
Long-term GHG and non-GHG target(s)			
Sectoral coverage			
Link to immediate steps and interim targets (NDC)			
Mobilisation of finance and technology			
Sustainable development and just transition			
Outlook			

Introducing eight key LTS aspects for consideration

Process – Overview

Key aspects for consideration	Base Version	Intermediate Version	Detailed Version
Process	For any of the LTS version types, LTS development should build on extensive coordination efforts and wider stakeholder engagement, to reach a strong consensus among stakeholders.		

Introducing eight key LTS aspects for consideration

The concept of three levels of comprehensiveness can guide policy makers to address each aspect considering their country's circumstances.

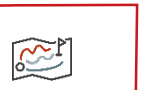
Key aspects for consideration	Base Version	Intermediate Version	Detailed Version
Process	Theoretical long-term scenario analysis	Long-term GHG and non-GHG target(s)	Sectoral coverage
Link to immediate steps and interim targets (NDC)	Mobilisation of finance and technology	Sustainable development and just transition	Outlook

Introducing eight key LTS aspects for consideration

Theoretical long-term scenario analysis – Overview

Key aspects for consideration	Base Version	Intermediate Version	Detailed Version
Theoretical long-term scenario analysis	Acknowledgement of scientific findings	First estimates of Paris Agreement aligned scenarios	Country-specific Paris Agreement aligned scenarios

Theoretical long-term scenario analysis – Detailed overview



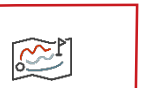
Theoretical long-term scenario analysis

Base Version

Acknowledgement of scientific findings

- ✓ **Review** of available (country-specific) literature and findings by the IPCC as starting point
- ✓ **Acknowledgment of scientific findings** (e.g. need of net-zero CO2 emissions by 2050) for country's long-term modelling with identification of currently existing knowledge gaps
- ✓ **Consultative process** by researchers and policy makers to determine next steps and support needs

Theoretical long-term scenario analysis – Detailed overview



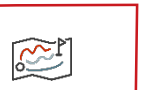
Theoretical long-term scenario analysis

Interme-diate Version

First estimate of Paris Agreement aligned scenarios

- ✓ **Initial (country-specific) economy-wide aligned scenarios** developed with some focus sectors covered in more detail
- ✓ Remaining uncertainty of obtained results due to the need for modelling improvements (e.g. missing data inputs, limited peer-review, etc.) **might make results highly indicative**
- ✓ **Consultative process** by researchers and policy makers to develop scenarios

Theoretical long-term scenario analysis – Detailed overview



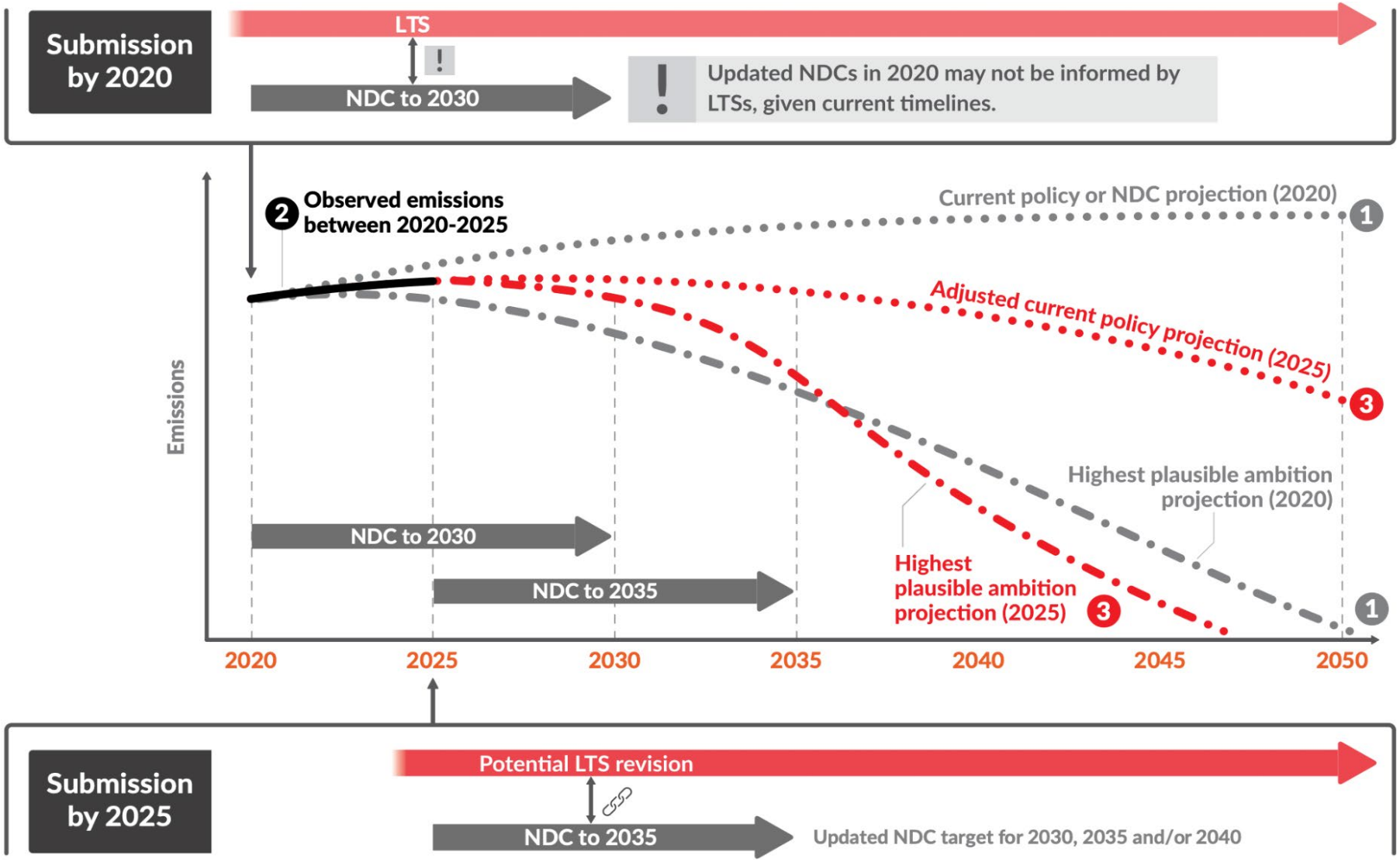
Theoretical long-term scenario analysis

Detailed Version

Country-specific Paris Agreement aligned scenarios

- ✓ **Country-specific aligned scenarios** developed for all sectors and economy-wide scenarios
- ✓ Robust methodologies and models applied and in-depth (peer) review
- ✓ **Cooperative process** by researchers and policy makers to co-develop scenarios and to validate key inputs, assumptions and results

Updating the long-term scenario analysis over time



First scenario modelling in 2020 (grey lines in graph):

Updated scenario modelling in 2025 (red lines in graph):

Theoretical long-term scenario analysis – Country example

Real-world Example

Theoretical long-term scenario analysis

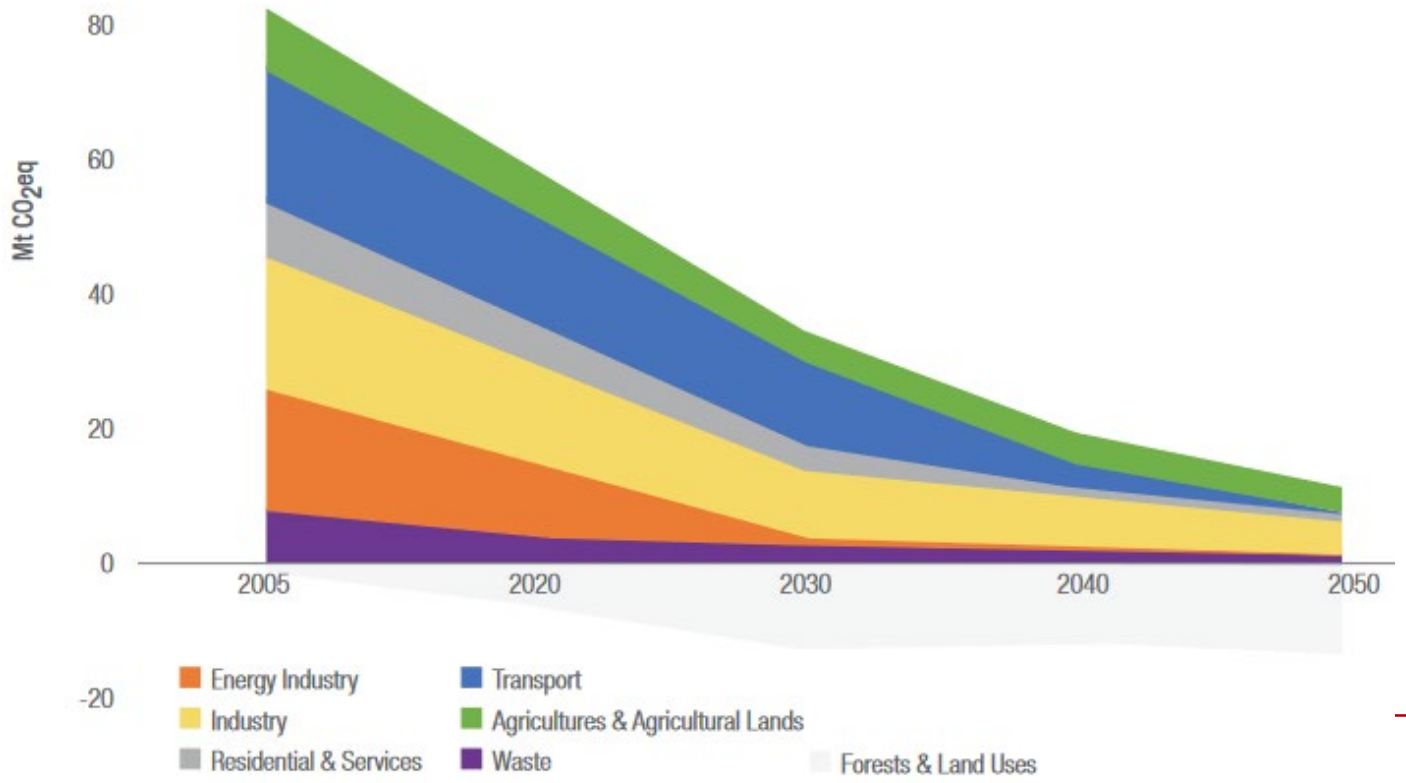
Example for 'detailed version' - Portugal's LTS (RNC2050)

- Roadmap for carbon neutrality 2050 (RNC2050)
  - Long-term strategy for carbon neutrality of the Portuguese economy by 2050
- Acknowledges the latest science
- Refers to the Paris Agreement temperature limit and the IPCC Special Report on 1.5°C, which both frame the need for full decarbonisation by 2050.

Theoretical long-term scenario analysis – Country example

Theoretical long-term scenario analysis

Real-world Example



- **Three comprehensive scenarios**
- Developed in **iterative phases**
- **Three months** consultation process
- Back-casting

Supporting the development of future LTS revisions

- The international community could set **clearer guidance** on the revision cycles for LTS, beyond a first submission in 2020.
- An **online platform** could track and share experiences on the approaches that countries use to address the various components of their LTSs.
- Further research and dialogues among policy makers should collect **experiences and lessons learnt from this first round** of LTS development.

Find out more about the guidance

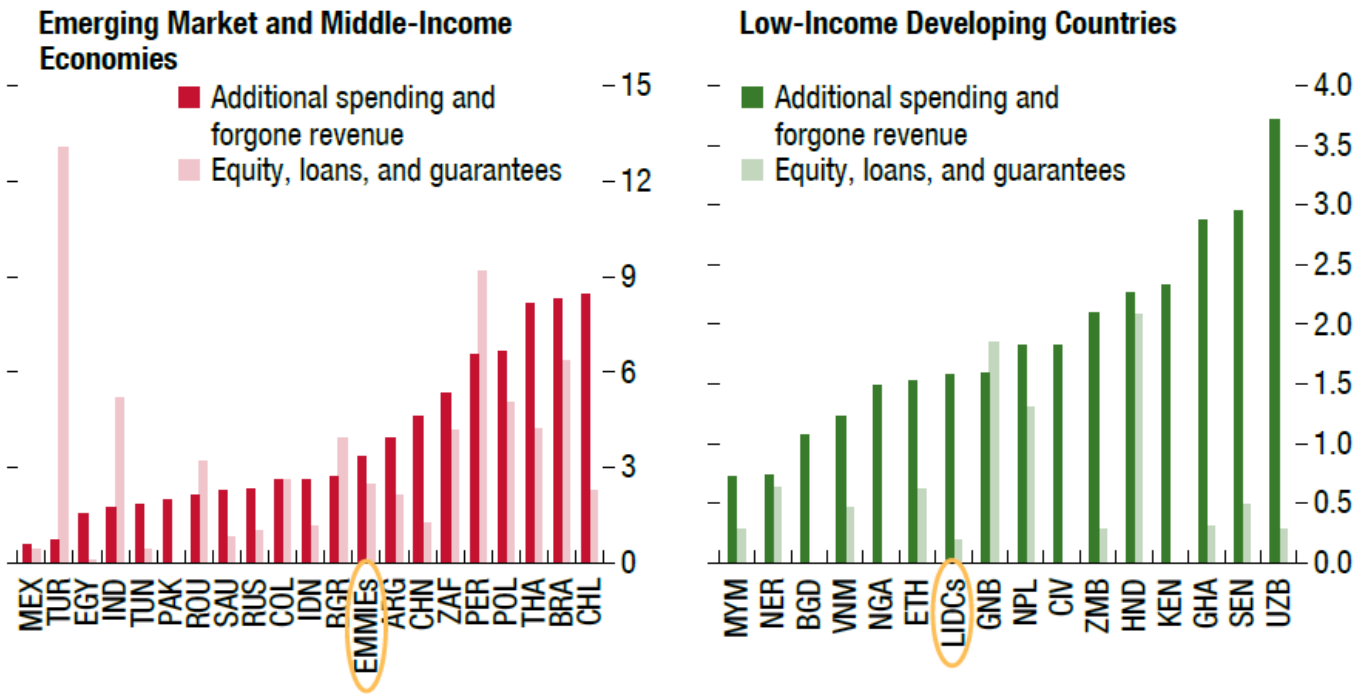
Read the **guidance** at
newclimate.org/publications/

Further information in **NewClimate LTS Hub**
newclimate.org/lts-hub/

Overview of COVID-19 recovery packages and opportunities for a low-carbon transition

Fiscal action in 2020 at unprecedented scale

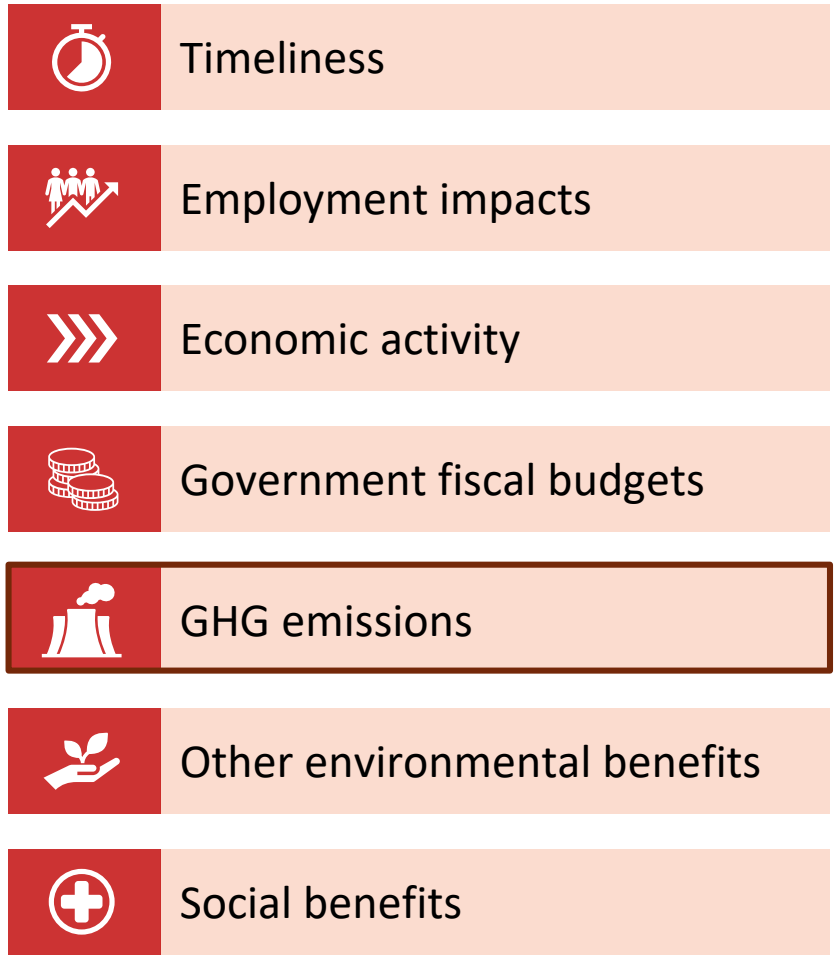
Fiscal response to the COVID-19 pandemic in selected economies as of 11 September 2020



Sources: IMF (October 2020) Fiscal Monitor. Available at: https://www.imf.org/en/Publications/FM/Issues/2020/09/30/october-2020-fiscal-monitor

- Around **USD 12 trillion**, or ~12% of global GDP, had been spent globally as of September 2020
- **Large discrepancy** between G20 countries (~15% of GDP on average) and middle- and low-income countries (<6% of GDP on average)
- Initial **rescue-type spending** to weather severe effects of health and socio-economic crisis in all countries
- Level of **recovery-type spending** differs between countries to date

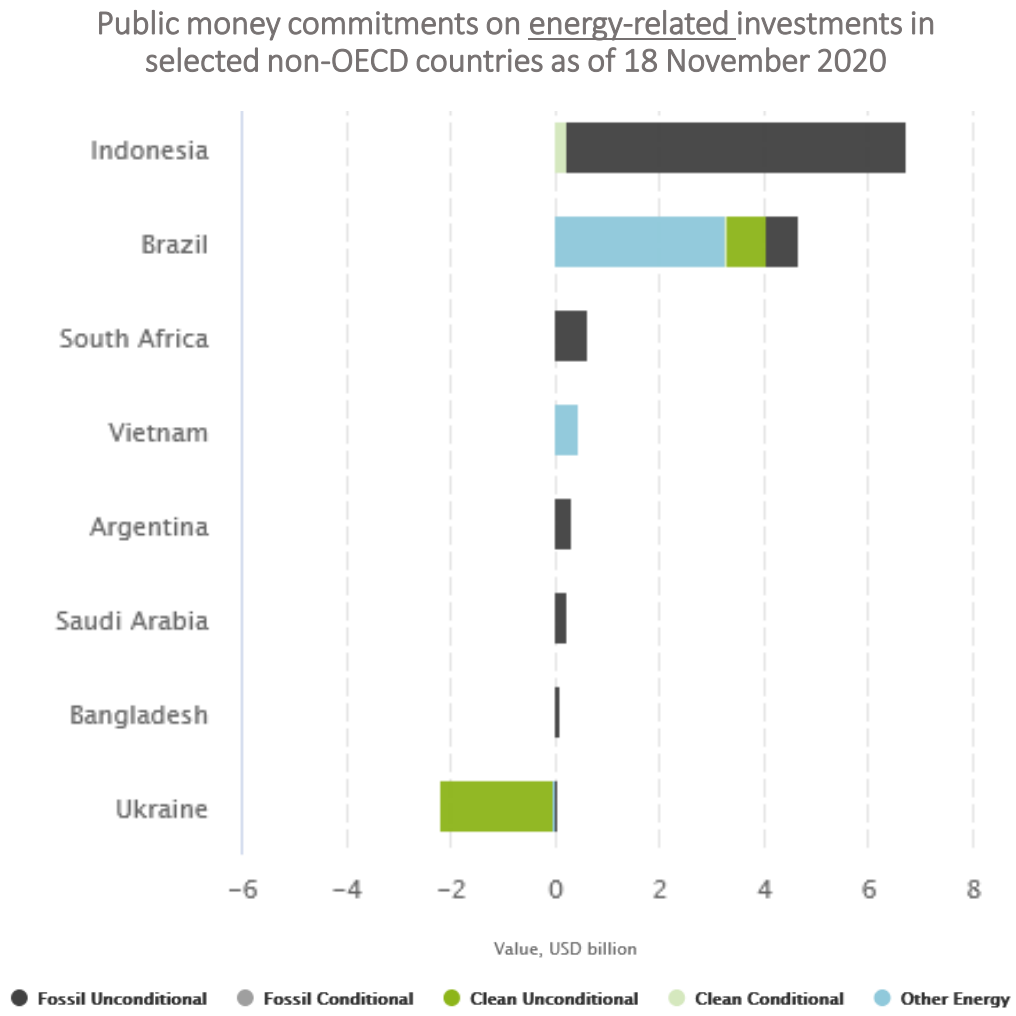
Multiple dimensions guiding fiscal (recovery) spending



GHG emissions dimension under assessment in several recently launched trackers differentiating by:

- ***Low-carbon* impact** ("green"): Measures triggering investments in low-carbon technologies or supporting further development of such technologies through R&D or regulatory changes
- ***High-carbon* impact** ("red"): Measures reinforcing an unsustainable business-as-usual or new carbon-intensive investments
- **Neutral/unclear impact**: Measures that do not have a direct impact on emission, i.e. do not clearly fall into the *low-carbon* and *high-carbon* categories summarised above

Measures mainly support a (high-carbon) status quo, but jury still out



Sources: Energy Policy Tracker (11/2020) Available at: https://www.energypolicytracker.org/region/select-non-oecd-countries

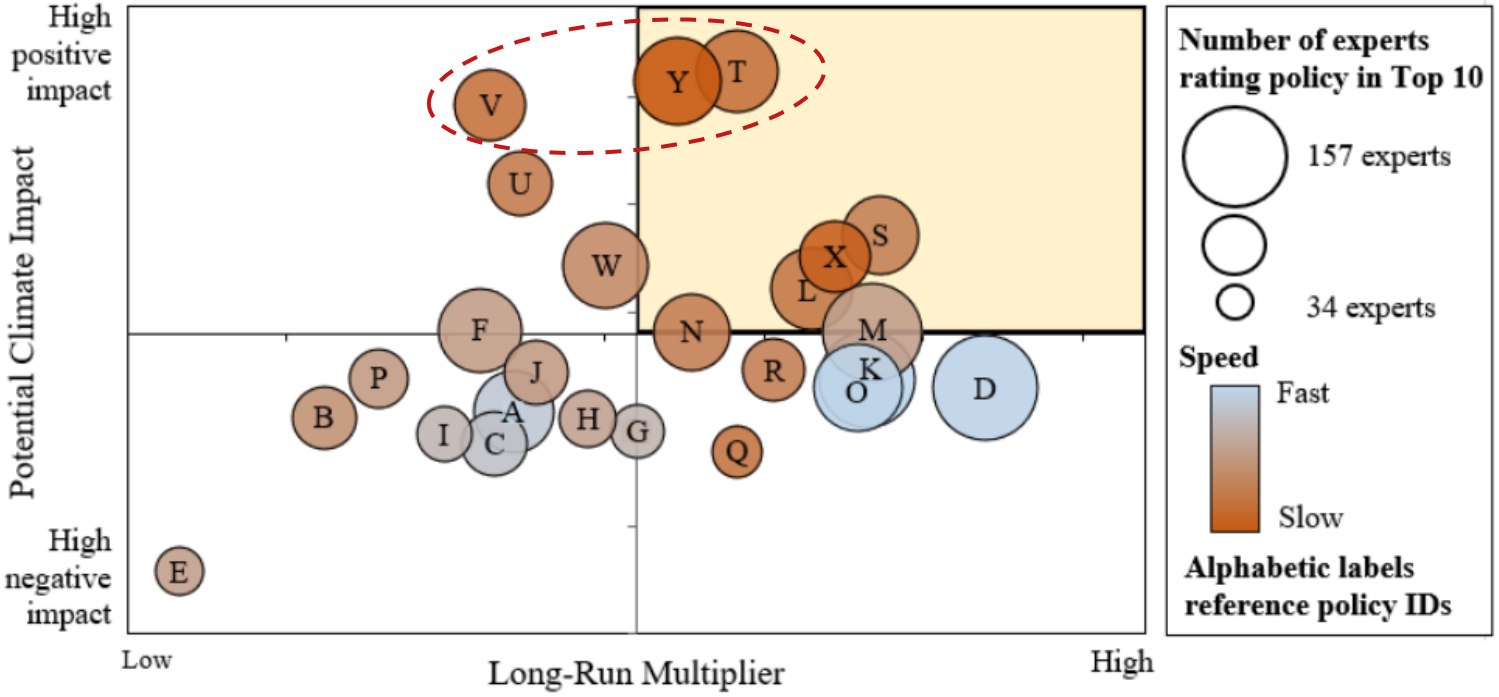
- **Assessments of the impact of rescue and recovery packages on GHG emissions remain preliminary**
- Most countries bring forward measures and packages supporting a high-carbon status quo of their economies – or even fostering new high-carbon investments
- Only some countries dedicate larger shares of their packages explicitly to low-carbon measures
- High-carbon infrastructure investments and a respective emissions lock-in may impact the feasibility of NDC targets and long-term targets by 2050

Unfolding an effective and sustainable economic recovery

- COVID-19 pandemic **reemphasizes necessity of NDCs and LTSs** to guide scarce fiscal spending and regulatory changes in context of severe socio-economic crisis
- **International donor community** have an important role to support developing countries
- **Application of multi-dimensional approach** and **'do no harm'** principle in country specific contexts to steer economic stimulus package that support nature and the climate, for example:
  - Corporate liquidity support with conditions for low-carbon transition attached
  - **Investment in nature-based solutions**
  - **Loans and grants for low-carbon investments in transport, buildings, industry, and energy**
  - Subsidies or tax reductions for low-carbon products
  - Green R&D subsidies

Fiscal measures with potential on economic multiplier and climate impact

Target group mean survey on COVID-19 fiscal recovery measure archetypes among finance ministry officials, central bank officials, and other economists in April 2020



Source: Hepburn et al. (2020) Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?. Available at: https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf

- Economic recovery measures available to policymakers that have long-run multiplier **and** positive impact on climate
- In-depth assessment of measures in country-specific context required

Full list of all policy archetypes on Page 10 of publication

- **T** – Clean energy investments
- **V** – Green spaces and natural infrastructure investments
- **Y** – Clean R&D spending

Emerging examples in the pursuit of low-carbon economic recovery

T – Clean energy infrastructure investments

- **Chile**: Green Credit programme to make renewable energy investments of up to USD 39 million in 2020 by refinancing long-term credits granted by financial intermediaries
- **Nigeria**: Installation of Solar Home Systems (SHS) in 5 million households currently not connected to the national grid, including a local content production requirement triggering domestic employment opportunities

V – Green spaces and natural infrastructure investments

- **Ethiopia:** Ethiopia and the United Nations Economic Commission for Africa signed a Memorandum of Understanding on a four-year USD 3.6 million project on nature-based solutions for water resources infrastructure and community resilience to support Ethiopia's green recovery
- **Pakistan:** Three-phased approach to natural ecosystems restoration focusing on local employment creation, for example aiming to provide around 65,000 employment opportunities as part of the first stage of the 10 Billion Trees Tsunami project

Expectations generally rather positive, despite high uncertainties

Multiple upcoming analyses surveying expectations among policy makers and expert

i. Majority of 98 country representatives **optimistic about intensifying climate action** (e.g. increases spending in future mitigation spending), but more divided on **whether the COVID-19 crises accelerates or slows down their countries' climate policy and ambitions** (NDC Update Report 2020, *forthcoming*)

ii. Most of 55 countries report an **intention or announcement to include *low-carbon* measures** in their COVID-19 recovery plans, but contradicting measures remain widespread (Climate Change Performance Index 2020, *forthcoming*)

iii. Relatively **positive expectations on medium-term impacts of COVID-19 crisis on climate policies** by policy makers of >50 countries, especially in OECD and Asian countries (Euro-Mediterranean Center on Climate Change 2020, *forthcoming*)

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