

Enhancing the ambition and implementation of Nationally Determined Contributions using Long-Term Strategies

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The Glasgow Conference of Parties (COP26) in 2020 is a key milestone for the implementation of the Paris Climate Agreement signed in 2015 (COP21), and the first test of its ability to increase collective ambition. By then, countries are required to increase the ambition of their existing climate pledges to 2030, the Nationally Determined Contributions (NDCs), and invited to share their 'Long-Term low greenhouse gas emission development Strategies' (LTs).

In the run-up to COP21, the submission of voluntary pledges (or 'intended NDCs') by 184 countries demonstrated universal commitment to limit global warming despite different responsibilities, capabilities and national circumstances. The first round of NDCs was instrumental in gathering momentum and securing the Paris Agreement. However, these NDCs fall short of setting the world on track to limiting global warming to well-below 2°C, and pursuing efforts to limit it to 1.5°C. Revising NDCs in 2020 will be key to achieve the Paris Agreement, and the 1.5°C goal in particular.

The second round of NDCs needs to address two connected challenges: ambition and implementation. On ambition, current pledges to 2030 do not reflect the global momentum that the Paris Agreement delivered and set the world on track to a 3°C warming. Their implementation is also lacking. The next round of NDCs can draw from national Long-Term Strategies consistent with the global net-zero emissions goal to address both challenges.

KEY MESSAGES

The second round of NDCs in 2020 needs to not only be more stringent in terms of emissions targets and plans for low-carbon energy capacity, but also focus on areas where progress is most lacking, such as retiring fossil capacity, decarbonising transport, buildings and industry, increasing energy efficiency policies and better managing land.

Long-Term Strategies and NDCs are distinct exercises, not just in terms of timescale. LTs provide two specific opportunities to support the design and implementation of NDCs:

- The exploration of different economy-wide decarbonisation pathways with detailed options at the sectoral level. LTs can identify short-term decisions that are robust in a context of uncertainty and avoid lock-ins incompatible with deep decarbonisation;

- The organisation of society-wide consultations to ensure economic and social factors are an integral part of the development strategy. LTs can foster buy-in and eventually support implementation of short-term action.

Sectoral targets or indicators that focus on emissions' underlying drivers are also key to foster the transparency of LTs and NDCs. Revealing these drivers is important to:

- Follow progress at the domestic and global scale ahead of the Global Stocktake in 2023 as short-term fluctuations in emissions alone are a poor indicator of whether a fundamental transition is underway (Spencer *et al.*, 2019);
- Act as a blueprint to attract private investment and international public support, foster international cooperation for decarbonisation and adaptation and catalyse non-state action.

In the run-up to COP26 under the United-Kingdom presidency, this *Policy Brief* suggest three priorities to design NDCs that reflect countries' 'highest possible ambition' as per the Paris Agreement and are fit to address the current implementation gap.

1. EXPANDING THE SCOPE AND DEPTH OF CURRENT NDCs

Current NDCs were designed prior to the signature of the Paris Agreement when countries agreed to limiting global warming to well below 2°C, striving for 1.5°C. The ambition of some NDCs was explicitly conditional on a global momentum that the Paris Agreement later delivered. Global discussions that tackle jointly climate imperatives and other Sustainable Development Goals should, in turn, foster national ambition through the ratcheting-up process.

Many of current NDCs, including from major emitters, do not reflect the global momentum that the Paris Agreement delivered (Robiou du Pont *et al.*, 2018) and set the world on track to a warming over 3°C (UNEP, 2018). The second round of NDCs should not only be more stringent in terms of emissions targets, but also focus on areas unaddressed in NDCs or lacking progress to date. Possible priorities include:

- *Providing mitigation sectoral strategies and targets.* Sectoral information adds transparency and credibility to a headline national mitigation target and facilitates its implementation. The development of sectoral strategies induces a coordinated approach of decarbonisation that highlights the role non-state actors and guides investments. Sectoral objectives coherently embedded in the local context reveal investment needs that can attract private and public finance (see Section 3). These sectoral strategies should feature immediate action that is coherent with a LTS (see Section 2).
- *Tackling non-CO₂ gases.* More than half of the NDCs do not address HFCs (hydrofluorocarbons), and half of G20 countries have not ratified the Kigali amendment to the Montreal Protocol that guides their phase-down globally. Important methane emissions sources remain unaddressed in high emitting countries' NDCs.
- *Reducing fossil energy consumption.* Vouching to increase renewable energy capacity by itself is insufficient. The recent IEA WEO 2019 Stated Policies Scenario projects renewables meeting the majority of increases in global energy demand, but a plateau for coal, along with rising demand for oil and gas, would mean global emissions continue to rise to 2040.
- *Enhance energy efficiency and decarbonisation of end-use sectors.* Observed rates of energy efficiency gains, and consumption decarbonisation in transport, buildings and industry globally are stable, at around 1.5% annually, when they should be at 3% (Spencer *et al.*, 2019).
- *Protecting and restoring natural sinks,* including peatland, primary forests or coastal ecosystems. Nature-based solutions can offer both biodiversity and climate benefits:

naturally restored forests store 40 times more carbon than monoculture plantations (Lewis *et al.*, 2019).

- *Including the impact of public foreign investments* such as through development co-operation. Bilateral and multilateral development banks are increasingly working on aligning their activities with the Paris Agreement (OECD, 2019); the European Investment Bank has committed to end lending to fossil fuel projects as from 2021. However, despite some progress, there are reasons for concern. In the absence of greener standards, the magnitude of the Chinese investment under the Belt and Road Initiative could jeopardise the Paris Agreement (Tsinghua *et al.*, 2019). At minima, international investments need to align with both the recipient countries NDC and with the providing countries' environmental standards (Voituriez *et al.*, 2019).

This *Policy Brief* specifically discusses the emissions mitigation component of NDCs and LTSs, but recognises the importance of progressing on adaptation. More than half NDCs refer to adaptation measures and their enhancement is discussed as adaptation communications under the Paris Agreement.

2. ENSURING COHERENCE WITH LONG-TERM DEVELOPMENT STRATEGIES

Long-Term Strategies and NDCs are distinct exercises, not just in terms of timescale (Colombier *et al.*, 2016). LTSs can include a process to engage civil society, businesses, and regional and international stakeholders regarding inclusive pathways that will foster societal buy-in. They can also offer a desirable vision of the sustainable society that is pursued, while NDCs represent a set of transition measures to achieve it. A clear vision of the end-goal is more easily understood and can get more support from the civil society than isolated mitigation policies that focus on collective efforts.

All countries are invited to submit a LTS, although they are not mandatory under the Paris Agreement. LTSs represent the most comprehensive opportunity for countries to position their economy and society towards the ambitious global political objective of reaching emissions neutrality. The scientific community associates the Paris temperature well-below 2°C threshold and 1.5°C goal to indicative global emissions phase-out dates in the Special Report on 1.5°C (IPCC, 2018). Global GHG emissions should reach net-zero in 2085 to limit global temperature increase to 2°C, and by 2070 (2050 for CO₂ emissions only) to limit to 1.5°, before becoming negative.

In addition to setting the level of ambition and framing transformative action, LTSs have the potential to reap more ambitious mitigation potentials by avoiding lock-ins and ensuring short-term decisions are robust in the context of uncertainty (e.g. regarding the future maturity or cost of certain technologies). A key advantage of LTSs is its potential minimise costs by avoiding stranded assets, limit risks of relying on yet non-existent

BOX 1. CARBON AND GHG EMISSIONS NEUTRALITY

The notion of emissions neutrality is a lodestar for climate action for all economic and political actors (Rankovic *et al.*, 2018). The UN Secretary General called all countries to commit to net-zero CO₂ emissions to 2050, in line with the IPCC emissions range to limit warming to 1.5°C. To date, 24 countries committed to GHG emissions neutrality domestically, including Germany, the UK and France, and signalled their intention to submit a LTS towards net-zero emissions by joining the Carbon Neutrality Coalition. Many non-state actors committed to reach carbon neutrality by 2050 under the Climate Ambition Alliance set up by Chile (102 cities, 10 regions, 93 businesses and 12 investors, to date). To date, only 12 countries have submitted LTSs to the UNFCCC, and some, including France's, are out-of-date as they do not refer to GHG emissions neutrality. Least-Developed Countries also shared a group vision to reach net-zero GHG emissions by 2050 conditioned to "high-quality, predictable and accessible finance". By capturing and amplifying this momentum in 2020, the international community could take a decisive step towards framing climate action around emissions neutrality.

negative emissions technologies, and limit trade-offs with other sustainable development objectives. Myopic measures focusing *only* on reducing emissions by 2030 may hit the NDC mark, but miss deeper transformations required to deliver deeper decarbonisation. For example, two of the IPCC 1.5°C scenarios (the low energy demand P1 and the sustainable P2) suggest that emissions from the gas sector should rapidly decline ahead of 2030. Therefore, while fossil gas is sometimes presented as a 'bridging fuel' to decarbonisation globally (as its emissions are broadly half of coal's), it should not be planned outside a clear zero-emissions strategy. In the transport sector, the focus of emissions intensity for vehicles does not address the absolute growth in emissions as their size increases (IEA, 2019). Across sectors, countries should not solely rely on land use (Deprez *et al.*, 2019) and ocean (Gattuso *et al.*, 2019) actions—that can be detrimental to biodiversity and local communities—in lieu of mitigation measures to reduce fossil-fuel consumption. Recent studies suggest a methodology to backcast the decarbonisation goal to inform current decisions in a local context (Waisman *et al.*, 2019).

The design of a LTS can also adopt a whole-society approach that includes a broad range of non-state actors and international partners. Overlooking public acceptability of the climate policies, such as carbon pricing, can impede their implementation despite strong support from civil societies for stronger climate action. In their methodology, LTSs offer the opportunity to start from the long-term zero emissions objective to then discuss and select the most suited policy instruments, considering their interlinkages (Briand *et al.*, 2019). Beyond global costs considerations, inclusive just transitions should consider public accessibility, fair distribution of mitigation costs, access to jobs and basic services to provide a common vision of the future.

An LTS is not set in stone and should include an option for periodic revision. Several countries already ratcheted up the ambition of their long-term decarbonisation strategy. Other countries may want to increase their LTS' ambition in light of global progress on ambition and capture the development of mitigation solutions.

3. INCREASING THE TRANSPARENCY OF ACTION: HOW AND WHY?

Sectoral targets and indicators that capture emissions' *underlying drivers* are key to foster the transparency of LTSs and NDCs. These drivers can best inform on progress at the domestic and global scales ahead of the 2023 Global Stocktake. Detailed domestic plans with sectoral information can act as a blueprint to attract private investment and international public support, catalyse non-state action, and foster international cooperation for decarbonisation and adaptation.

The Rulebook adopted in Katowice requires countries to identify quantitative and qualitative indicators to track and report on progress on their NDCs, but does not specify their nature. Dashboards monitoring the low-carbon transition can coherently articulate key sectoral developments and support the integration multiple strategic plans with both a short- and long-term perspectives (Rüdinger, 2019). Indicators need to be tailored to the domestic context, and could potentially track progress in seven sectors: energy, transport, buildings, industry, agriculture, waste, forests and carbon sinks. The IPCC global scenarios provide quantified pathways for key sectoral indicators for various regions and large countries. Alternatively, bottom-up modelling exercises seek to reflect national contexts in decarbonisation pathways that can better account for the local capacity to implement mitigation measures (Waisman *et al.*, 2019).

3.1. Tracking progress and fostering trust

Short-term emissions trends are not sufficient to convey clearly the progress on ongoing sectoral transformations (Spencer *et al.*, 2019). Indeed, annual fluctuations of global emissions do not necessarily signal a decarbonisation of the economy. Instead, looking in-depth at the underlying economic and energy system drivers of emissions can reveal more durable emissions trends.

The provision of greater details on sectoral transformation indicators would help businesses and non-state actors to plan and support the economic transition. Many companies, including multinationals, have pledged to support ambitious mitigation even in the absence of a national vision. Internationally, countries can be credited their progress and by reporting progress on their investments and on sectoral indicators that may not be captured by annual emissions trends. Countries are required to disclose how their NDC is 'fair and ambitious' according to their own perspective. Demonstrating progress on

implementation of detailed indicators would support the credibility of domestic actions and foster greater trust than annual emissions trends. Progress on domestic mitigation will inform independent reviews that assess the ambition of national mitigation effort, including international support and potential internationally traded mitigation outcome, in light of the equity principle of the Paris Agreement accounting for countries' responsibility and capability (Robiou du Pont *et al.*, 2018).

3.2. Supporting investments and international cooperation

The communication of sectoral plans and measures can attract investment and direct international support. Credible LTSs can provide a clear long-term signal to private investors and create a basis for guiding flows of public finance, including development finance (IDB, 2019). Countries can attract such support by communicating the finance and technology needed to implement specific measures that align with the sectoral pathways. In turn, greater visibility on the support to be provided can help recipient countries to develop commensurate mitigation plans that are more likely to be funded and implemented. Sending a clear signal that the imbalance between mitigation and adaptation will be resorbed can help achieving vital adaptation projects and unlock ambitious emissions commitments from vulnerable countries.

Long-Term Strategies can contain multiple alternative visions of the future, and thus offer innovative and collaborative strategies that rely on non-state actors and other countries. International collaboration can help address global issues such as emissions embedded in imported goods, trading-standards and international aviation and shipping. The benefits of regional collaboration can be captured in coordinated LTSs. The United States, Mexico and Canada released joint LTSs in 2016, recognising the importance of their trade partnership and economic integration. Such initiatives can build an aligned international vision, sharing development costs, providing clear signal to regional economic actors. Beyond economic signals, neighbouring countries could adopt coherent environmental standards and emissions objectives, to create a wider market that reduces investment risks and attracts investors.

CONCLUSION

In the lead-up to COP26 when all countries should enhance the ambition of their contributions, Long-Term Strategies have a key role to unlock greater ambition and foster implementation of NDCs. Only a rapid implementation of mitigation measures informed by LTSs inclusive of countries and non-state actors can secure a chance to avoid the most dangerous climate impacts.

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Robiou du Pont, Y., Vallejo, L. (2019). Enhancing the ambition and implementation of Nationally Determined Contributions using Long-Term Strategies. *IDDRI, Policy Brief* N°03/19.

This article has received financial support from The French government in the framework of the programme "Investissements d'avenir", managed by ANR (the French National Research Agency) under the reference ANR-10-LABX-01.

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