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#DEVELOPMENTBANKS



LONG-TERM STRATEGY USE FOR PARIS- ALIGNED INVESTMENTS

THE CASE OF DEVELOPMENT FINANCE INSTITUTIONS

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I4CE – Institute for Climate Economics, is a non-profit association with expertise in economics and finance. **I4CE** contributes to the fight against climate change by informing the public policy debate and supporting public and private decision-makers.



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ABOUT THIS REPORT

More and more development finance institutions (DFIs) are exploring the use of countries' long-term strategies (LTSs) as they seek to implement Paris-aligned investment strategies. This report focuses on the role of countries' LTSs in the Paris alignment approaches of DFIs. It explores the possible roles of both the LTS development process and the resulting LTS document in providing insights on the Paris alignment of investments within financial institutions' investment decision-making processes.

The report looks primarily at the multilateral development banks (MDBs), in view of the current operationalisation of their Paris alignment commitments, as well as their ongoing support for LTS development within their respective areas of intervention. Despite this focus, the findings are relevant for other DFIs, and may also be potentially useful for a broader range of financial institutions and economic actors. The target audience for this report mainly includes DFIs and other entities involved in LTS development (governments, experts from NGOs and intergovernmental organisations), as well as DFI shareholders.

The findings are drawn from an analysis based on a literature review, the outcomes of a workshop held alongside COP26, and interviews with three think tank experts and 10 DFI practitioners (see Appendix B). The report provides guidelines on how LTSs can be used to increase DFI Paris alignment and how this potential use can be improved, through both recommendations relevant to LTS development for this purpose, and to DFI operations in order to fully harness this potential.

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EXECUTIVE SUMMARY

The Paris Agreement invites countries to voluntarily produce long-term strategies (LTSs) as part of the bottom-up approach to limit the global average temperature increase to 1.5°C above pre-industrial levels.

Within the agreement, and more recently in the Glasgow Climate Pact, countries are requested to define their contribution to this shared global objective, and their economy's pathway to achieving low-greenhouse gas (low-GHG) climate-resilient development, by developing an LTS towards just transition to net zero emissions. For practitioners, LTSs can potentially ensure short-term policies and targets, including nationally determined contributions (NDCs), are consistent with the long-term goals of the Paris Agreement and can help to steer and inform discussions on increasing the long-term level of ambition.

The multilateral development banks (MDBs) and a number of development finance institutions (DFIs) have committed to aligning their operations with the Paris Agreement. Aligning with the Paris Agreement implies aligning with national pathways, and not just with its global goals. As such, the MDBs and a number of DFIs are including a country-specific dimension in their Paris alignment assessments, to which LTSs can contribute. The potential and limitations for LTSs to inform the Paris alignment of DFI operations is explored in this report.

As of March 2022, only 30 OECD and 20 non-OECD countries had developed an LTS, of the 196 country parties to the United Nations Framework Convention on Climate Change (UNFCCC). Furthermore, where available, these LTSs are of varying quality and are sometimes insufficiently detailed. Although LTSs are voluntary at present, the Glasgow Climate Pact adopted at COP26 in 2021 urges Parties to communicate them and to update them regularly. It is expected that their number will continue to grow, that their quality will improve, and that such strategies will be increasingly referred to and used by economic actors, and in particular by DFIs.

LTSs ideally represent a country-owned long-term vision with the potential to help stakeholders, including DFIs, to better under-

stand the key dimensions of a country's climate ambitions. Although the structure an LTS should follow has not been formally defined, best practice indicates this vision can include: (i) the country's baseline for decarbonisation and resilience with a coherent overview encompassing all sectors; (ii) where the country is headed and how committed it is to making progress (e.g. through the policies/strategies envisaged for priority sectors or across sectors that might be referred to in the LTS); and (iii) the country's current pathway to decarbonisation and resilience, for national stakeholders and DFIs to determine how investments and interventions can best support this pathway. Furthermore, the LTS can provide insights on how the identified priorities and related investments can be leveraged by other actors (e.g. counterparties in the country) for low-GHG, climate-resilient development. LTSs are thus increasingly seen as key inputs into the country-specific analysis used by DFIs to screen and improve the design of projects and other activities, as they provide the country's long-term vision of resilience and decarbonisation.

Initial experience suggests that DFIs should use LTSs and other country-specific inputs as early as possible in the project cycle, including in the identification and design stage, in order to support alignment. Interviews with practitioners from MDBs indicated that there have been no instances to date where the LTS analysis performed during the screening phase proved to be the key step in determining project alignment. Nevertheless, interviewees suggested that under specific circumstances for the deployment of technologies such as gas infrastructure, an LTS could be a decisive input to assess alignment in the screening process. It was noted that this input would potentially be more useful in the identification and design stage of the project cycle, to leave room for any substantial changes to fully align with the country's vision of mitigation and adaptation, rather than later in the project cycle. Consequently, the LTS alignment assessment should not be just an end-of-process consistency check, but should serve to determine from the outset the projects to be developed in view of the Paris-aligned investment needs in the country.

Both DFIs and experts have noted the strong potential of LTSs and their development pro-

cess to inform the definition of DFI country intervention strategies, and the potential for their use in country dialogue. In these strategic discussions, an LTS can help to identify:

- Priority sectors and technologies for climate action in the longer term;
- Specific long-term mitigation and/or adaptation targets by sector;
- Climate policies and institutional changes needed in the country (including those to address barriers to private sector investment towards decarbonisation and resilience).

The use of LTSs and other country-specific information is seen as a way to support the development of an aligned project pipeline in the country, while reinforcing the country's own commitments made through its LTS. Beyond alignment, LTSs can identify where DFIs could support capacity building, as well as transformative climate and development outcomes, by financing activities with high potential for knock-on benefits, or activities that could lead to systemic change, such as Paris-aligned policy-based operations¹. The LTS development process and the resulting strategy can also support better coordination of DFIs within the country, for investment alignment.

This potential use of LTSs in country dialogue is even more significant if DFIs support the LTS design process, enabling a deeper understanding of policy discussions and of the aspirations of the different country stakeholders that should be involved in this country-owned process. Interviews suggested that the potential for the LTS to identify transformative climate outcomes in the country can be enhanced by direct DFI involvement in the country's LTS development process itself. Interviewees indicated that taking part in this process through direct support could give DFI operational teams a deeper understanding of the underlying data used in the LTS (e.g. economy-wide long-term modelling of emissions reductions in a Paris-aligned scenario), which in turn can facilitate its use to inform Paris-aligned transformative support.

¹. Policy-based operations can be defined as financial instruments that support structural reforms (e.g. sectoral or multi-sectoral public policy design and implementation) in a country.

In order for LTSs to fully realise their potential as instruments to increase the overall alignment of internationally financed activities in a country, a number of challenges need to be addressed. These challenges are in the country LTS design process and the content of LTSs, as well as in DFIs' approach to supporting and using LTSs as an input in Paris-aligned operations. To address these challenges, the following recommendations have been identified:

For countries and entities developing or supporting LTSs, including DFIs:

- To ensure the provision of sufficient information on the transition and adaptation of national economies, where possible, **LTSs should include long-term data on strategic country orientations and economy-wide climate mitigation and adaptation priorities**, such as:

- priority sectors and sub-sectors for climate action;
- technologies to be deployed for decarbonisation (e.g. low-carbon infrastructure and assets across sectors and low-carbon options and technologies by sector that are aligned with the country's pathway to net zero emissions by mid-century, priorities for innovation, and research and development for sectoral decarbonisation);
- country current and science-based projected emissions by sector, and pace of economy-wide decarbonisation (e.g. through intermediate shorter-term measures and policies for emissions reduction targets by sector, as set out in a country's NDC, which an LTS can help inform);
- climate vulnerabilities and national adaptation strategies and/or technologies to be deployed for adaptation;
- identified risks of carbon lock-in and potential stranded assets and misaligned activities or technologies within sectors and sub-sectors;

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- timing for the phase-out of existing misaligned assets or the deployment of new aligned assets;
- development objectives and qualitative targets to support sustainable economic development, poverty reduction, a just transition, and decent work and quality jobs.

• To be seen as a credible basis for alignment assessments:

- **LTSs should involve an economy-wide stakeholder engagement process** (including informal sectors and minorities) and have **political backing** (e.g. adoption and enforcement of related legislation and legally binding climate policies);
- **LTSs should list the government interventions (e.g. policy and institutional changes) required in the short and medium term to address identified barriers to investment** and to link the long-term vision to near-term action and reference points;
- **National development plans and sectoral strategies should be aligned with the LTS.**

For DFIs, including the MDBs:

• To ensure LTSs lead to Paris-aligned operations and enable a deeper understanding of country pathways to low-GHG, climate-resilient development, **DFIs should continue to proactively offer technical and financial support for the development and operationalisation of robust LTSs, where relevant.**

- The **resulting LTS should fully meet the expectations of countries and the DFI community** regarding the quality and scope of emissions reduction modelling, the approach to target definition (e.g. resulting from a multi-stakeholder process), and sectoral plans for LTS implementation within a country-owned vision.

- **For MDBs, within their joint approach to Paris alignment, this implies strengthening the LTS support they provide** under the fourth building block of their approach (engagement and policy development support), guided by the eight LTS principles they have defined², and supporting the synchronised update and revision of future NDCs and LTSs.

• To leave sufficient room in current DFI practice for any substantial changes needed to align with the country's vision of mitigation and adaptation, **DFIs should assess consistency with the country LTS during the identification and design stage of the project cycle.** If relevant, this assessment could also take place during the screening phase as part of project preparation, but it should not be just an end-of-process consistency check.

• To ensure their country intervention strategies and projects are consistent with the country's low-GHG, climate-resilient development pathway, and to foster transformative climate outcomes in the country based on country priorities for the achievement of the Paris Agreement objectives, **DFIs should use LTSs and associated assessments from the start of country strategy formulation.**

- DFIs should leverage the potential of the LTS and **make it a formal part of their internal processes**, using the LTS to identify the options that would be the most transformative in the country.
- This will **require that they build capacity of country and sectoral teams and raise awareness internally** on the importance of integrating a given country's long-term climate-related vision, embodied in its LTS, into the country dialogue (and the resulting country strategy, including all country-specific diagnostics).

• To avoid duplicating efforts or having different interpretations of a country's low-GHG, climate-

resilient development (e.g. due to the use of different resources for a country's context analysis), to improve DFI country-specific alignment assessments, and to increase the efficiency of their financial support, coordination and/or formalisation appear essential to link the efforts of both the MDBs and other DFIs. As part of the process to develop facilities or other channels to deliver support for LTS development, DFIs could:

- **share common up-to-date resources** that would serve country context analysis for Paris alignment;

- **coordinate DFI support for LTS development and implementation** both within and across countries.

• To overcome potential limitations in their internal capacity to perform such assessments for all of their countries of intervention and all of their intervention instruments, **DFIs should continue to build capacity on the country-specific alignment assessment of their projects and interventions.** This capacity should be built internally and DFIs should dedicate sufficient resources to this process. For the MDBs, this could involve:

- the **development of internal databases and materials** to support this type of assessment,

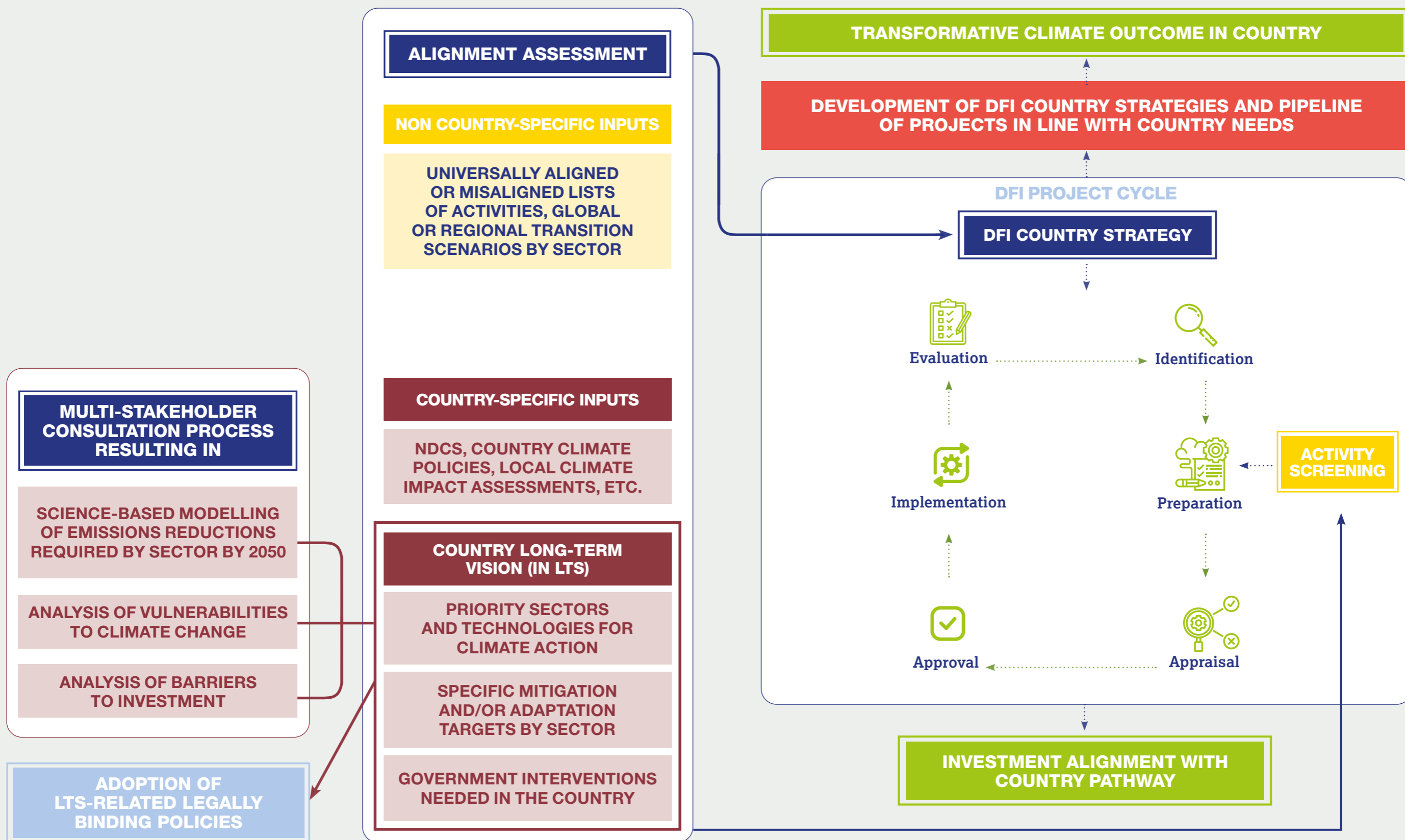
- the **clear identification of internal focal points to support operational teams performing country-specific alignment assessments** under the first and second building blocks of their joint approach to Paris alignment (alignment with mitigation goals, and adaptation and climate-resilient operations, respectively)³.

The following figure presents an overview of the contribution of LTSs to informing the alignment of DFI strategies and operations, as detailed in this report.

² The eight MDB principles for long-term strategy support are detailed in section I of this report and can be found at the following URL: <https://www.eib.org/attachments/documents/mdb-principles-for-lts-support-en.pdf>

³ The joint MDB approach to Paris alignment includes six building blocks, which are detailed [here](#).

FIGURE 1: – OVERVIEW OF LTS CONTRIBUTION TO INFORMING THE ALIGNMENT OF DFI STRATEGIES AND OPERATIONS



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I. INTRODUCTION: GROWING EXPECTATIONS THAT LONG-TERM STRATEGIES WILL HELP TO DETERMINE THE PARIS ALIGNMENT OF FINANCIAL FLOWS

The Paris Agreement relies on a bottom-up, country-driven approach to climate action, in which long-term strategies (LTSs) help to reconcile global long-term goals with short-term action at the local level. The 2015 Paris Agreement invited countries to set out their contributions to the common long-term objectives of decarbonising and adapting economies worldwide (i.e. achieving the long-term mitigation, adaptation, and financial flows-related goals as defined in article II.2. and develop LTSs. It also required them to develop more short-term plans, in the form of their nationally determined contributions (NDCs). Achieving the long-term temperature goal of the Paris Agreement, in other words keeping global average temperature rise well below 2 degrees above pre-industrial levels and pursuing efforts to limit this temperature rise to 1.5 degrees, implies reaching net zero emissions by mid-century while increasing the resilience of systems and infrastructure. This will entail a gradual and significant transformation of all sectors over the coming decades, making it useful for countries to back-cast their contribution to collective climate goals from the expected state of decarbonisation and resilience in 2050, in order to construct a long-term vision of how to get there from the present.

Both NDCs and LTSs may be used as a reference by economic actors to understand country-specific pathways to achieving global long-term goals. NDCs are mandatory, meaning they are available for most countries and their content has been harmonised. However, they only provide information on short-term action, and will be revised every five years to reach the level of ambition of the long-term global goals. They should thus only be considered as a minimum baseline for alignment assessments. LTSs are voluntary and were only available for 50 countries as of March 2022 (see Appendix A), with varying content and quality. However, LTSs provide the long-term vision of how the sectors within a country will be transformed over time to achieve long-term national goals. This vision may be useful to complement Paris alignment assessments.

LTSs, when they exist, have the potential to provide key insights that can in turn support DFIs in ensuring their investment decisions are aligned with the

Paris Agreement. According to the World Resources Institute (WRI), LTSs are necessary because they guide countries to avoid costly investments in high-emissions technologies, support a just transition, promote technological innovation, account for future climate risks in country planning, and send signals to investors about envisaged long-term societal changes (World Resources Institute, 2020). As such, the LTS of a given country should signal its ambition and provide insights to a broad set of stakeholders on:

- **Priority areas** in which to both increase and decrease investment and activity in terms of balance across and priorities within sectors, and prioritisation of certain climate actions;
- **Areas of support and project types** where expertise, capacity building and/or additional finance could reduce greenhouse gas (GHG) impacts and improve transition; and
- **Areas of vulnerability to physical risks** and actions that can improve local resilience (I4CE, 2017).

As countries continue to develop their LTSs, it is increasingly expected that an LTS and its underlying scenarios and analysis will have the potential to inform Paris alignment decision-making processes within financial institutions. Ideally, an LTS is produced based on a comprehensive economy-wide analysis that uses long-term scenarios specific to each country. These scenarios can help to determine country priorities and should ideally cover both GHG targets, in particular specific targets by sector, and non-GHG targets (i.e. supporting policy frameworks) in the long term as well as country development aspirations and other socioeconomic objectives based on stakeholder consultations. Furthermore, an LTS could help to understand: 1 the country's baseline for decarbonisation and resilience with a coherent overview encompassing all sectors; 2 where the country is headed and how committed it is to making progress (e.g. through the policies/strategies envisaged for priority sectors or across sectors that might be referred to in the LTS); and 3 the country's current pathway to decarbonisation and resilience, for national stake-

holders and DFIs to determine how investments and interventions can best support this pathway. Finally, the LTS can provide insights on how the identified priorities and related investments can be leveraged by other actors (e.g. counterparties in the country) for low-GHG, climate-resilient development.

However, most alignment approaches across the financial system are currently based on global rather than national scenarios. The main methodologies and tools to assess the alignment of financial institutions' portfolios use global decarbonisation scenarios, which do not take into consideration country-specific trajectories. The most widely used scenarios are the International Energy Agency (IEA) Energy Technology Perspectives (ETP) or World Energy Outlook (WEO) scenarios, which provide macro-level decarbonisation trajectories based on available sectoral data at a global or regional level (Institut Louis Bachelier et al., 2020). The global GHG emissions and global warming scenarios in the Intergovernmental Panel on Climate Change (IPCC) reports on climate change mitigation are also used, but they do not provide country-specific trajectories.

DFIs have started to integrate LTSs into their Paris alignment project screening process, in which these LTSs contribute to the consistency check of an investment's alignment with the Paris Agreement objectives at country level. The MDBs have included an assessment of consistency with country LTSs in the project screening process developed as part of the first and second building blocks (alignment with mitigation goals, and adaptation and climate-resilient operations, respectively) of the MDB Paris alignment framework launched at COP24 (MDBs, 2018). In addition, British International Investment (BII, formerly CDC Group), for instance, has committed to ensuring sector investments are consistent with countries' low-GHG pathways and to using "the latest available scientific and forward-looking evidence to consider how [its] investments align with different countries' net zero emission development pathways to limit global warming to 1.5°C and pursue [its] ambition to align [its] portfolio to net zero GHG emissions by 2050" (BII, Climate Change Strategy, 2020, p. 28). Similarly, the Agence Française de Développement (AFD) conducts a systematic analysis of low-GHG transition issues, for all countries of operation. This includes analysis of public policies, NDCs, and prospects for long-term low-GHG and climate-resilient pathways, which then feeds into country intervention strategies.

Given the perceived usefulness of LTSs for a country's contribution to achieving long-term climate goals, a number of DFIs aim to provide support for their development. Under the fourth building block of the MDB Paris alignment framework⁴ (engagement and policy development support), MDBs aim to support coun-

4. The joint MDB approach to Paris alignment includes six building blocks, which are detailed [here](#).

tries in the development of LTSs, considering eight key principles that these strategies should follow:

- 1 **Setting out a long-term vision for a low-GHG, climate-resilient future**, with clear steps in the near and medium terms to enable its achievement;
- 2 **Linking climate goals to Sustainable Development Goals (SDGs)** to maximise socioeconomic benefits and to support a just transition;
- 3 **Ensuring alignment with the long-term goals of the Paris Agreement**, with clear arrangements to deliver short- and medium-term milestones towards LTS objectives;
- 4 **Integrating the adaptation and climate resilience goals** of the Paris Agreement;
- 5 **Covering key sectors and systems to capture their impact**, interlinkages and interdependencies under a range of plausible futures;
- 6 **Ensuring country ownership by facilitating the integration of long-term objectives** into development planning and budgeting across the whole government;
- 7 **Developing an inclusive and transparent stakeholder engagement process**, including on approaches to a just transition;
- 8 **Ensuring there is appropriate institutional capacity** to implement, monitor and update the LTS (MDBs, 2021b).

Moreover, AFD provides support to countries for the development of their LTSs, which can include public policy loans through its 2050 Facility (AFD, 2020).

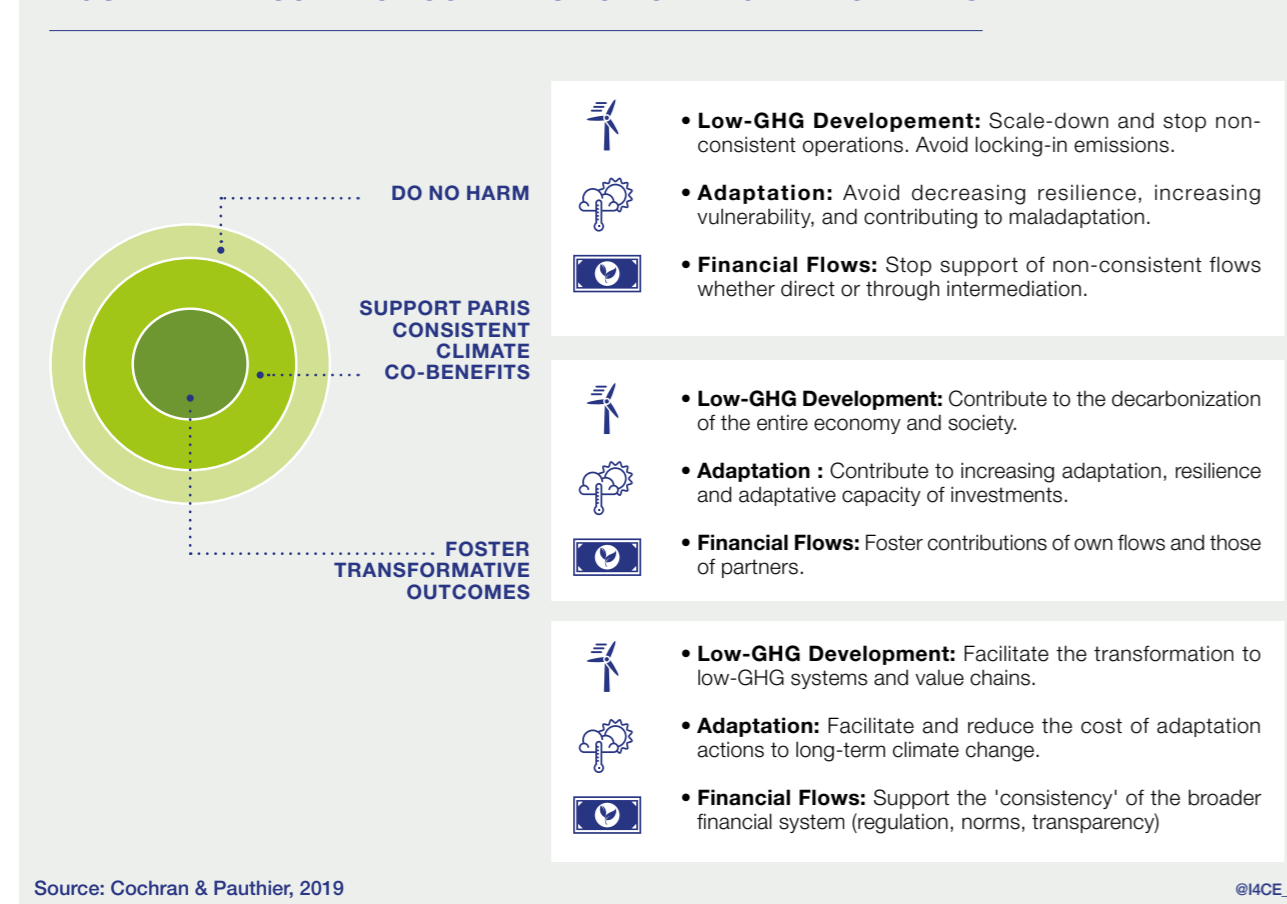
II. WHICH ELEMENTS OF AN LTS CAN PROVIDE SIGNALS ON WHAT IS ALIGNED OR MISALIGNED WITH LONG-TERM NATIONAL AND INTERNATIONAL CLIMATE GOALS?

1. Taking the country context into account in addition to *de facto* international definitions of aligned and misaligned activities

A Paris-aligned activity is defined as being one that is consistent with the long-term mitigation and adaptation objectives of the Paris Agreement at the global level, and does not prevent the achievement of these objectives or of broader sustainable development goals (I4CE, 2019). The scale of contribution of aligned

activities to the transition and adaptation of economies goes from activities consistent with long-term national sustainable, low-GHG, climate-resilient development pathways, to activities that contribute to both incremental and transformative outcomes. This can be illustrated as follows:

FIGURE 2: THE SCALE OF CONTRIBUTION OF ALIGNED ACTIVITIES



A first step in identifying aligned activities is to ensure that they “do no harm” and do not significantly hinder the achievement of long-term Paris goals. For the temperature goal of the Paris Agreement, activities that “do harm” include those that lead to the lock-in of greenhouse gas (GHG) emissions at levels inconsistent with national and international climate objectives, as well as those that support systems and value chains that are counterproductive to long-term climate goals.

Activities that are most often considered *de facto* Paris-aligned are those that contribute significantly to increasing resilience or reducing emissions, including by enabling mitigation or making the transition possible. When considering the mitigation objective of the Paris Agreement, activities that significantly contribute to this objective are often defined as those found on positive lists of activities by sector/technology that meet specific criteria. The Multilateral Development Banks - International Development Finance Club (MDBs-IDFC) Common Principles for Mitigation Tracking, which were updated in 2021 to reflect Paris alignment, differentiate between: 1) activities with negative or very low emissions that are consistent with the Paris Agreement temperature goal, 2) transitional activities, which, despite their GHG emissions, are important for the transition to a net zero economy, and 3) enabling activities, which enable other activities to make a significant contribution to climate change mitigation, (e.g. manufacturing of very low emission technologies) (MDBs-IDFC, 2021). Similarly, the EU taxonomy, which was the first taxonomy adopted by a group of countries, identifies as activities that significantly contribute to mitigation: 1) activities that are already low-carbon, 2) activities that contribute to a transition to a net zero emissions economy in 2050, and 3) activities that enable mitigation (European Commission, 2020).

Several initiatives have developed negative lists of activities considered as being *de facto* misaligned with the mitigation goal of the Paris Agreement, often linked to a national or regional context. The taxonomy developed by the Climate Bonds Initiative (CBI), for example, “identifies the assets and projects needed to deliver a low carbon economy and gives GHG emissions screening criteria consistent with the 2-degree global warming target set by the COP 21 Paris Agreement” (Climate Bonds Initiative, Climate Bonds Taxonomy, 2021, p. 1). It highlights a number of “incompatible” activities, especially in the energy sector, such as coal or oil power without carbon capture and storage, waste heat recovery from coal- or oil-fuelled power generation, and coal mining or oil extraction, refining, processing or production and associated supply chain infrastructure (Climate Bonds Initiative, 2021).

Country-context information is essential for activities that fall between *de facto* aligned and misaligned activities, such as transitional activities that may be either aligned or misaligned depending on

the context. Four criteria need to be met for the qualification of transitional activities as per the MDBs-IDFC Common Principles for Mitigation Tracking, updated in 2021 to support Paris-aligned finance. These activities would need to: 1) lack available technologically or economically feasible very-low-emission alternatives; 2) comply with high performance country- or sector-specific standards, benchmarks or thresholds for GHG emissions or emission intensity that significantly exceed expected performance in a sector or activity; 3) not hamper the development or deployment of very-low-emission activities; and 4) not lead to a lock-in of GHG emission-intensive assets that is inconsistent with the long-term goal of net zero GHG emissions. The following box (Box 1) presents the key considerations when assessing the alignment of natural gas infrastructure, as an example of a transitional activity.

BOX 1: CONSIDERATIONS FOR ASSESSING ALIGNMENT OF NATURAL GAS INFRASTRUCTURE

A key discussion point is the case of investments in natural gas.

The consortium of think tanks involving Germanwatch, NewClimate Institute, and the World Resources Institute has highlighted that “Paris-aligned pathways only allow natural gas in exceptional circumstances:

- where it is proven that no feasible technical alternative exists; or
- where it is proven that the facility can be repurposed for the use of low-carbon gas (e.g. biomethane, low-carbon hydrogen, hydrogen blends, or synthetic methane); or
- where it is proven that the installation will be equipped with carbon capture and storage technologies; and
- where there is no risk of a systemic lock-in as a result, for example, of increased gas demand that will lead to further investments in gas infrastructure.” (*NewClimate Institute, Germanwatch, World Resources Institute, Raising the Game on Paris Alignment, A memo series by Germanwatch, NewClimate Institute and World Resources Institute, 2020, p. 5*)

The consortium advises considering four criteria in such assessments:

- Absolute emissions;
- Potential role in electricity systems transition;
- Relative improvement compared to other options and alternatives;
- Lock-in risk.

In 2020, British International Investment (formerly CDC Group) defined a methodology to assess the alignment of natural gas power plants, which involves an in-depth assessment combining:

- Asset-level indicators focusing on the specific characteristics and circumstances of an asset;
- System-level indicators focusing on whether a jurisdiction understands and is committed to a low-carbon pathway for its electricity system, and whether the role of gas power plants is understood in this context;
- Transition risk indicators (e.g. stranded asset risk indicators) drawing on the preceding system- and asset-level assessments and providing an indication of the proposed investment’s exposure to the policy, market and technological risks associated with a low-GHG transition, as well as the global investment context.

In both cases, a qualitative assessment of the context is included, and ideally requires access to the country’s decarbonisation pathway. DFIs may therefore use economy-wide LTSs, or NDCs and other sectoral policies (e.g. energy policies) when no LTS exists yet, or when they are insufficiently robust (e.g. not Paris-aligned, or with insufficient science-based modelling that does not cover all significant economic sectors), to determine the alignment of natural gas investments. Some MDBs have reported that in certain regions, they have seen that credible LTSs could potentially be developed that involve gas exploitation over the next decade with no significant risk of systemic lock-in considering the local context.

For the adaptation and resilience goal, no *de facto* list of Paris-aligned adaptation activities has yet been drawn up; consequently, a process aimed at understanding location- and context-specific climate vulnerabilities is required. The MDBs-IDFC Common Principles for Adaptation Tracking and the EU Adaptation Taxonomy establish such a process, based on qualitative screening criteria that are applicable to all economic activities and include two categories of activities: those that adopt adaptation solutions and those that develop adaptation solutions. Qualification is based on a three-step assessment process, taking into account the climate change vulnerability context and the specific project’s intent to reduce climate vulnerabilities. When defining adaptation measures, considering a country LTS can help to avoid the risk of maladaptation⁵.

For the identification of activities that would be misaligned with the adaptation goal, a context-specific assessment is also required. The Technical Expert Group of the EU Commission defined an economic activity as “significantly harming climate change adaptation ‘where that activity leads to an increased adverse impact of the current

and expected climate, on itself or for other people, nature and assets’” (*European Commission, Updated methodology & Updated Technical Screening Criteria, 2020, p. 29*). A location- and context-specific assessment is thus required.

Finally, all activities, even if they contribute to climate goals, should be assessed for their consistency with a given country’s low-GHG, climate-resilient development pathways and context. For example, in the revised version of the MDBs-IDFC Common Principles for Mitigation Tracking, updated in 2021 to include Paris-alignment considerations, the MDBs and IDFC stressed that even “a hydro-power project (that complies with the climate change mitigation eligibility criteria) may be inconsistent with a country’s resilient development pathway if such investment increases the probability of electricity shortages as a result of falling rainfall in the coming years” (*MDBs-IDFC, MDBs-IDFC Common Principles for Mitigation Tracking, 2021, p. 5*). As such, an alignment screening should always include an analysis of the country-specific context within its national pathway.

⁵ Maladaptation can be defined as an adaptation process that directly results in an increase in vulnerability to climate variability and climate change and/or alters current and future adaptation capacity and opportunities for adaptation (*IPCC, 2013*).

2. An LTS can provide a long-term vision that can help to reduce country-specific technical uncertainties related to Paris alignment

Investors need long-term country-specific data to reduce uncertainties concerning the alignment of their investments with the Paris Agreement. A lack of data, along with information asymmetries on alignment in a given country may act as a barrier to investment, since they make it difficult for investors to assess the alignment of their projects with Paris Agreement objectives at the local level (*OECD, 2017*). Without such information, financial actors would still perceive risks stemming from country-specific uncertainties related to the investment environment, for both long-term and shorter-term investments.

Significant data on the local context is needed in order to assess whether an investment would be aligned or misaligned, in particular data on strategic country orientations, and policy signals on economy-wide climate change-related priorities, such as:

- priority sectors and sub-sectors for climate action;
- technologies to be deployed for mitigation and/or adaptation;
- country current and projected absolute emissions and intensity by sector; and
- pace of economy-wide decarbonisation.

In addition, understanding a country’s pathway may be critical for investments that are considered controversial or highly context-dependent, such as biomass electricity generation. Such understanding would make it possible to identify other potential low-carbon alternatives, which might be more suitable in view of the country’s long-term vision for its energy sector.

LTSs can complement NDCs and other sources of information needed to undertake the country context analysis required as part of an alignment assessment, by providing the long-term vision. While LTSs in the strict sense are not developed to be used directly by investors and other economic actors, they can nevertheless provide a long-term vision to guide the development of more detailed and ambitious NDCs and public policies. LTSs can help to reconcile short-term actions and decision-making with longer-term climate goals, in line with a country’s own development aspirations. However, this requires that they model scenarios of country-wide emissions considering Paris Agreement objectives and provide the required data for decision-making processes by covering:

- **low-carbon infrastructure and assets** across sectors that would be aligned with the country’s pathway to net zero emissions by mid-century;
- **low-carbon options and technologies by sector** that would be aligned with the country’s pathway to net zero emissions by mid-century (e.g. low-carbon infrastructure and assets across sectors and low-carbon options and technologies by sector that are aligned with the country’s pathway to net zero emissions by mid-century, priorities for innovation, and research and development for sectoral decarbonisation);
- **country current and science-based projected emissions** by sector, and pace of economy-wide decarbonisation (e.g. through intermediate short-term measures and policies for emissions reduction targets by sector, as set out in a country’s NDC);
- **climate vulnerabilities and national adaptation strategies** and/or technologies to be deployed for adaptation;
- **identified risks of carbon lock-in and potential stranded assets** and misaligned activities or technologies within sectors and sub-sectors;
- **timing for the phase-out of existing misaligned assets** or the deployment of new aligned assets; and
- **development objectives and qualitative targets** to support sustainable economic development, poverty reduction, a just transition, and decent work and quality jobs.

The use of modelling in the context of LTS development can help to consolidate the different inputs by stakeholders towards an improved long-term economy-wide vision that is aligned with Paris Agreement objectives. Although this modelling capacity can vary depending on the country context, LTSs could serve as a map showing the way to low-GHG, climate-resilient development, since they can at least provide insights on technologies and innovations that need significant resources for implementation, and highlight what countries will eventually be regulating.

BOX 2: LTS CASE STUDY NO.1 – REDUCING UNCERTAINTIES RELATED TO ALIGNMENT

Indonesia's LTS submitted to the UNFCCC (as of March 2022) helps to reduce uncertainties related to alignment by addressing a number of issues:

FROM AN ADAPTATION STANDPOINT

The LTS provides insights on the scale of adaptation required, as it covers the local physical climate risks the country might be exposed to and estimates related economic losses. It also estimates the funding needs (IDR 577.01 T, i.e. IDR 577,010 billion, when assuming the same amount of investment as impact costs) for adaptation, considering funding needed for roadmap governance (5% to 10%) and for adaptation implementation (90% to 95%). Finally, it identifies the regulatory framework that should already be followed as of today, referring to an existing ministerial regulation that provides guidance for local governments on planning climate change adaptation actions and integrating them into the development plans of specific regions and/or sectors.

FROM A MITIGATION STANDPOINT

1 Overview of the necessary pace and scale of decarbonisation

Three scenarios are modelled altogether in the Indonesian LTS, of which one is considered sufficiently ambitious to be Paris-aligned. The three scenarios to 2050 are: the current policy scenario (CPOS), which is based on the unconditional NDC (i.e. the country's commitments considering its own resources); the low-carbon scenario compatible with the Paris Agreement target (LCCP); and the transition scenario (TRNS), which bridges both scenarios. The emissions are modelled by 2030, 2040, and 2050 for each scenario, and by sector (energy, agriculture, waste, industry, and forestry and land use), indicating the ideal pace and scale of decarbonisation required by sector, as illustrated below.

2 National plans/priorities and technological choices

The strategy indicates the technological choices available in the country for the agriculture, energy, transport, waste, and industry sectors, and clearly lists the different mitigation options for each modelled scenario. Actions to be implemented are broken down

by sector and sub-sector according to each scenario, which helps to clarify the main mitigation actions to be considered for investment. The Indonesian agriculture sector orientations are presented as a case study in section IV of this report.

3 Activities that could become stranded

The LTS explicitly refers to stranded assets as issues to be addressed during the planning and implementation phases, namely: "(a) stranded/unmined coal resources/assets associated with large reduction of coal use in power generation, (b) stranded assets in the form of unused or early retirement of fossil-based power plants due to 'locked-in' situation, and (c) migration of mining/fossil energy manpower to 'green job'" (Government of the Republic of Indonesia, Long-Term Strategy for Low Carbon and Climate Resilience 2050, 2021, p. 88). When included in an LTS, such statements that clearly define stranded assets at the country level help an investor, following prior assessments that may have led to the identification of stranded asset risks, to confirm the activities that are misaligned in all circumstances.

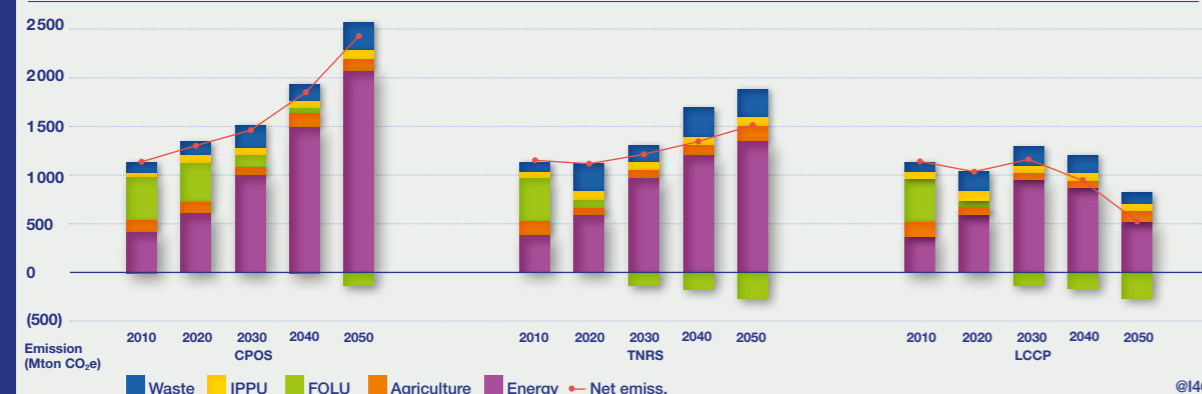
4 Assessment of financial and capacity needs

The LTS refers to a lack of finance and capacity for specific mitigation actions under one or more scenarios, and highlights where larger investments will be needed to ensure consistency with the Paris Agreement objectives, also giving an indication of what might slow down the envisaged decarbonisation pathway.

5 Near-term policy actions

In addition, the LTS presents the measures envisaged in the shorter term from a regulatory perspective to help to address related risks that might arise, and to create a supportive environment for investment. It also highlights key interventions, policies and measures, and institutional aspects to address just transition issues by 2030 (Government of the Republic of Indonesia, Long-Term Strategy for Low Carbon and Climate Resilience 2050, 2021). This helps to increase understanding of the pace of decarbonisation and the immediate next steps for LTS implementation, as listing policy interventions may help to make the LTS more operational.

FIGURE A: PROJECTED EMISSIONS INCLUDED IN THE INDONESIAN LTS UNDER EACH SCENARIO (GOVERNMENT OF THE REPUBLIC OF INDONESIA, LONG-TERM STRATEGY FOR LOW CARBON AND CLIMATE RESILIENCE 2050, 2021, P. 56)



3. An LTS can signal a country's commitment to reducing perceived policy uncertainty and can contribute to mobilising the finance needed to achieve national climate goals

LTSs can bridge the gap between global and regional climate-related projections on the one hand, and country-level projections supporting country ownership and ambition on the other. Several analyses have been performed that define global and regional pathways to decarbonisation (e.g. energy transition scenarios by the International Energy Agency (IEA), the International Institute for Applied Systems Analysis (IIASA), the International Renewable Energy Agency (IRENA), British Petroleum (BP), etc.) or overall appropriate adaptation measures at a global or regional level (e.g. assessments by the Intergovernmental Panel on Climate Change (IPCC) working groups). However, these scenarios and analyses are not meant to represent countries' own intentions. This country perspective on its own carbon reduction objectives is key to ensuring that the principle of equity and common but differentiated responsibilities and respective capabilities under the Paris Agreement is met (*Institut Louis Bachelier et al., 2020*). In this sense, LTSs are a unique tool providing projections at a country level on the basis of assumptions that reflect the country's long-term vision of its own low-GHG, climate-resilient development, integrating socioeconomic objectives.

For the plans included in an LTS to be implemented and to trigger the required investments, the country will need to demonstrate that such plans have political backing. Long-term investments can be undermined by a lack of political commitment to climate action (*OECD, 2017*). Political continuity can be ensured by the adoption and enforcement of related legislation and legally binding climate policies, which would remain in line with the Paris Agreement regardless of political change in the country. Engaging all key stakeholders in the climate policy development process has been identified as critical to ensure there is sufficient confidence in the long-term mitigation and adaptation objectives defined, across different sectors (*OECD, 2012*). This could allow wider access to the existing science-based evidence behind the choices made in the development of sectoral approaches, as appropriate.

Many economic, market and financial barriers may need to be overcome to enable the vision presented in the LTS to become reality. In some cases, these may be climate-specific, or barriers limiting investment in the country as a whole. In addition to the above-mentioned climate-related country context, key barriers to private investment include uncertainty about the broader regulatory frameworks, such as product and labour market policies, education and training, and knowledge-based capital that would affect investment opportunities, costs, risks, and returns in the country (*OECD, 2012 & 2017*). The absence of defined project pipelines for

investments has also been identified as a significant barrier (*OECD, 2017*). These barriers can be overcome through long-term planning, and in the case of national climate goals, through LTSs that are formally linked to national development plans. As detailed in the following section, this integration would aim to ensure the establishment of an environment that creates demand for low-carbon and climate-resilient prospects.

A country-led analysis of barriers to investment can be a first step signalling a country's commitment to overcoming them. If an LTS assesses the barriers to investment in the domestic investment environment, and identifies interventions needed to address them, it in theory signals the country's commitment to overcoming those barriers. Commitment to addressing limitations to investment can, moreover, translate into a call for increased public-private dialogue in the development of related policies, which can also be referred to in an LTS. For example, an LTS (e.g. Chile's LTS presented in the box below) making reference to existing institutional arrangements, such as roundtables that aim to engage with the private sector, could signal that the country is committed to moving forward, together with financial stakeholders, towards the financing of LTS implementation. For it to be a strong signal, an LTS would need to be followed by concrete steps and a financial strategy for the implementation of LTS-related plans.

Furthermore, LTSs can both identify near-term policy changes to address identified barriers and reflect a government's commitment over time to creating an investment-enabling environment. This commitment can be reflected in LTSs that extensively cover the policy changes required and planned legislation for the implementation phase. The climate policies to be introduced that can be referred to in LTSs may include (depending on the country's climate policy already in place): removal of fossil fuel subsidies; targeted incentives such as feed-in tariffs; energy efficiency standards and labelling/information instruments; and carbon pricing (with carbon values aligned with Paris-aligned pathways) (*OECD, 2017*). In addition to government commitment to long-term policies, enhanced transparency and an effective investment policy framework would also help to mobilise investment and support innovation (*OECD, 2017*). Predictable and sufficiently transparent regulations can help to mobilise investment to achieve national climate goals. Experience shows that these policy changes can also be complemented by supporting measures and interventions that address technical and human resource barriers, such as education and training, and enhanced governance and coordination, which may also be identified through LTSs.

BOX 3: LTS CASE STUDY NO.2 – SIGNALLING A COUNTRY’S COMMITMENT

Chile’s LTS submitted to the UNFCCC (as of March 2022) refers to a climate change financial strategy that is being developed and to a draft Framework Law on Climate Change, in the second constitutional process in the National Congress at the time of publication of the LTS. The LTS also clearly mentions that “in accordance with what is defined in the Financial Strategy and the commitments made by Chile to face climate change, the Ministry of Finance, with the technical support of the Ministry of the Environment and other competent bodies, has promoted specific definitions and actions aimed at accelerating the flow of resources to sectors aligned with the Chilean NDC”. These actions are then presented in greater detail. Referring to both a financial strategy and related actions for implementation, as well as to a climate policy framework, reflects the country’s commitment to implementing its LTS.

Broad stakeholder consultations are also mentioned, through a formal public consultation process on the LTS, but also through the participation of the Advisory Committee for Climate Action, the Scientific Advisory Committee for Climate Change, the Ministry of Environment’s Consultative Council (representing civil society), the Technical Interministerial Climate Change Team, and the Gender and Climate Change Committee, which were involved in the whole LTS development process.

The LTS presents the different gaps that were identified to scale up investment, at the systemic, institutional, financial sector, and financial ecosystem levels, as follows:

- Systemic gaps include private sector limitations in terms of identifying and managing risks and opportunities related to climate change;
- Institutional gaps include the need to articulate, based on the sectoral goals set out in the LTS, the consequent measures established in the sectoral mitigation and adaptation plans, with sources of public financing, whether hybrid/combined and/or private according to the benefits and disadvantages of each;
- Financial sector gaps include limited capacity to assess low-emission and climate-resilient projects and business models;
- Financial ecosystem gaps include a lack of development of portfolios of bankable projects, with limited access to affordable financing by micro, small and medium enterprises.

The Government of Chile has stated that the financial strategy will take into account the identified gaps (Government of Chile, 2021). This in turn has the potential to signal to investors that the government is committed to addressing barriers to aligned investment. The financial strategy has yet to be operationalised, and will be updated every five years in line with the NDC, which should itself be in line with the country’s commitments by 2050.

Since the LTS was submitted, the Framework Law on Climate Change has been adopted (on 9 March 2022), which further contributes to signalling the country’s commitment to climate action and LTS implementation.

III. HOW DOES THE DEVELOPMENT OF AN LTS SERVE AS A PROCESS THAT ENABLES PARIS-ALIGNED NATIONAL DEVELOPMENT AND INVESTMENT?

1. An LTS can be a reference to translate long-term climate goals into near-term country policy, national and sectoral development plans, and associated budgetary decisions

Examples exist where an LTS has been used as a reference for the preparation of national development plans and associated budgetary decisions. When countries take steps to operationalise their LTS and prepare for its implementation, this can help to reduce any uncertainty that might be perceived around implementation. These steps include reviewing the regulatory framework (both the financial regulatory framework and the climate

policy framework) as well as national and sectoral development plans to ensure they are in line with LTS sectoral orientations, and defining financial strategies for their implementation. Considering the LTS in national strategic planning can further mobilise funds in support of LTS implementation, through both international climate finance and budgetary measures, as shown in the Costa Rica LTS example below.

BOX 4: LTS CASE STUDY NO.3 – LINKS WITH NATIONAL DEVELOPMENT PLANS

Costa Rica’s LTS submitted to the UNFCCC (as of March 2022) clearly mentions that it is part of a broader development planning process that the Ministry of National Planning and Economic Policy will lead with the Costa Rica 2050 Strategic Plan. As part of the 2019-2022 activities to foster change, it includes objectives to align sectoral and sub-sectoral policies, strategies, and development plans with the decarbonisation objectives set out in the LTS, by decarbonisation axis.

The LTS itself has contributed to the elaboration of the key milestones in the National Development and Public Investments Plan (PNDIP 2018-2022), which ensures the goals for LTS actions planned for 2018-2022 are in line with the goals included in the PNDIP, as appropriate. This has improved the consistency of the LTS with the PNDIP and the NDC, with actions on three timelines: foundations (2018-2022, timeline shared with the PNDIP), inflection (2023-2030), and massive deployment (2031-2050), each with different levels of detail.

Costa Rica’s LTS includes two cross-sector strategies that aim to mobilise and allocate funds in support of Paris-aligned decarbonisation:

- 1 Implementing a domestic green tax reform to be led by the Ministry of Finance, designed to mobilise new revenue sources for the transport sector transition and to tax negative externalities through a comprehensive analysis of the tax system, carbon pricing, and the elimination of fossil fuel subsidies;
- 2 Mobilising national and international funds from both public and private sources, for example through integrated strategies to access financing from climate facilities. A first step was a USD 230 million loan from the Inter-American Development Bank (IDB) to implement NDC and LTS policies to support the national development strategy (NewClimate & GIZ, 2020). An additional USD 150 million were provided by the Agence Française de Développement (AFD). Both DFIs provided technical assistance to support the development of LTS-related policy reforms in Costa Rica.

DFIs such as the IDB have recognised that an LTS can be the basis for an implementation investment plan as long as it covers country priorities by sector, near-term projects to be implemented, and the different funding sources that could be mobilised (Inter-American Development Bank, 2021). As mentioned in section II.2, when

developing an LTS, it is important that it covers the required scale of decarbonisation, the technological options considered, and the extent to which the economy across sectors would need to decarbonise in a Paris-aligned scenario. Work by the IDB has indicated that the identification of investment priorities, financing options and clear project pipelines is key to support-

ing the translation of the LTS into near-term country policy and decisions, and mobilising public and private funds for implementation (*Inter-American Development Bank, 2021*).

Furthermore, the LTS development process should either include, or lead to the definition of, an investment plan within a shorter timeframe for which investment projections are possible (e.g. 5-10 years).

According to the IDB, this involves four key components: 1 quantification of the investments needed and the type of investment required to fill funding gaps; 2 identification of the different funding options and financial mechanisms

to be arranged; 3 development of a pipeline of initial projects to be implemented, with intermediate milestones for implementation; and 4 identification of investment-supporting policy (*Inter-American Development Bank, 2021*). As noted by practitioners during interviews, the development of NDCs and adaptation communications that are consistent with the country's LTS will be important, as these would then define where investments are needed based on the long-term orientations included in the LTS. Governments could then use the LTS or the subsequent investment plan to coordinate supporting DFIs and seek to harmonise their investments.

BOX 5: LTS CASE STUDY NO.4 – FROM AN LTS TO A CLIMATE INVESTMENT PLAN

To further help translate Costa Rica's LTS into near-term climate action, its LTS includes a specific annex with an action plan by decarbonisation axis. It includes clear intermediate goals, the actors involved, indicators, and a description of activities and technological choices consistent with the country's decarbonisation pathway. As is currently the case in Costa Rica, such an action plan could be used to develop an implementation investment/costing plan based on the quantified intermediate shorter-term goals: for example, at least three kilometres of restored urban corridors; at least two roadmaps for emissions reduction (one per type of industry) developed and published (e.g. cement sector); 20 new buildings that apply voluntary environmental standards; at least two sectoral plans and/or electrification strategies (e.g. transportation, industry) prepared and published; one pilot project to improve the efficiency of the freight transport sector

(use of biofuels and LPG); zero-emissions fleets acquired in at least three public institutions, etc.

As noted by a representative of Costa Rica's Ministry of Environment and Energy during a COP26 side event on LTS support⁶, once the LTS document had been developed, one of the first steps was to begin disaggregating the different axes and activities in the plan into tools to be implemented by region. A cost-benefit analysis of the LTS helped to align the Ministry of Finance and Planning with the vision established in the LTS (*Inter-American Development Bank, 2020*). As of early 2022, the country is assessing the financing required to implement the LTS, and identifying the projects and policies needed in order to undertake related feasibility studies and to help request funding for strategy implementation.

2. A multi-stakeholder LTS development process can lead to real buy-in for its implementation

Buy-in for an LTS across different levels of government (including sub-national) has been identified by both researchers and practitioners as important to its successful implementation and its credibility. This is seen as necessary to ensure all of the ministries and government entities involved contribute to the implementation of near-term actions and support measures needed in the longer term, including public finance management measures. A number of studies have analysed the LTS development process and identified success factors for setting a long-term vision for the low-GHG, climate-resilient development pathway the country should follow⁷.

Assessments of current practice suggest that it is essential to undertake multi-stakeholder consultations and to include the different government entities that will be responsible for delivering sectoral actions (e.g. ministries of energy, agriculture, transport, etc.), and those with which it will be important to collaborate in order to ensure cross-government buy-in, such as the ministries of finance. The different government entities need to be involved throughout the process, from the start of the LTS development (e.g. in strategic visioning and modelling), up to implementation, as well as in the LTS review process. According to a survey

6. <https://www.youtube.com/watch?v=VmqrbvCjM4&t=3975s> - 01:06:15 – 01:10:33

7. These studies include for example: 'Quality assurance checklist for long-term low greenhouse gas emission development strategies', United Nations Development Programme, 2021; 'Making long-term low GHG emissions development strategies a reality – A guide to policy makers on how to develop an LTS for submission in 2020 and future revision cycles', NewClimate Institute, 2020; 'Long-term Low Carbon Development Strategies: Why Have Them and Where to Start?', World Resources Institute, 2018; '2050 Pathways: A Handbook', 2050 Pathways Platform, 2017.

conducted by The Coalition of Finance Ministers for Climate Action, it appears that there is great value in involving finance ministries in the LTS development process from the outset. Nevertheless, coordination between stakeholders was considered to be a challenge that made it a cumbersome collaboration exercise (*The Coalition of Finance Ministers for Climate Action, 2021*). Despite these challenges, as reported in interviews with DFI practitioners, wide consultations help to mitigate the risk of political instability and failure to implement long-term plans by securing broad buy-in for such plans. These consultations therefore reduce the political risks perceived by investors, both national economic actors and international financial institutions.

A multi-stakeholder development process with a high-level mandate has been identified as helping to ensure buy-in for the LTS beyond the institutions in

charge of its development. Real buy-in for the LTS will require: 1 a high-level political mandate and a clear vision that will enable coordination across ministries and government entities, and other stakeholders; 2 the creation of, or support for, existing multi-stakeholder institutional arrangements for long-term planning that bring together government stakeholders, civil society and NGOs, the private sector, and research institutes; 3 legal frameworks that avoid conflicting policies and ensure consistency in government strategy; and 4 the construction of a shared vision with stakeholders' inputs (*World Resources Institute, 2020*).

The following table summarises how an LTS serves as a process that enables Paris-aligned national development and investment based on the above discussion in this section. It also highlights how it can serve the Paris-alignment of DFI operations, which is further discussed in the following section.

TABLE 1 – POTENTIAL CONTRIBUTIONS OF LTS TO THE DFI COUNTRY DIALOGUE AND STRATEGY PROCESS

LTS PROCESS COMPONENTS WITH POTENTIAL TO CONTRIBUTE TO DFI COUNTRY STRATEGY	KEY CONTRIBUTIONS TO DFI COUNTRY STRATEGY AND COUNTRY DIALOGUE
<p>Linkages with national and sectoral development plans and associated budgetary decisions</p> <ul style="list-style-type: none"> • Long-term national and sectoral development plans building on LTS • Development of LTS-related financial strategies and budgetary measures 	<p>Can inform the country intervention strategy and serve in the country dialogue process</p>
<p>Near-term country policy development and investments for implementation</p> <ul style="list-style-type: none"> • Identification of investment priorities • Identification of financing options • Identification of investment-supporting policy • Identification of short-term policies and strategies • Development of project pipelines for near-term implementation 	<p>Can prioritise DFI support in the country according to short-term needs and serve as an input and sense check for project pipelines and the development of policy-based operations</p>
<p>Buy-in beyond the ministries in charge of LTS development</p> <ul style="list-style-type: none"> • Multi-stakeholder consultations for LTS development that include the different government entities and non-government stakeholders that will be essential for LTS implementation • High-level political mandate • Legal frameworks that avoid conflicting policies and ensure consistency in government strategy and LTS integration into national development policies 	<p>Can serve in the country dialogue process and strengthen DFI partnerships with local counterparties, particularly if they were involved in the LTS formulation process</p>

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IV. HOW ARE DFIS OPERATIONALISING THIS POTENTIAL FOR THE LTS TO INFORM THE ALIGNMENT OF INVESTMENTS?

1. DFIs are beginning to use LTSs and underlying studies as part of the country-context inputs into project- or activity-level alignment screening

As a first step in their alignment screening process, DFIs may use positive and negative lists of activities based on global scenarios to achieve global long-term goals. The MDBs' joint assessment framework for Paris alignment presents a framework for each individual institution to develop its own project alignment screening process. It is based, as an initial screening, on the assessment against a positive list, which contains activities that are currently considered to be aligned with the Paris Agreement mitigation and/or adaptation objectives. This list includes activities that contribute to climate action consistently with the Paris Agreement goals (e.g. flood management and protection, electric urban mobility, etc.), and activities that have a negligible impact on climate change, as they do not harm country transitions to long-term low-GHG development pathways and do not lead to lock-in of carbon-intensive patterns, (e.g. professional, scientific, research and development, and technical activities, etc.). If the activity is not included in the positive list, it is then assessed against a negative list, which includes activities that are considered misaligned with the Paris Agreement mitigation objectives in all circumstances, regardless of country context (e.g. electricity generation from coal/peat) (MDBs, 2021a).

However, this first step of the screening process will not be sufficient to determine country-specific alignment. Even for activities on the positive list, the updated MDBs-IDFC Common Principles for Mitigation Tracking, for instance, state that "assessment of potential mitigation activities should consider, where appropriate and to the extent possible, country-appropriate technology benchmarks (including those derived from regional benchmarks) in order to facilitate progress towards national goals and avoid risks of locking in emission-intensive technologies and practices over the long term" (MDBs-IDFC, MDBs-IDFC Common Principles for Mitigation Tracking, 2021, p. 7). The first step of this alignment screening process should therefore be supplemented with the assess-

ment of contextual information specific to the country of intervention.

A number of DFIs, including the MDBs, have indicated that they aim to consider, to the extent possible, the country context when screening their activities to determine alignment, including the country LTS. For the MDBs for example, activities that are considered neither aligned nor misaligned using the initial set of positive and negative lists will be assessed against specific screening criteria, which a project would have to meet to be aligned, depending on available information:

- 1 Is not inconsistent with country NDC;
- 2 Is not inconsistent, over its lifetime, with country LTS or national economy-wide/sectoral/regional low-carbon strategy compatible with Paris Agreement mitigation goals;
- 3 Is not inconsistent with sector-specific Paris-alignment criteria;
- 4 Does not prevent opportunities to transition or support misaligned activities;
- 5 Is not unviable considering transition risks/stranded assets in the national/sectoral context.

For adaptation, the screening assessment comprises three contextualisation steps: 1 establishing the climate risk and vulnerability context; 2 identifying climate adaptation and resilience measures; and 3 assessing consistency with the national/broad context for climate resilience. Considering this screening process, information included in an LTS helps to determine whether such an activity would be in line with the country's Paris-aligned decarbonisation and resilience pathway.

Interviews with practitioners from MDBs indicate, however, that since the methodology has begun to be piloted and deployed, there have been no instances so far where the LTS analysis has proved to be a key step in determining project alignment during the screening phase. This is in part due to the fact that there has been little uptake of LTS development by developing countries. Interviews have also indicated that other considerations (such as exclusion lists) further upstream in the project cycle may contribute to ensuring alignment before the project screening phase, in which the LTS analysis currently occurs. Nevertheless, MDB practitioners mentioned that the LTS analysis could play a key role when

undertaken for transitional activities (e.g. natural gas investments), in which case full understanding of the country's priority sub-sectors for investment in the energy sector under a Paris-aligned scenario is important. According to interviews with DFI practitioners, sector-specific targets for implementation included in an LTS may be most useful to help design projects aligned with the Paris Agreement objectives at the country level. These upstream considerations leave more room for any substantial changes to the project than a downstream assessment made at a relatively advanced stage in the project cycle – an assessment which would only be considered as a final consistency check.

BOX 6: LTS CASE STUDY NO.5 – ALIGNED TECHNOLOGICAL CHOICES IN THE AGRICULTURAL SECTOR

The agricultural sector is often considered to be difficult to assess in terms of alignment. Indonesia's LTS defines the mitigation technologies that are being considered to implement the Paris-aligned scenario for its agricultural sector, i.e. "the adoption of low emission variety and water-saving paddy cultivation system (hereinafter referred to as SPR/STT) in the rice field, and utilization of livestock waste for biogas and livestock feed improvement in livestock management, and the reduction in using synthetic fertilizer", (Government of the Republic of Indonesia, Long-Term Strategy for Low Carbon and Climate Resilience 2050, 2021, p. 65).

In addition, the LTS clearly refers to a lack of finance available for the implementation of specific mitigation actions in this sector, considering their scale of implementation in the Paris-aligned scenario. For instance, for the utilisation of livestock waste for biogas and the improvement of livestock feed supplement, it mentions that "this activity requires high investment for biogas digester and flaring facility and continues supply of livestock waste. Hence, there is an urgency to design this activity to be more attractive for a large scale and communal husbandry", (Government of the Republic of Indonesia, Long-Term Strategy for Low Carbon and Climate Resilience 2050, 2021, p. 66).

It also refers to the fact that government action will not be sufficient, which could help guide DFI investments according

to the most important financing needs for this sector's transition: "Government has encouraged the use of technology and machinery in agricultural production and provided assistance to support the adoption of technology by farmers. However, the technology adoption rate is limited due to financial constraints. Increasing financial access for the adoption of better technology and machinery in both scenarios is very important to ensure that the target of increasing productivity is achieved. Adoption of technology by farmers should not merely rely on government support, but also should mobilise other sources of support including access to bank or non-banking financial institutions-NBFI (cooperatives, financial technology companies). Improvement of farmers/farmer groups access to credit can increase adoption of technology based on farmers needs and land condition", (Government of the Republic of Indonesia, Long-Term Strategy for Low Carbon and Climate Resilience 2050, 2021, p. 70).

The LTS concludes by referring to the fact that additional investment will be key to increasing productivity in this sector (e.g. for mechanisation, agricultural inputs, land management, as well as research and development), which underlines the fact that the Indonesian government lacks funding for the implementation of the LTS' most ambitious scenario, which relies heavily on the use of technology and machinery in agricultural production, as opposed to more traditional farming practices.

Beyond its role in project alignment screening, the LTS assessment could support the alignment of other DFI activities, such as policy-based lending. In the case of policy-based lending, methodologies to assess alignment are currently being developed by DFIs. An LTS could support these alignment assessments as it would identify, for exam-

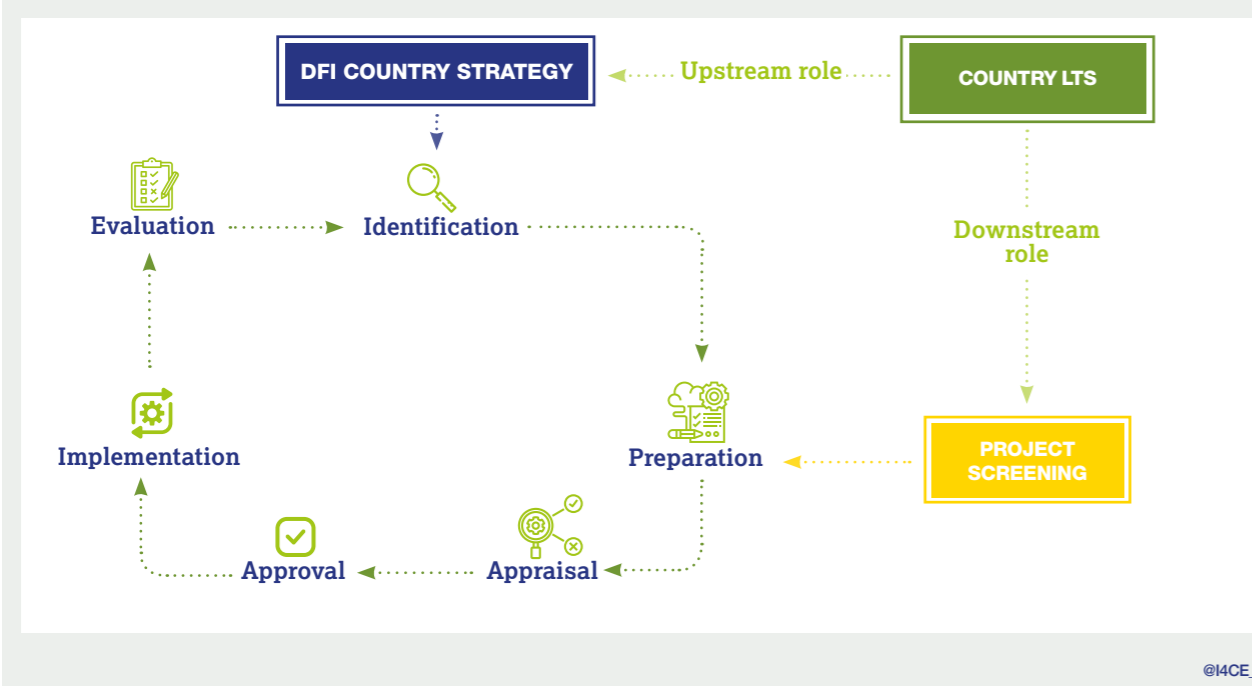
ple, the policy reforms needed to address identified barriers to investment that impede progress towards both national and international climate objectives. LTSs therefore have the potential to support, at an early stage of DFI interventions, the identification of transformative climate operations, as discussed in the following section.

2. The LTS should be used during upstream DFI country dialogue to support transformative climate outcomes in the country

To ensure from the outset that projects are aligned with country priorities towards the Paris Agreement objectives, it will be important to assess consistency with the country LTS as early as possible in the project development process, as noted in the expert interviews. The project portfolios of the MDBs are both demand-driven to ensure country ownership and co-developed with MDBs, as they can prioritise projects according to their mandate and objectives (Germanwatch & NewClimate Institute, 2018). Practitioners from MDBs and bilateral DFIs indicate that they are increasingly considering LTS assessment from the outset as a means of ensuring the consistency of their country strategies with the

country's Paris-aligned decarbonisation pathway. The Agence Française de Développement (AFD), for example, even mentions in its 2017-2022 Climate Strategy that “for all countries, an analysis of their public policies, NDCs, prospects for low-GHG and climate-resilient long-term trajectories [will be taken into account] in country intervention strategies” (AFD, 2017-2022 Climate Strategy, 2017, p. 8). Current DFI practice reflected in interviews shows, for instance, that NDC investment plans, which may provide a more granular level of detail than the LTS or the NDC, are increasingly being used in country dialogue for the development of country intervention strategies.

FIGURE 3: POTENTIAL ROLE OF LTS IN DFI PROJECT CYCLE (FROM WORLD BANK PROJECT CYCLE⁸)



Beyond ensuring consistency with country priorities, LTSs can also be used by DFIs to identify how they can best contribute to LTS implementation and prioritise investment needs. LTS development is meant to be a multi-stakeholder, economy-wide planning exercise that sets out decarbonisation pathways by sector and resilience-building plans that support socioeconomic objectives, along with related timelines for their gradual

implementation. As can be seen in the Indonesian LTS example (see Box 2), LTSs can provide information on the need for DFI support and on areas where international finance would have the greatest impact on a country's decarbonisation and resilience efforts. As such, the outcome of a country dialogue process supported by LTS analysis could help to define DFI country intervention strategies, as well as project pipelines for loans and other finan-

cial support mechanisms, including policy-based lending, that are not just aligned with the country pathway, but result in transformative climate outcomes in the country.

current country strategies, given the limited uptake of LTS development so far.

Using LTSs, DFIs could coordinate and identify the options that would be the most transformative in the country, building on existing recommendations to enhance the climate finance system. LTSs could play an important role in identifying the actions the World Bank suggests DFIs could take to support transformative outcomes⁹. The Transformative Climate Finance report stressed that “climate finance should be programmed according to long-term strategies for low-carbon, resilient development of each recipient country” (World Bank Group, Transformative Climate Finance: A new approach for climate finance to achieve low-carbon resilient development in developing countries, 2020, p. 6). The IDB also indicates that it uses the pathway models in country LTSs to inform its country strategies and to re-prioritise projects, which supports countries in “identify[ing] financing gaps and possible approaches to catalyse investments” (E3G, 2020). In practice, however, it is mainly NDCs that are referred to in

In addition, interviews indicated that LTS development as a process could actively contribute to the dialogue between a DFI and country representatives in the future. Dialogue between DFIs and counterparties in a country that may have been involved in the development of the LTS could help to identify areas of support and to define sector support strategies that have a greater impact on climate mitigation and adaptation in the country. Counterparties in the DFI dialogue that have been involved in the LTS development process would be more familiar with the country LTS objectives and would have acquired a higher level of understanding of the long-term climate-related issues applicable to their sector, compared to a country that has not yet engaged in this process. Moreover, DFIs that have supported LTS development in a country would have a more in-depth understanding of LTS-related issues, which would facilitate operational support for implementation. This would also facilitate dialogue with other DFIs engaged with country governments for coordinated and more efficient DFI support.

3. DFIs are well placed to provide support to enhance the role of an LTS in creating a pipeline of aligned projects and activities

The expectation that LTS development will increase and the fact that the quality of existing LTSs varies significantly are an opportunity for the DFI community to help to overcome the challenges countries face in developing LTSs. As presented in section I, out of 50 country LTSs submitted to the UNFCCC as of March 2022, only 20 are from non-OECD countries. Some LTSs are considered robust enough to inform alignment by DFIs, for example with sufficient science-based modelling covering all significant economic sectors. However, the structure and content of existing LTSs vary and may lack detail, as the underlying scenarios and pathways might not be sufficiently quantified or may have been insufficiently discussed among relevant stakeholders. Moreover, LTSs may not be ambitious enough (i.e. not Paris-aligned), may be missing up-to-date economy-wide data, or may not reflect all socioeconomic aspects related to decarbonisation and resilience in the significant sectors. Therefore, additional

support would be needed to further develop missing elements or to provide a complementary investment plan.

The difference in LTS outputs may result from challenges faced by countries in undertaking government-wide dialogue and multi-stakeholder consultations, or challenges in linking decarbonisation objectives with resilience considerations and other sustainable development objectives. According to The Coalition of Finance Ministers for Climate Action, support is needed in particular on economic modelling and cost-benefit analysis of the decarbonisation measures included in LTSs, to enable projects and activities to be implemented in the country (The Coalition of Finance Ministers for Climate Action, 2021). The usefulness of such LTSs for DFI alignment may be limited, forcing them to rely on or to develop other sources of information to assess the country climate strategy context. These are discussed in section IV.4.

8. <https://www.worldbank.org/en/projects-operations/products-and-services/brief/projectcycle>

9. These actions include: (i) planning for the long term; (ii) complementing project-based financing with policy-based financing and strengthening enabling environments; (iii) using a wider variety of financial instruments; (iv) enhancing leverage on a wider, systemic basis; (v) investing in climate intelligence products; (vi) understanding and managing the political economy to ensure a just transition; and (vii) differentiating support by income level and climate vulnerability (World Bank Group, 2020a).

To support LTS development, MDBs and other DFIs could first scale up their support for the development of robust LTSs.

The goal should be to develop LTSs that fully meet the expectations of parties to the Paris Agreement and the DFI community regarding the quality (e.g. LTSs that embody the eight principles the MDBs defined for LTSs) and scope of emissions reduction modelling, the approach to target definition (e.g. resulting from a multi-stakeholder process), sectoral plans for LTS implementation, and political backing. The MDBs are already working to increase the level of funding and coordination of their support, for example by exploring the establishment of a joint MDB LTS Facility¹⁰ to facilitate the development and implementation of LTSs. Individual DFIs are also directly and indirectly supporting LTS development, such as the Agence Française de Développement's 2050 Facility, launched in 2018¹¹, and the IDB's efforts to integrate local capacity building on modelling into LTS support¹².

Second, the DFI community should expand and better coordinate these efforts, which may be split between different actors.

As MDB and other DFIs' support for LTS development increases, coordination between the different actors that contribute to the same LTS development process in a country may be a challenge. It will be important to ensure sufficient coordination is in place to avoid duplicating efforts, and to maximise synergies and opportunities for increased efficiency and collaboration (e.g. as of November 2021, there were 69 MDB engagements in 39 countries to help to develop LTSs). As suggested in interviews with DFI practitioners, when several DFIs support a country in its LTS development process, the countries themselves might also need to coordinate the different DFIs' involvement and to share and learn from other countries' experience on this process. Moreover, it will be important for DFIs to coordinate and share common resources on the country's low-GHG, climate-resilient development pathway and to aim to limit significant differences in the interpretation of pathways and scenarios. This would help to identify where further technical or financial support is needed in a country, in a consistent manner between the DFIs.

Partnering development finance support with country-led policy reforms might also enhance the role LTSs could play and help to make projects commercially viable (OECD, 2012).

These country-led policy reforms could include the various climate policy actions that an LTS identifies as near-term policy changes needed to remove barriers to climate-related investments. In this regard, analysis conducted for this report shows that MDBs

could help to explore governance arrangements that would make it easier to coordinate the implementation of policy reforms and investments. The information collected in interviews indicates that some MDBs are, for instance, considering interest subsidies on loans and linking these to LTS target achievement. MDBs and other DFIs could also support governments in developing regulatory frameworks and clear incentives for private investment, "such as long-term policies and regulations that can promote the integration of sustainability in the financial and local capital markets, providing clear guidance on the implications and benefits of net-zero and climate-resilient investments and green business operations" (*Inter-American Development Bank, NDC Invest: Supporting Transformational Climate Policy and Finance, 2021, p. 57*). This support can be provided through policy-based lending and related technical assistance.

Finally, MDBs could consider supporting the definition of national or regional taxonomies of Paris-aligned or misaligned investments made available to all financial and non-financial institutions, based on the LTS assessments and country context analyses for Paris alignment that they have undertaken.

Several taxonomies are being discussed or are under development around the world, outside of the EU, including (as of September 2021) in developing countries such as Colombia, Chile, the Dominican Republic, Thailand, the Philippines, Sri Lanka, and Kazakhstan, among other countries that plan to develop their own taxonomies (*Future of Sustainable Data Alliance, 2021*). MDBs, in partnership with local authorities and national and regional public development banks, could support the development of robust classification systems by jurisdiction according to best practices for comprehensive Paris alignment definition, where technical and/or financial support to local actors might be needed to implement such systems.

¹⁰ The MDBs are currently exploring the potential of developing a joint LTS Facility to help developing countries and other public sector clients to prepare and implement such strategies, as announced in the COP26 Joint MDB Statement on collective climate ambition.

¹¹ This Facility currently supports 23 countries in defining the Paris-aligned pathways by 2050 for their LTSs.

¹² The IDB's LTS focus includes building local capacity to use modelling and analysis to better prepare decarbonisation strategies. It also assists in preparing LTS plans that cover adaptation. This support framework, in addition, includes advice on the related investment plans for LTS implementation (*E3G, 2020*). This could then translate into investment loans, and policy loans to incentivise implementation of country policy reforms when there is potential for use of such an instrument in the country (*Inter-American Development Bank, 2021*).

4. DFIs are exploring alternatives to LTS use for country context integration into alignment assessment while robust LTSs are developed

Beyond the use of LTSs, DFIs are developing different types of country context analyses to be used both downstream and upstream of their project cycles and activities.

A number of MDBs and DFIs have started to at least aggregate existing country-owned documents that present the countries' own vision of low-GHG and climate-resilient development. DFIs are using LTSs when they exist, together with other sources of information such as NDCs, other country climate policies, local climate impact assessments, and national and sectoral development plans. They also use the foundational and/or sectoral modelling, assessments and reports used in the LTS development process itself, if the LTS exists or is underway at the time of the context analysis. Some institutions with more internal resources and capacity go a step further and undertake complementary in-house assessments in addition to the above-mentioned documents (see boxes 7 and 8).

The development of adequate country analyses requires that DFIs dedicate sufficient resources to their preparation and regular updating. Some DFIs might have limited internal capacity to perform such assessments for all

their countries of intervention, which may hinder consideration of country pathways to low-GHG, climate-resilient development in their alignment approach. This also includes potentially limited capacity to consider updates to LTSs and the most recent developments on a regular basis. Current DFI practice shows that if an LTS is not directly financed, resource and time constraints can make it difficult to understand the modelling performed and the country choices, and to assess LTS quality. In that case, LTSs may need to be supplemented with sectoral action plans or masterplans for medium-term implementation in the country. Some DFIs in fact reported having limited capacity to fully assess LTS underlying studies for certain sectors, which may lead to high transaction costs, in particular if governments themselves have limited capacity to perform these studies. Moreover, the interviews indicated that different DFIs might be choosing different documents for a same country to align their operations, and highlight the need for them to collaborate periodically and to share experience. This could cause divergence among DFIs, as internal assessments could lead to different expectations or projections of each country's long-term pathway to low-GHG, climate-resilient development.

BOX 7: BILATERAL DFI COUNTRY ASSESSMENT CASE STUDY – INTERNAL COUNTRY ANALYSES PERFORMED BY THE AGENCE FRANÇAISE DE DÉVELOPPEMENT (AFD)

AFD conducts a systematic analysis of low-GHG transition issues for all of its countries of operation. This includes analysis of public policies, NDCs, and prospects for long-term low-GHG and climate-resilient pathways, which then feeds into country intervention strategies. Country analyses (85+) are performed by consolidating existing country climate data along with qualitative aspects, such as country climate governance:

- 1 **to better understand the climate-related positioning and context of the countries of intervention**, including vis-à-vis complementarity with other DFIs' activities in the country, and are undertaken with support from (i) an external data provider, (ii) country agencies based on country public policy documents and dialogue with local authorities on climate issues, (iii) the climate team, and can be shared with embassies;
- 2 **to raise operational teams' awareness internally on climate issues** and to inform upstream decision-making (projects are mostly already aligned at the design stage, given the important climate co-benefit targets set by the AFD group and the fact that climate issues are mainstreamed – climate teams are systematically consulted);
- 3 **to foster discussions with counterparties and local authorities on climate topics.**

In addition, in-depth analyses of transition pathways are also undertaken as part of AFD's support to certain countries. Moreover, AFD provides support to countries in the development of their LTSs, which can include public policy loans through its 2050 Facility (*AFD, 2020*). The 2050 Facility does not only finance LTS development, and was launched to perform original assessments of priority countries on climate issues, to complement the above-mentioned country analyses through more in-depth assessments and studies, while providing capacity building.

Country analyses are currently being revised to also include a qualitative analysis of NDCs, as well as indicators on investment needs to mobilise climate finance to implement the NDC, as requested by country agencies. The revised country analyses will also cover just transition issues in the country.

These assessments are supported by the countries, but are not made public. Some may serve as inputs to the World Bank's Country Climate and Development Reports (CCDRs) if knowledge products are developed within the same timeline as the one the World Bank committed to.

BOX 8: MULTILATERAL DFI COUNTRY ASSESSMENT CASE STUDY – WORLD BANK COUNTRY CLIMATE AND DEVELOPMENT REPORTS (CCDRS)

The World Bank plans to introduce “Country Climate and Development Reports (CCDRs) that address the interplay between climate and development. CCDRs will be used to inform, prioritize, and sequence climate action through the country engagement process and thus implement the Action Plan. These CCDRs will investigate how climate change and decarbonisation may impact a country’s development path and priorities, and identify potential mitigation, adaptation, and resilience-building actions to improve development outcomes. They will support the preparation and implementation of our client countries’ Nationally Determined Contributions (NDCs) and Long-Term Strategies (LTSs) and will feed into the WBG’s Systematic Country Diagnostics, Country Private Sector Diagnostics, and Country Partnership Frameworks” (*World Bank Group, World Bank Group Climate Change Action Plan 2021-2025, 2020, p. 7*). Moreover, CCDRs are meant to be made public in order to “inform partner and donor coordination and to engage companies and investors to support climate investments” (*World Bank Group, World Bank Group Climate Change Action Plan 2021-2025, 2020, p. 23*).

The CCDRs currently being developed by the World Bank highlight a country’s climate and development nexus at the sectoral level, then at the macro level, covering all relevant parts of the economy with different scenarios. They also assess the current institutional and policy landscape and are meant to be a bank tool that determines where the World Bank can and should be supporting countries. These reports will be developed for all of the World Bank’s countries of operation within the next five years.

CCDRs in fact inform the Country Strategy Diagnostic developed by the bank, which in turn informs the Country Partnership Framework, the latter however being mainly the result of a political negotiation with the recipient country’s ministerial representatives.

Compared to LTSs, CCDRs are developing more rapidly, within a more compressed timeframe. They are also intended to be broader, as World Bank modelling teams would be using previous bank analytics, NDCs and LTSs where they exist, and incorporating documents and sources that are specific to countries and made available by country teams. The synergy between these CCDRs and LTSs could help to enhance the role LTSs currently play in enabling aligned project pipelines, or even in accessing international climate finance. NDCs are currently used more than LTSs to cost needs for climate action implementation (*United Nations Framework Convention on Climate Change, 2021*). CCDRs, however, would not be considered as country-owned plans such as an LTS: LTS development involves deep country engagement, with more stakeholders to involve than a CCDR. This explains the difference in the timeline, and in documentation readiness and availability for use, between LTSs and CCDRs.

In addition, as part of its project on transformative climate finance, the World Bank is considering developing long-term climate finance diagnostics that “must be undertaken jointly with host countries, DFIs, the local and international private sector, and other stakeholders (...) [to] establish a long-term strategy for decarbonisation and resilience in line with development objectives” (*World Bank Group, Transformative Climate Finance: A new approach for climate finance to achieve low-carbon resilient development in developing countries, 2020, p. 26*). Such long-term climate finance diagnostics by country could help to direct international climate finance where it is most needed. Furthermore, the World Bank Climate Support Facility (CSF), which focuses on NDC implementation and enhancement, will be used to support LTS development in collaboration with other MDBs and relevant development partners.

Some initial ideas could be explored by DFIs to facilitate consideration of aligned country pathways when LTSs are not yet developed at the country level. These include use of independent expert assessments of long-term country decarbonisation pathways, and use of common alternative sources of information on the country climate-related context. However, these should remain temporary, as their use raises the issue of country ownership of, and commitment to, development pathways proposed.

The country analyses developed by DFIs to address limited LTS availability and/or quality could

represent a significant country ownership issue that should also be considered. When developing their own assessments of country pathways and related long-term priorities towards low-GHG, climate-resilient development, DFIs should try to engage with countries as much as possible, if this is not already the case. Country engagement in this process would help to avoid and mitigate any risk of misrepresentation of country interests and misalignment with national priorities, until robust country-owned LTSs are developed and can be used.

V. RECOMMENDATIONS ON THE PATHWAY FORWARD FOR LONG-TERM STRATEGIES

For LTSs to fully realise their potential and to serve as instruments that increase the overall alignment of internationally financed activities in a country, the following recommendations have been identified.

For countries and entities that develop or support LTSs, including DFIs:

- To ensure the provision of sufficient information on the transition and adaptation of national economies, where possible, **LTSs should include long-term data on strategic country orientations and economy-wide climate mitigation and adaptation priorities**, such as:

- priority sectors and sub-sectors for climate action;
- technologies to be deployed for decarbonisation (e.g. low-carbon infrastructure and assets across sectors and low-carbon options and technologies by sector that are aligned with the country’s pathway to net zero emissions by mid-century, priorities for innovation, and research and development for sectoral decarbonisation);
- country current and science-based projected emissions by sector, and pace of economy-wide decarbonisation (e.g. through intermediate shorter-term measures and policies for emissions reduction targets by sector, as set out in a country’s NDC, which an LTS can help inform);
- climate vulnerabilities and national adaptation strategies and/or technologies to be deployed for adaptation;
- identified risks of carbon lock-in and potential stranded assets and misaligned activities or technologies within sectors and sub-sectors;
- timing for the phase-out of existing misaligned assets or the deployment of new aligned assets;
- development objectives and qualitative targets to support sustainable economic development, poverty reduction, a just transition, and decent work and quality jobs.

- To be seen as a credible basis for alignment assessments:

- LTSs should involve an **economy-wide stakeholder engagement process** (including informal sectors and minorities), and have **political backing** (e.g. adoption and enforcement of related legislation and legally binding climate policies);
- LTSs should list the **government interventions (e.g. policy and institutional changes) required in the short and medium term to address identified barriers to investment** and to link the long-term vision to near-term action and reference points;
- **National development plans and sectoral strategies should be aligned with the LTS.**

For DFIs, including the MDBs:

- To ensure LTSs lead to Paris-aligned operations and enable a deeper understanding of country pathways to low-GHG, climate-resilient development, **DFIs should continue to proactively offer both technical and financial support for the development and operationalisation of robust LTSs, where relevant.**

- The **resulting LTS should fully meet the expectations of countries and the DFI community** regarding the quality and scope of emissions reduction modelling, the approach to target definition (e.g. resulting from a multi-stakeholder process), and sectoral plans for LTS implementation within a country-owned vision.
- **For MDBs, within their joint approach to Paris alignment, this implies strengthening the LTS support they provide** under the fourth building block of their approach (engagement and policy development support), guided by the eight LTS principles they have defined¹³, and supporting the synchronised update and revision of future NDCs and LTSs.

- To leave sufficient room in current DFI practice for any substantial changes needed to align with the country’s

¹³ The eight MDB principles for long-term strategy support are detailed in section I of the current report and can be found at the following URL: <https://www.eib.org/attachments/documents/mdb-principles-for-lts-support-en.pdf>

vision of mitigation and adaptation, **DFIs should assess consistency with the country LTS during the identification and design stage of the project cycle.** If relevant, this assessment could also take place during the screening phase as part of project preparation, but it should not be just an end-of-process consistency check.

- To ensure their country intervention strategies and projects are consistent with the country's low-GHG, climate-resilient development pathway, and to foster transformative climate outcomes in the country based on country priorities for the achievement of the Paris Agreement objectives, **DFIs should use LTSs and associated assessments from the start of country strategy formulation.**

- DFIs should leverage the potential of the LTS and **make it a formal part of their internal processes,** using the LTS to identify the options that would be the most transformative in the country.

- This will **require that they build capacity of country and sectoral teams and raise awareness internally** on the importance of integrating a given country's long-term climate-related vision, embodied in its LTS, into the country dialogue (and the resulting country strategy, including all country-specific diagnostics).

- To avoid duplicating efforts or having different interpretations of a country's low-GHG, climate-resilient development (e.g. due to the use of different resources for a country's context analysis), to improve DFI country-specific alignment assessments, and to increase the efficiency of their financial support, **coordination and/or formalisation appear essential to link the efforts of both the MDBs and other DFIs.** As part of the process to develop facilities or other channels to deliver support for LTS development, DFIs could:

- **share common up-to-date resources** that would serve country context analysis for Paris alignment;

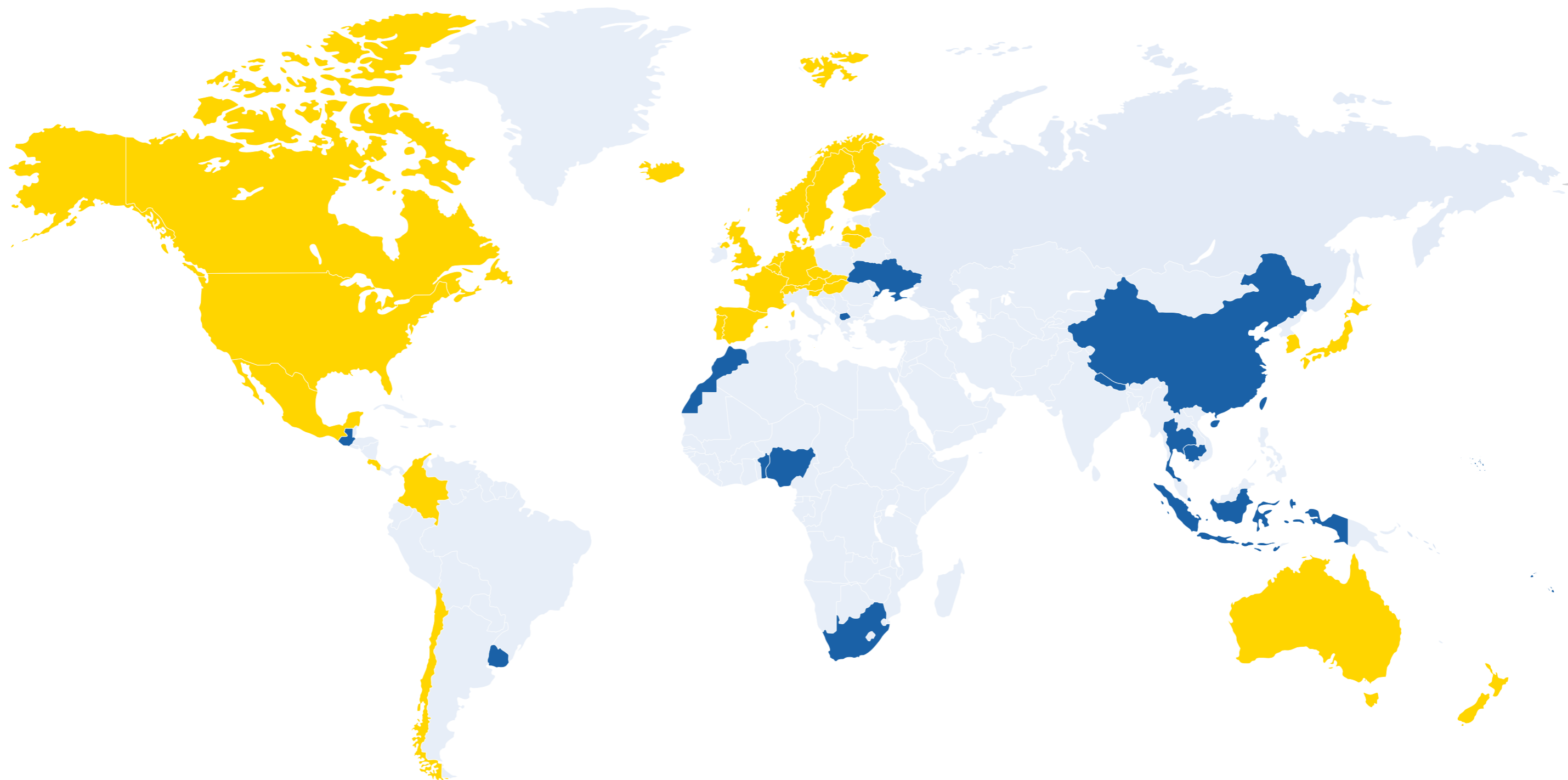
- **coordinate DFI support for LTS development** and implementation within a same country and across countries.

- To overcome potential limitations in their internal capacity to perform such assessments for all of their countries of intervention and all of their intervention instruments, **DFIs should continue to build capacity on the country-specific alignment assessment of their projects and interventions.** This capacity should be built internally, and DFIs should dedicate sufficient resources to this process. For the MDBs, this could involve:

- the **development of internal databases and materials** to support this type of assessment,

- the **clear identification of internal focal points to support operational teams performing country-specific alignment assessments** under the first and second building blocks of their joint approach to Paris alignment (alignment with mitigation goals, and adaptation and climate-resilient operations, respectively).

Appendix A – LTSs submitted to the UNFCCC as of March 2022



■ Non-OECD countries ■ OECD countries

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Appendix B – List of workshop participants and interviewees

PARTICIPANTS AT THE WORKSHOP HELD IN GLASGOW ON 7 NOVEMBER 2021:

- **Agence Française de Développement:** Serge Perrin, Facilité 2050, Climate Division
- **Asian Development Bank:** Kate Hughes, Senior Climate Change Specialist
- **European Investment Bank:** Nancy Saich, Chief Climate Change Expert
- **European Bank for Reconstruction and Development:** Sung-Ah Kyun, Associate, Energy, Sustainable Infrastructure Group; Gianpiero Nacci, Director, Green Economy and Climate Action; Jan-Willem van de Ven, Head of Climate Finance and Carbon Markets
- **Germanwatch:** David Ryfisch, Team Leader for International Climate Policy
- **Islamic Development Bank:** Daouda Ben Oumar Ndiaye, Lead Climate Change Specialist; Olatunji Yusuf, Senior Climate Change Specialist
- **NewClimate Institute:** Aki Kachi, Senior Climate Policy Analyst
- **Organisation for Economic Co-operation and Development:** Özlem Taşkın, Policy Analyst
- **World Bank:** Ahmed Al Qabany, Senior Climate Change Specialist

EXPERTS INTERVIEWED:

FROM NGOS:

- **Overseas Development Institute:** Charlene Watson, Research Associate, Climate and Sustainability
- **NewClimate Institute:** Aki Kachi, Senior Climate Policy Analyst
- **Organisation for Economic Co-operation and Development:** Özlem Taşkın, Policy Analyst

FROM DFIS:

- **African Development Bank:** Gareth Phillips, Chief Climate Change and Green Officer
- **Agence Française de Développement:** Emmanuelle Matz, Sustainable Development Analysis Division; Serge Perrin, Facilité 2050, Climate Division
- **Asian Development Bank:** Christian Ellermann, Senior Climate Change Specialist; Kate Hughes, Senior Climate Change Specialist
- **Islamic Development Bank:** Bradley Hiller, Lead Climate Change Specialist; Daouda Ben Oumar Ndiaye, Lead Climate Change Specialist; Olatunji Yusuf, Senior Climate Change Specialist
- **Inter-American Development Bank:** Adrien Vogt-Schilb, Senior Climate Change Specialist; Amy Lewis, Operations Senior Specialist, Climate Change Division
- **World Bank:** Ahmed Al Qabany, Senior Climate Change Specialist; Steve Hammer, Advisor, Climate Policy and Strategy

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