I4CE
INSTITUTE FOR CLIMATE ECONOMICS
Une initiative de la Caisse des Dépôts et de l'Agence Française de Développement

# A Framework for Alignment with the Paris Agreement: Why, What and How for Financial Institutions?

## Discussion Paper

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European Climate Foundation

*An I4CE Report in collaboration with the Climate Policy Initiative (CPI), the International Development Finance Club and with support from the European Climate Foundation.*

I4CE – Institute for Climate Economics is a think tank that provides public and private decision-makers with expertise on economic and financial issues related to the energy and ecological transition. We strive to implement the Paris Agreement, and make global financial flows compatible with low-carbon development that is resilient to climate change. I4CE is an initiative of Caisse des Dépôts and Agence Française de Développement and is also supported by the ADEME and Morocco's Caisse de Dépôts et Gestion.

## ABOUT THIS PROJECT

Mandated by the International Development Finance Club (IDFC) and the European Climate Foundation (ECF), Climate Policy Initiative (CPI) and the Institute for Climate Economics (I4CE) have conducted a research project in two parts, resulting in a **Discussion Paper** (Part 1) and a **Final Report** (Part 2) on "**Aligning with the Paris Agreement"**.

**Part 1** led by I4CE establishes a theoretical and conceptual basis for alignment, analyzing and describing the emerging interpretations of the definitions, principles, and approaches across the financial community, and building on the experience of the Climate Action in Financial Institutions Initiative[1].

**Part 2** led by CPI identifies the changes the Paris Agreement implies for the role of Development Finance Institutions (DFI) – specifically, members of the IDFC – and how they may implement these changes, through a targeted set of activities.[2]

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This research project was carried out independently by I4CE. The content of this report does not commit the partner organizations of I4CE nor those that were interviewed or provided feedback on draft versions.

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1 https://www.mainstreamingclimate.org/

2 To read the full CPI Final Report, see https://climatepolicyinitiative.org/publication/implementing-alignment-recommendations-for-the-international-development-finance-club

## FOREWORD

On 12 December 2015, the 196 Parties to the UN Framework Convention on Climate Change (UNFCCC) offered an unprecedented example of reconciliation as they agreed to put a world increasingly fractured by climate change on a pathway towards sustainable, low-carbon, and resilient development trajectories. Five years later, as we must switch gear from summits to solutions, aligning with the Paris Agreement has become a business case for all financial actors, national and regional development banks leading the way. This endeavor involves taking into consideration the upcoming risks and opportunities which underpin climate change.

At a time when climate action is most needed, it is an honor to present this groundbreaking report, produced by independent think tanks CPI and I4CE, which provides a robust framework usable by the members of the International Development Finance Club (IDFC) – a unique group of 24 national and regional development banks – and the financial community at large. This study includes a number of actionable recommendations designed to align any financial institutions' vision with the goals of the Paris Agreement at country, strategic, and operational levels.

National and regional development institutions are best placed to enable strong interconnections between public and private sectors as well as between local governments and global stakeholders. In particular, IDFC members can act as game-changers in the achievement of long-term national climate objectives. Endowed with an important capacity to redirect financing flows towards climate action, these institutions have already demonstrated their power of action.

To consolidate such results and ensure their stability over time, the IDFC needs to act now in fashion that is fully consistent with the Paris Agreement. And this report, of utmost analytical and operational importance, also highlights the fact the growing responsibilities and financial weight of IDFC members, combined with the urgent need to harness their full potential, require giving them a strong mandate to embark on this journey to alignment and support the objectives of the Paris Agreement as well as deploying those of the 2030 Agenda.

Aligning our financial flows with the Paris Agreement is a challenge but our strength lies in our interactions as a Club. Besides, the newly created IDFC Climate Facility will be a place to share our respective experiences on alignment and further concretize it within our respective institutions and in cooperation with all other willing partners.

In short, implementing an ambitious alignment strategy requires strong leadership and inventive ways of doing business, while seizing the opportunities of financing resilient and low-carbon development.


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***Chair***

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# Executive Summary

**Since the adoption of the Paris Agreement, financial institutions and other economic actors have taken commitments to 'align' their activities with the goals agreed to by national governments in 2015.** A growing body of literature from both the research community and practitioners has emerged on 'alignment' with the Paris Agreement goals – but to date no overarching framework has been proposed to define what it means and implies in practice.

**This report proposes a framework to align activities with the Paris Agreement for all economic actors.** It considers how the Paris Agreement's long-term goals for adaptation, mitigation and finance and the process laid out to achieve them shifts the framing of climate action. Moving from theory to practice, the paper applies the framework to the case of financial institutions to help understand the implications of aligning with the Paris Agreement and integrating these considerations at the strategic and operational levels.

## The Paris Agreement: Reframing Climate Action around the Long-Term Transformation of Economies and Societies

**The Paris Agreement has reframed climate action from a focus on the near-term incremental increase of adaptation and mitigation actions to emphasize the importance of the long-term transformation of economies and societies.** The Agreement highlights the importance of country-led national pathways to low-greenhouse gas (GHG) emissions climate-resilient development to simultaneously achieve both climate and broader sustainable development objectives. These forward-looking pathways should guide near-term actions that contribute to achieving the long-term goals in the three areas of mitigation, adaptation and finance. This reframing implies that all actions of governments and non-state actors should be consistent with economic and social development that is, in turn, consistent with the long-term goals of the Paris Agreement.

**The Paris Agreement expands the mandate for country Parties in relation to finance**:

1. First, developed-country Parties will need to continue and scale up their financial support for developing-country Parties in the implementation of mitigation and adaptation measures.
2. Second, Article 2.1(c) creates an additional mandate for all country Parties to put into place the policy and investment frameworks to support the 'consistency' or 'alignment' of all domestic and international financial flows with a "low GHG emissions and climate-resilient development" pathway.

**As a result, financial institutions and other economic actors - whether seeking sustainable development impacts or with a commercial focus - have an interest to align their activities with the long-term goals of the Paris Agreement**:

1. Many will be called to directly contribute to the achievement of the long-term climate goals by shareholders and other stakeholders;
2. All will need to manage the risks and opportunities associated with the needed transformation of the economy and the financial environment; and
3. All will need to take into account and respond to the changing physical climate.

## A Framework for Defining Alignment with the Paris Agreement

**This report proposes a framework that can be used by all actors whether public or private to align their strategies and operations with the Paris Agreement**. The framework specifies three dimensions for action:

***A Comprehensive Scope of Action:*** actors should seek to directly or indirectly support low-GHG climate-resilient development across all business areas – and take into account impacts on broader systems and value chains. This goes beyond measuring investment in activities supporting mitigation or adaptation outcomes; rather, it implies that all activities are carried out in a manner consistent with the long-term goals of the Paris Agreement.

***A Long-Term Time Horizon to Guide Impact:*** actors should prioritize actions that are consistent with both near-term climate objectives and long-term goals and do not lead to lock-in or mal-adaptation. It is essential to recognize that activities that result in 'relative' rather than 'absolute' emissions reductions or enhanced resilience may be counterproductive to achieving long-term goals.

***An Ambitious Scale of Contribution:*** actors should seek to increase the ambition of contribution to the goals of the Agreement, ensuring that all activities:

- **Do No Harm**: all activities should neither hinder nor be counterproductive to the achievement of climate objectives and should be consistent with long-term national sustainable and low-GHG, climate-resilient development pathways;
- **Support Paris-Consistent Climate Co-Benefits**: whenever possible, actors should prioritize activities with direct or indirect mitigation and adaptation co-benefits that are consistent with the national attainment of long-term goals of the Paris Agreement;
- **Foster Transformative Outcomes**: whenever possible, actors should prioritize activities with 'transformative outcomes' that reduce the barriers to and support the large-scale, systemic and structural changes needed for the transition of economic, social and natural systems across and within national economies.

**FIGURE 1. A FRAMEWORK TO GUIDE AMBITIOUS ALIGNMENT WITH THE PARIS AGREEMENT**

**A Comprehensive Scope of Action: screen all activities for contribution to low-GHG climate-resilient development**

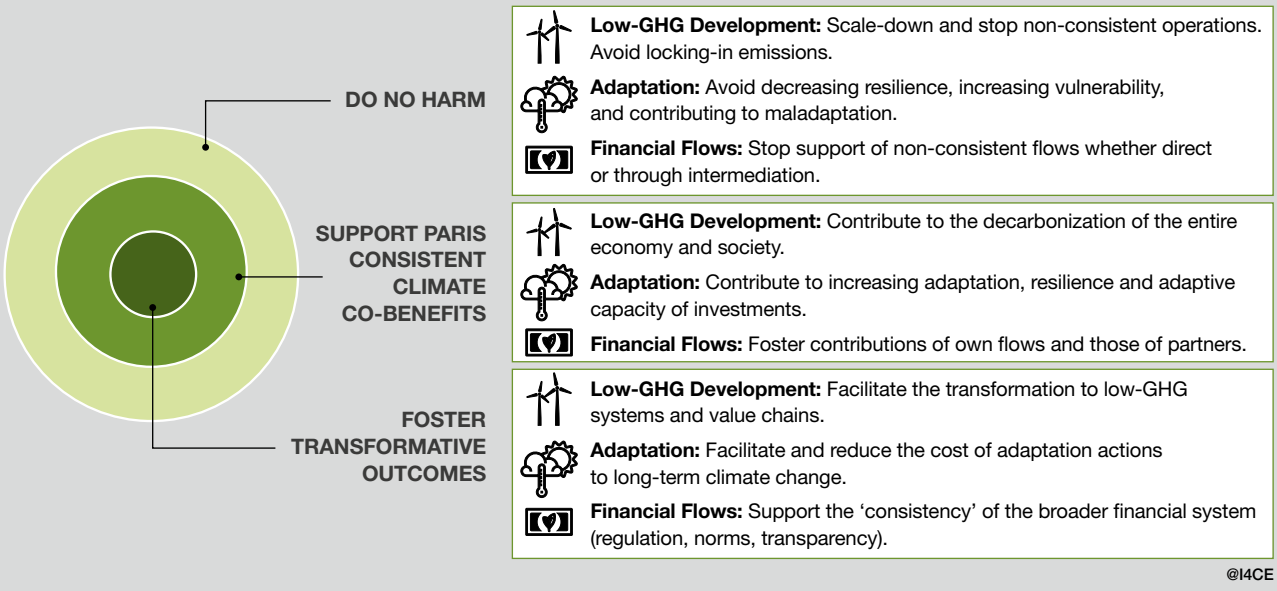
Directly or indirectly support activities consistent with low-GHG climate-resilient development across all business areas. Take into account impacts and influence on systems and the entire value chains, both at national and global levels.

**A Long-Term Time Horizon to Guide Impact: ensure that near-term actions contribute to the achievement of long-term goals**

Prioritize actions that are consistent with both near- and long-term climate objectives and do not lead to lock-in or mal-adaptation. Recognize that 'relative' reductions in emissions or increases in resilience may be counterproductive to achieving long-term goals.

**An Ambitious Scale of Contribution: actively support national and international transformations across all activities**

Halt support for non-consistent activities and seek whenever possible to contribute to both the incremental and transformative changes needed to support national and global sustainable long-term low-GHG climate-resilient development.




*Source: I4CE*

**In addition, Paris Alignment should take into account national contexts and support shared pathways or 'visions' of how long-term climate goals could be met nationally and internationally.** While successfully addressing the climate challenge requires action globally, the Paris Agreement recognizes the importance of supporting low-GHG, climate-resilient development at the country level. Assessment of activities should consider both current country contexts and national forward-looking pathways for decarbonized and resilient development. On one hand, long-term strategies and forward-looking scenarios can provide important insights on the pathway a country may follow and the transformation that will be necessary to achieve the three goals of the Agreement. On the other hand, national plans and NDCs can provide roadmaps of near-term national priorities and actions to achieve the long-term pathways. Further efforts are needed to improve the quality and availability of scenarios and national plans to guide alignment approaches of all economic actors.

## Financial Institutions Need to Integrate Paris Alignment across Strategic Governance and Assessment Frameworks

**Whether institutions are principally focused on sustainable development impacts or commercially-oriented, a commitment to 'Paris Alignment' is a commitment to adopt the high level of ambition that is embodied in the Paris Agreement**. However, the scale of contribution of financial institutions will vary as institutions may be involved in different types of business lines that have impact-oriented objectives or more commercial objectives. Nevertheless, for all actors, being aligned requires that they scale-down and halt activities inconsistent with these goals and contributing whenever possible to national attainment of low-GHG climate-resilient development.

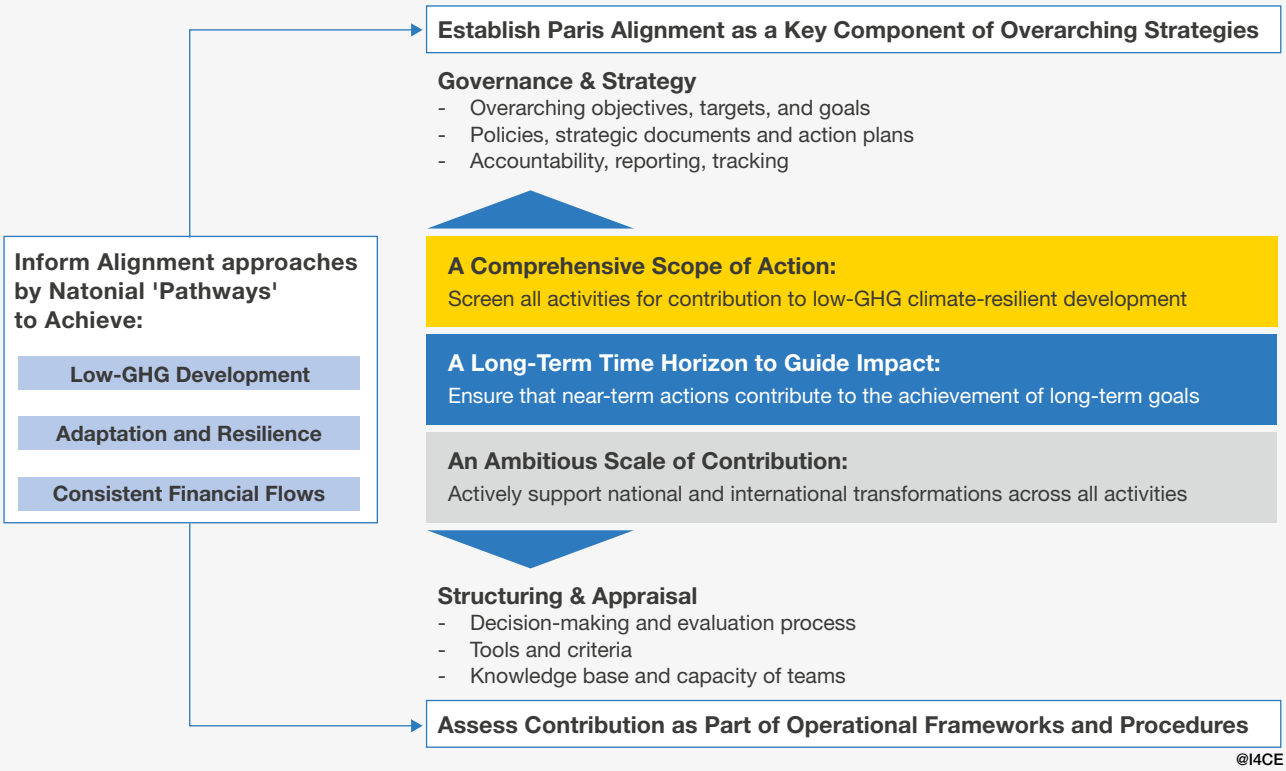
**Doing this in practice requires financial institutions to integrate considerations of the Paris Agreement**

**goals into their overarching strategies and operational frameworks and procedures for decision making and investment**. Ensuring that all of an institution's activities are consistent with long-term goals is important. However, it is also important for institutions to determine how they can best leverage their potential to support low-GHG climate-resilient transformations in their countries and sectors of operations.

**Alignment approaches should**:

1. **Be integrated into the Overarching Strategies**: Rather than focusing on the development of a stand-alone Paris Alignment strategy and dedicated tools or products, an institution should seek to integrate alignment with the goals of the Agreement into all strategic plans, objectives and business lines. This process should be guided by all three dimensions of Paris Alignment.
2. **Be integrated into the Operational Frameworks and Procedures**: Financial institutions need to develop and define the methods and approaches to assess ex-ante as part of decision-making processes whether all assets, projects or transactions are counterproductive, neutral or contribute to achieving the three goals of the Agreement. Definitions of these categories should be whenever possible country-specific to take into consideration long-term national pathways and to evolve over time, based on evolutions in the economy, policy and climate.
3. **Focus on New Activities, but also Cover Existing Portfolios**: Financial institutions need to address both new activities as well as the management of existing assets and portfolios. Decisions concerning existing portfolios should be tailored and prioritize management strategies that result in the most appropriate contributions to the long-term goals in the real economy. For example, institutions may need to go beyond divestment from activities "doing harm" to prioritize strategies that focus on the early retirement of assets, their conversion or adopt other engagement strategies with direct impact on emissions and resilience.

**FIGURE 2. STEERING FINANCIAL INSTITUTIONS' CLIMATE MAINSTREAMING APPROACHES TOWARDS PARIS ALIGNMENT**




*Source: I4CE*

## Financial Institutions Can Build on Existing Approaches to Overcome Barriers

**Financial institutions are not starting from zero and can build on existing and emerging climate mainstreaming and climate risk assessment and management approaches.** However, while addressing many similar issues, these approaches in their current form alone may not lead to institutions rapidly scaling down all 'harmful' activities and reorienting capital to scale up transformative contributions supporting long-term low-GHG and climate-resilient development. As a result, existing approaches may need to be adapted to take into account the changes around scope of action, time horizon of impact, and scale of contribution introduced by the Paris Agreement (see **Figure 2**).

**The scale of the contribution of a financial institution is dependent on one hand on their mandates, and on the other hand on the credible and ambitious level of action taken by countries and other economic actors to create low-GHG, climate-resilient development models to finance**. Financial institutions seeking to align their activities should recognize and take into consideration these external factors, but also actively work to confirm their mandate and policies to deliver Paris Alignment.

**Aligning all activities with the Paris Agreement will take time.** In some cases, it implies significant shifts in business models, in areas targeted for action and internal expertise and capacity. Nevertheless, institutions that have committed to align with the Paris Agreement should transparently report on progress as well as where further efforts will be required. Committing to an ambitious timeline and roadmap to align all their activities can both ensure their credibility as well as signal to markets changing priorities and intentions to reallocate capital.

# Abbreviations and Acronyms

| | |
|---|---|
| **$CO_2$** | Carbon dioxide |
| **COP** | Conference of Parties |
| **GCF** | Green Climate Fund |
| **GHG** | Greenhouse Gas |
| **IDFC** | International Development Finance Club |
| **IPCC** | Intergovernmental Panel on Climate Change |
| **LEDS** | Low Emission Development Strategies |
| **MDB** | Multilateral Development Bank |
| **NAPs** | National Adaptation Plans |
| **NAMA** | Nationally Appropriate Mitigation Actions |
| **NDC** | Nationally Determined Contribution |
| **NGFS** | Network for Greening the Financial System |
| **OECD** | Organization for Economic Co-operation and Development |
| **SDG(s)** | Sustainable Development Goals |
| **SNBC** | Stratégie Nationale Bas Carbone (French National Low-Carbon Strategy) |
| **TCFD** | Task Force on Climate-related Financial Risk Disclosure |
| **UNFCCC** | United Nations Framework Convention on Climate Change |

# Introduction



**The Paris Agreement builds on two decades of international climate negotiations and introduces an ambitious country-led framework to advance the global response to the threats posed by climate change.** Adopted at the 21st Conference of Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC) in Paris in 2015, the Agreement reiterates the principal objective set in 1992 by the UNFCCC to stabilize greenhouse gas (GHG) concentrations in the atmosphere.[3] However, it reframes global efforts on climate change around three common goals to focus climate action on supporting national long-term low-greenhouse gas emissions (low-GHG), climate-resilient development in a manner consistent with broader sustainable development objectives. To support implementation, the Agreement defined a dynamic and country-led framework for action shared by all country Parties to the Agreement. The Paris Agreement thus created a strong mandate for participating governments to proactively support national low-GHG, climate-resilient development pathways to achieve long-term climate and sustainable development objectives.

**The commitment by countries to achieve the three long-term goals enshrined in the Agreement has important implications for all types of economic actors.** Over the coming decades, governments will put into place the economic, financial and regulatory frameworks to achieve the ambitious transformation necessary to achieve the three common goals of the Paris Agreement. On one hand, public actors will be rapidly called to support efforts by countries and contribute to the achievement of the goals of the Paris Agreement through their activities. On the other hand, while private and non-mandated institutions may not have a formal mandate to act on climate change, they will increasingly operate in economic and regulatory environments that take the Paris Agreement into account. Furthermore, all economic actors will operate in a world directly impacted by the changing climate. As a result, they will be directly or indirectly affected by climate change in both the near and long term and have strong reasons to contribute to halt global heating as well as to support adaptation and resilience.

**Over the last four years, an increasing number and range of actors – including financial institutions - have publicly committed to 'align' their activities with the Paris Agreement.** While not used in the Paris Agreement itself, the term 'Paris Alignment' has rapidly become a catch-all phrase referring to the process needed to make an actor's activities 'consistent' with the goals of the Paris Agreement. As actors move to take concrete steps to align their activities, it is increasingly clear that Paris Alignment is a dynamic process through which an institution takes into account its direct and indirect contributions to the achievement of the three goals of the Agreement. Across the different emerging rationales and approaches, Paris Alignment implies that actors revise their over-arching strategies and operational frameworks to scale-down and halt counterproductive actions, while scaling-up positive contributions to long-term low-GHG, climate-resilient climate development pathways. This commitment has taken different forms, often linked to the specific mandates and core areas of business.

**This report proposes a framework for alignment with the Paris Agreement for all economic actors.** It benchmarks the interpretation of Paris Alignment four years after COP21 and assesses how the Paris Agreement's long-term goals for adaptation, mitigation and finance and the process laid out to achieve them shift the framing of climate action. Moving from theory to practice, the paper applies the framework to the case of financial institutions to help understand the implications of aligning with the Paris Agreement and integrating these considerations at the strategic and operational levels.

**BOX 1. WHAT ARE 'NATIONAL LOW-GHG CLIMATE-RESILIENT DEVELOPMENT PATHWAYS' TO ACHIEVE LONG-TERM CLIMATE AND SUSTAINABLE DEVELOPMENT OBJECTIVES?**

For the purpose of this report, a 'pathway' refers to a shared 'vision' of how national economies and societies will tend to evolve over time to achieve the long-term goals set by the Paris Agreement. Pathways should ideally provide both near- and long-term information on the socio-economic and physical environment transformation expected – either through the impacts of policy and consumer habits on market dynamics or the impacts of the changing climate on the economy and society. Pathways should be economy-wide and address not only climate objectives, but also broader sustainable development objectives. Presently, no single document formally defines a country's pathway. As discussed in Section 3.4 of this report, different types of government plans, long-term strategies and scenarios are used to define possible pathways and their translation into near-term policy priorities and actions.

3 *"The ultimate objective of this Convention [...] is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner"* (UN 1992).

**The report is structured in five sections:** The first section presents the current interpretation of the Paris Agreement framework for climate action and identifies the key evolutions compared to the pre-2015 framework. The second section assesses the mandates given to governments on financial issues and the resulting implications for the financial sector. The third section lays out a framework to define what Paris Alignment is in practice and guide the alignment of all actors – including financial institutions. This framework is structured around three dimensions: 'a Comprehensive Scope of Action', 'a Long-Term Time Horizon to Guide Impact', and 'an Ambitious Scale of Contribution'. The fourth section applies the framework to financial institutions to identify the implications of Paris Alignment for their strategies and operations. The fifth and final section looks at the road forward for financial institutions based on existing 'climate mainstreaming' approaches, as well as some of the external barriers that will also need to be addressed.

# 1. The Paris Agreement: Reframing Climate Action around the Long-Term Transformation of Economies and Societies



**KEY TAKEAWAYS FROM THIS SECTION**

- The three ambitious goals of the Paris Agreement have reframed climate action to emphasize supporting 'long-term low-GHG climate-resilient development' internationally through a country-driven approach.
- The Paris Agreement provides a reinforced framework for action guided by three long-term goals and a new country-led and dynamic process summarized in **Table 1** – couched within the broader objective of sustainable development.
- This evolution calls for a 'deep' long-term transformation of economies and societies, which has implications for all actors – including the financial sector. This transformation is structured around the goals of:
  - Transforming economies and societies to achieve 'absolute' net-zero emissions and meet the well below 2°C aspirational temperature goal;
  - Fostering the adaptation of individuals, assets, economies and societies to the physical impacts of climate change over the near- and long-term;
  - Making all financial flows consistent with long-term climate goals, including all public budgets and spending, operations of the financial system as a whole including public and private actors, as well as investments of companies and individuals.
- The ambition of the Agreement and the required transformation of the economy implies the prioritization of 'systemic' or 'transformational' actions over 'incremental' or 'marginal' actions.
- The Agreement highlights the need to rely on and support national pathways leading to the achievement of both climate and broader sustainable development objectives.

**The Paris Agreement calls for the deep transformation of the economy and society with implications for governments as well as economic and financial actors.** Article 2 of the Agreement lays out three long-term goals that embody a shift of focus from maximizing the volume of mitigation and adaptation actions over the short-term, to supporting a long-term economy-wide transformation.[4] Rather than focusing on the achievement of successive short-term mitigation targets defined through a top-down approach and at times disconnected from the more ambitious long-term objectives, the Paris Agreement puts in place a common framework for all countries to contribute to international efforts by defining and implementing national transition trajectories to achieve the long-term goals.[5]

**The three goals of the Paris Agreement combined with the processes and principles that it lays out put in place a bottom-up approach to create low-GHG, climate-resilient economies and embeds climate change action in the broader sustainable development agenda.** This section presents how the Agreement is being interpreted four years after its adoption.

## 1.1. Three Ambitious Goals Reframing Climate Action around Long-Term Low-GHG, Climate-Resilient Development

*"Article 2.1: This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty [...]"* (United Nations 2015a)

**Article 2.1 of the Paris Agreement sets out three long-term goals that reaffirm the initial objectives of the UNFCCC and aim to enhance the implementation of the Convention.** Seen in conjunction with the process laid out in other parts of the Agreement, the three goals frame climate action around supporting ambitious and sustainable long-term, low-GHG, climate-resilient development. This represents an important shift in framing climate action and emphasizes the contribution of near-term actions to achieving the long-term transformation of national economies and societies.

4 While the objective of transforming the economy is not explicitly mentioned in the Paris Agreement, Article 2.1(c) refers to *"a path towards low greenhouse gas emissions and climate-resilient development"* and different components of the Agreement introduce a shift from considering the volume/output of mitigation and adaptation action to considering the impact of action towards a long-term transformation of national economies.

5 The Cancun Agreements had introduced the idea that *"addressing climate change requires a paradigm shift towards building a low-carbon society that offers substantial opportunities and ensures continued high growth and sustainable development, based on innovative technologies and more sustainable production and consumption and lifestyles, while ensuring a just transition of the workforce that creates decent work and quality jobs"*.

**TABLE 1. EVOLUTIONS IN THE INTERNATIONAL FRAMEWORK FOR CLIMATE ACTION BEFORE AND AFTER THE PARIS AGREEMENT**

| | Pre-Paris | Post-Paris |
|---|---|---|
| **Greenhouse Gas Emissions** | • Near-term quantified emission targets were introduced for developed country Parties in the Kyoto Protocol and revised in the Doha Amendment to the Kyoto Protocol.<br>• A global common long-term temperature increase threshold (2°C) was introduced in the Cancun Agreements. | • Definition of a global common long-term temperature increase threshold (2°C-1.5°C), an absolute net-zero emissions objective "in the second half of this century" and guidance on the international GHG emissions trajectory necessary.<br>• Emphasis on the broader long-term systemic changes needed in national economies – focusing on low-GHG development rather than incremental GHG mitigation. |
| **Adaptation** | • The Cancun Agreements introduced that "Adaptation must be addressed with the same priority as mitigation". | • Adaptation action is on an equal footing with mitigation action. Adaptation and resilience are to be considered in national pathways towards a low-GHG climate-resilient development. |
| **Finance** | • The Cancun Agreements introduced the annual '100 billion USD' commitment for financial support from developed country Parties to developing country Parties for mitigation and adaptation action by 2020. Specific funds and facilities were created to support this process. | • Financial support between countries is maintained with the objective to increase the volume of support and ensure consistency with national strategies.<br>• New objective of making financial flows "consistent" with a low-GHG climate-resilient development path, covering flows of all actors for all types of activities. |
| **Transformation of the economy** | • The Cancun Agreements indicated that a transformation of the economy was needed.<br>• Texts focus on fostering strengthened mitigation and adaptation efforts. | • Adoption of goals that frame and emphasize the need for a long-term transformation of the global economy.<br>• Linking the global transformation to the bottom-up definition of national long-term pathways to achieve low-GHG climate-resilient development.<br>• Recognition of the important role of the redirection of financial flows towards 'consistent' activities and assets. |
| **Process and principles** | • Mitigation targets were defined in the Kyoto Protocol with a top-down approach relying on the concept of common but differentiated responsibilities between country Parties.<br>• Since the Convention, responses to climate change had to "be coordinated with social and economic development in an integrated manner". | • All countries are to provide ambitious efforts and define their specific contribution to the global low-GHG, climate-resilient pathway, taking into account national circumstances.<br>• Creation of a dynamic process linking short-term planning tools to national long-term strategies.<br>• Use of a 'Global Stocktake' to assess efforts and identify remaining actions needed to achieve the long-term goals.<br>• Climate action is embedded in the broader sustainable development agenda. |

*Source: I4CE*

### 1.1.1. Article 2.1(a): Decarbonizing the Global Economy for a "Well Below 2°C World"

*"Article 2.1(a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;"* (United Nations 2015a)

**Article 2.1(a) sets a long-term temperature goal of keeping the increase in the global average well below 2°C with the aspiration of limiting the increase to 1.5°C.** The high ambition of this goal implies that equally ambitious GHG emission reduction and mitigation efforts must be undertaken by all country Parties to stabilize and reduce global emissions. Additionally, Article 4.1 of the Agreement[6] calls all country Parties to increase mitigation efforts to achieve global peaking of emissions "as soon as possible" and then rapidly reduce emission. For the first time in international climate negotiations, the Paris Agreement sets the global objective of achieving *"a balance between anthropogenic emissions by*

6 Article 4.1 of the Agreement states that: "*In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty*."

*sources and removals by sinks of greenhouse gases in the second half of this century"*. This implies that at some point in the second half of the century, total GHG emissions must not exceed the amount of total emissions removed from the atmosphere by sinks. This objective corresponds to the concepts of 'GHG neutrality' or 'net zero emissions' (see **Box 2**). By adding this new objective, the Paris Agreement thus reinforces the global mitigation goal and provides a clear signal on the global emission trajectory that should be aimed for.

**This framing places an emphasis not only on near-term reductions for an emission peak, but also on the structural changes needed in national economies to achieve the long-term goal of a 'net zero emission' economy.**

The Paris Agreement requests all country Parties to define their contribution to achieving this shared target of 'net zero' absolute GHG emissions. These contributions based on national circumstances are to be defined in a dynamic process and laid out in increasingly ambitious near-term Nationally Determined Contribution (NDCs), and a long-term low-GHG development strategy (see Section 1.2.). While near-term GHG emission reduction targets will remain an important part of national climate policy, these near-term objectives should be consistent and coherent with the objective of achieving 'absolute' net-zero emissions by a given date (see **Box 2**). This represents a shift in framing climate mitigation action away from prioritizing 'relative' changes in GHG emissions to focus on the rapid reduction of total or 'absolute' emission levels needed to achieve a 'net zero' balance.

### BOX 2. THE NET-ZERO EMISSIONS TARGET: GLOBAL VS. COUNTRY TARGETS FOR BALANCING EMISSIONS

**The need to reach 'net zero' emissions globally is supported by the current scientific evidence around emissions trajectories to achieve the long-term mitigation goal.** The Fifth Assessment report of the Intergovernmental Panel on Climate Change (IPCC) released ahead of COP21 noted that mitigation pathways likely to limit warming to below 2°C relative to pre-industrial levels would require *"substantial emissions reductions over the next few decades and near zero emissions of Carbon dioxide ($CO_2$) and other long-lived greenhouse gases by the end of the century"* (IPCC 2014).

**At the international level, the Paris Agreement implicitly calls for reaching the net zero target closer to 2050 than 2070 by including the aspirational 1.5°C objective.** The conclusions of the IPCC special report on the impacts of global warming of 1.5 °C highlighted that: *"In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic $CO_2$ emissions decline by about 45% from 2010 levels by 2030 (40–60% interquartile range), reaching net zero around 2050 (2045–2055 interquartile range). For limiting global warming to below 2°C, $CO_2$ emissions are projected to decline by about 25% by 2030 in most pathways (10–30% interquartile range) and reach net zero around 2070 (2065–2080 interquartile range)"* (IPCC 2018).

**At the national level, the time horizon for reaching the net zero target may vary, depending on a repartition of efforts among countries based on the principles of equity and common but differentiated responsibilities and national circumstances (see Section 1.2.2).** Today, governments are defining the target date to achieve net zero emissions with varying levels of ambition in terms of the year and the scope considered*. As a result, many actors are calling for developed countries with a greater historical responsibility to reach net-zero emissions 'well before 2050', whereas developing countries may meet this target after 2050. A number of organizations have been proposing tools and metrics to propose a repartition of efforts based on different interpretations of the concept of equity such as the Climate Equity Reference Calculator**, Climate Fairshares*** or Paris Equity Check.****

#### TABLE 2. TARGET YEAR ADOPTED BY COUNTRIES TO ACHIEVE NET ZERO EMISSIONS AS OF THE END OF AUGUST 2019

| Country | Date | Country | Date |
|---|---|---|---|
| **Fiji** | 2050 | **Portugal** | 2050 |
| **Finland** | 2035 | **Sweden** | 2045 |
| **Marshall Islands** | 2050 | **United Kingdom** | 2050 |
| **Norway** | 2030 | | |

*Source: (Climate Home News 2019)*

* A key difference between countries' definitions of net zero targets is the scope countries take into consideration to achieve the balance with GHG emissions, which cannot be avoided. Some countries aim to ensure that negative emissions in their countries equal these remaining emissions, while others allow the use of international offset.

** https://climateequityreference.org/calculator-about/

*** http://www.climatefairshares.org/methodology

**** http://paris-equity-check.org/

**Finally, the ambition of the temperature objective and of the required transformation of the economy implies the prioritization of 'systemic' or 'transformational' actions over 'incremental' or 'marginal' reductions in emissions.** Climate policy frameworks and climate actions should be evaluated not only in terms of achieving short-term emissions reductions targets, but also on their contribution to achievement of the long-term transformation of economic systems efficiently and effectively. As counterintuitive as it may be, some emission reductions may not support the least-cost achievement of long-term objectives. For example, the prioritization of least-cost incremental mitigation actions may not be sufficient given that these may lead to relative GHG reductions, but not to the absolute reductions needed at the scale required or result in locking-in emissions in the future.[7] This is further discussed in Section 3.2.

### 1.1.2. Article 2.1(b): Placing Adaptive Capacity and Climate Resilience at the Core of Development

*"Article 2.1(b) Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production;"* (United Nations 2015a).

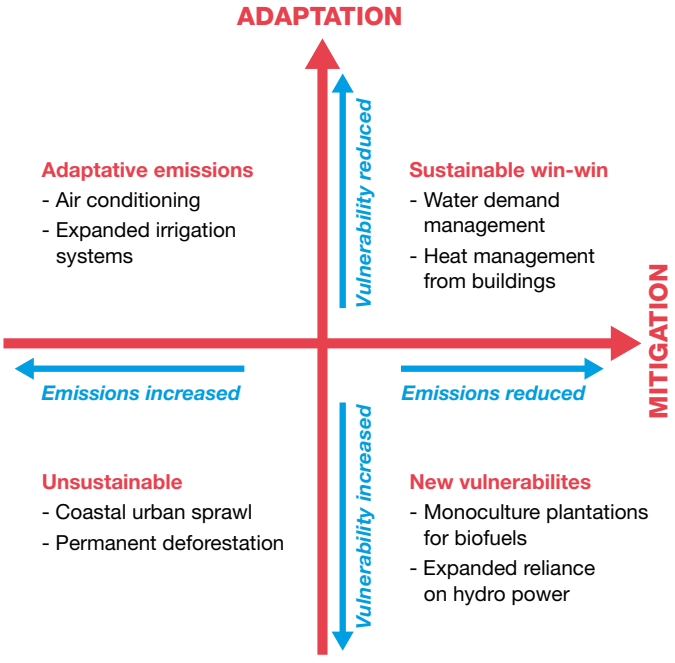
**Article 2.1(b) of the Paris Agreement sets a long-term goal focusing on the need to address both the ability to adapt and to increase overall resilience at the same time as pursing low-GHG development.** Mitigation and adaptation are established as equal parts of 'low-GHG climate-resilient development' promoting the need to consider mitigation and adaptation efforts jointly as part of national sustainable development. This framing implies that the adaptation to climate change and mitigation of climate change cannot be addressed separately (see **Box 3**). Certain mitigation actions could directly increase the exposure to climate change impacts (less-resilient agriculture practices for example) or the poverty of individuals (workforce in the fossil fuel industry for example) and thus indirectly their vulnerability to climate change impacts (Hallegatte *et al.* 2016). Conversely, some adaptation actions such as the widespread adoption of energy-intensive air conditioning could lead to increases in GHG emissions.

**The Paris Agreement also provides insights into how adaptation should be understood as both a short- and long-term issue requiring action today.** Over the short-term, the Paris Agreement highlights that adaptation to climate change impacts is an issue that should be addressed from today. Article 7.4 states that *"Parties recognize that*

**BOX 3. EXAMPLES OF ADAPTATION MITIGATION TRADE-OFFS AND SYNERGIES**

In the run-up to COP21, Chapter 2 of the 2014 IPCC AR5 Report demonstrated that mitigation and adaptation could have both positive and negative impacts one on another.

*The upper right quadrant (sustainable win–win) illustrates synergies in which actions enable the achievement of both adaptation and mitigation goals. The lower left quadrant (unsustainable) shows the opposite condition. The upper left (adaptive emissions) and lower right (new vulnerabilities) quadrants illustrate trade-offs that can result from actions within particular local-regional circumstances.*




*Source: IPCC, WGII. 2014. AR5, Chapter 2 "Foundations for Decision Making", Figure 2-4.*

7 A critique of the focus of climate policy on least-cost near-term abatement actions has been raised in terms of the risks posed to causing the lock-in of GHG emissions at levels inconsistent with long-term objectives. Furthermore, research has suggested that excessive use of the least-cost options to achieve near-term objectives can make longer-term objectives too expensive to reach (Vogt-Schilb and Hallegatte 2014; Vogt-Schilb, Meunier, and Hallegatte 2018).

*the current need for adaptation is significant"* and the latest IPCC report highlighted that adaptation is already occurring as impacts of climate change have already been observed (IPCC 2018). Taking into consideration the latest observations of climate change and the inertia of the economy, it is increasingly recognized that *"between now and 2030, climate policies can do little to reduce the amount of global warming already under way because of the long lag between the introduction of mitigation policies, their impact on emissions, and the effect of emissions reductions on the climate system"* (Hallegatte *et al.* 2016). Countries and all economic actors need to start to adapt from today.

**Nevertheless, the Agreement recognizes that the level of adaptation necessary in the long-term will depend on mitigation efforts.** Article 4.1 of the Paris Agreement calls for *"an adequate adaptation response in the context of the temperature goal referred to in Article 2."* Furthermore, the IPCC special report on the impacts of global warming of 1.5°C highlighted that different levels of global warming would require different options and levels of efforts: *"most adaptation needs will be lower for global warming of 1.5°C compared to 2°C (high confidence)"* (IPCC 2018). The IPCC noted that beyond these levels of global warming, limits to adaptive capacity *"become more pronounced."*[8] Ambitious mitigation efforts are necessary to limit the phenomenon and the level of current and future mitigation efforts is a key indicator of the expected level of climate change over the long-term.

**The Paris Agreement also emphasizes the various ways of contributing to adaptation and the need to be context-specific.** First, by introducing the idea of an 'adequate adaptation response' in Article 4.1, the Agreement confirms that adaptation will take different forms depending on the context. As highlighted by the IPCC AR5 *"adaptation is place- and context-specific, with no single approach for reducing risks appropriate across all settings"*. Second, Article 7.1 of the Paris Agreement adopts the broadest definition of adaptation, referring to the three interrelated concepts of 'adaptive capacity', 'resilience' and 'vulnerability'[9]. This implies that countries have to support the different forms of adaptation of individual actors and assets to physical impacts of climate change over the near-term as well as the adaptation of societies over the long-term.

**Finally, Article 7.1 of the Paris Agreement introduces the objective of *"contributing to sustainable development"* – thus linking adaptation efforts to the Sustainable Development Agenda.** On one hand, ahead of COP21, international negotiations and processes like the Sendai Framework for Disaster Risk Reduction 2015-2030 had highlighted that *"effective disaster risk management contributes to sustainable development"* (United Nations 2015b). The IPCC had also highlighted that *"transformations in economic, social, technological and political decisions and actions can enhance adaptation and promote sustainable development (high confidence). At the national level, transformation is considered most effective when it reflects a country's own visions and approaches to achieving sustainable development in accordance with its national circumstances and priorities"* (IPCC 2014). On the other hand, researchers and practitioners have established a reciprocal link with broader development objectives as *"poverty is one of the key markers of vulnerability and […] much of what is recommended as measures to make people and societies more resilient is simply good development policy"* (Hallegatte *et al.* 2016).

**The Paris Agreement furthermore requires all country Parties to engage in adaptation planning that are hoped to serve as roadmaps for economic actors.** All country Parties are to submit adaptation communications as part of or in conjunction with other communications or documents such as NDCs.[10] This country-driven and bottom-up approach aims to be appropriate with local, subnational, national, regional and international dimensions of adaptation and sends a strong signal to country Parties to ensure the systematic integration of resilience and adaptation considerations in national pathways towards a low-GHG climate-resilient development.

### 1.1.3. Article 2.1(c): Making All Financial Flows Consistent with Low-GHG, Climate-Resilient Development

*"Article 2.1(c) Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development."* (United Nations 2015a)

**Article 2.1(c) of the Paris Agreement introduces a specific focus on the transformative potential of financial flows and the importance of their 'consistency' with a low-GHG, climate-resilient development pathway.** It represents an important departure from previous climate action frameworks; for the first time financial flows do not only appear in the negotiations as a 'means of implementation'. The mandate for

8 *"limits to adaptive capacity exist at 1.5°C of global warming, become more pronounced at higher levels of warming and vary by sector, with site-specific implications for vulnerable regions, ecosystems and human health (medium confidence)."* (IPCC 2018)

9 Article 7.1 states that *"Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2."*

10 As of August 2019, 129 out of 183 NDCs integrated an overall vision for adaptation and climate-resilient development and "the process to formulate and implement NAPs, the main national-level adaptation planning instrument globally, is gearing up. More than 90 countries have started the process of formulating, and in some cases implementing, a NAP, aiming to reduce vulnerability by building adaptive capacity and resilience and to facilitate the integration of adaptation into policies, programmes and activities" (UNFCCC 2019).

country Parties to ensure the consistency of financial flows as a goal in and of itself recognizes the importance of reorienting finance and investments away from non-consistent activities - and scaling-up finance and investments for consistent activities across the entire economy. Setting this as a goal also recognizes the large-scale actions needed to achieve the reorientation of all investments and finance flows across national and global economies – and the importance of setting this a clear objective to be worked towards.

**However, the Agreement neither sets a definition of what 'consistent' means from a legal standpoint[11], nor precisely defines what specific financial flows it refers to**. Nevertheless, the goal laid out in Article 2.1(c) is seen as covering all financial flows, beyond climate finance. Traditionally, as defined by the 2018 Biannual Assessment of the UNFCCC flows for climate action are *"[t]he financial resources dedicated to adapting to and mitigating climate change globally, including in the context of financial flows to developing countries"*. In contrast, Article 2.1(c) mandates the consistency of all types of flows across all activities and assets: flows with climate co-benefits, flows with no particular climate-related impact and flows that undermine climate objectives. It highlights that in addition to direct climate finance, all financial flows should be addressed given their potential to directly or indirectly contribute to – or undermine - the transition to a low-GHG climate-resilient development.

**This represents a significant expansion in scope as in its broadest interpretation, Article 2.1(c) mandates country Parties to make consistent all financial flows and stocks of all public budgets and spending- as well as the financial system as a whole including companies and individuals.** The Agreement does not explicitly indicate whether the focus should be on new financial transactions or financial transactions and assets already in the portfolios of economic and financial actors (referred to as financial stocks). However, interpretations of the article include both flows and stocks of all economic actors (see **Box 4**). This is a much larger scope than currently covered in the traditional 'climate finance' discussions[12] that focus specifically on the continued 'north to south' transfers, mobilized private finance and Official Development Assistance. As discussed further in Section 2, the Agreement mandates governments to put into place the financial regulation and economic incentives and investment environment to influence all economic actors – including both mandated public and commercial financial institutions.

**BOX 4. INITIAL INTERPRETATIONS OF ARTICLE 2.1(C) AS PART OF CLIMATE-RELATED FINANCE TRACKING EXERCISES**

**The Standing Committee on Finance is charged with mapping information relevant to Article 2.1(c) and provided a first interpretation of the scope to be considered for Article 2.1(c) tracking in the 2018 Biennial Assessment.** The Committee broadened this scope to include the activities of financial actors in terms of both finance flows and stocks and extended the consideration to existing portfolios in addition to new activities (UNFCCC Standing Committee on Finance 2018).

**The Organization for Economic Co-operation and Development (OECD) Research Collaborative has reinforced the importance of looking at all investments and financial flows in relationship to their contribution to climate goals.** It has called for the reporting to be two-fold, looking both at the nature of tangible assets and the underlying source of finance. First, the OECD has included a focus on gross primary investment in new infrastructure and equipment (tangible fixed assets in System of National Accounts terms) and the refurbishment of existing ones. And second, a focus on the underlying sources of finance for these investments (Jachnik, Mirabile, and Dobrinevski 2019). This approach is similar to the global tracking of investments and financial flows conducted at the global level by the Climate Policy Initiative each year (CPI 2018) – as well as the framework of domestic-level exercises conducted in countries such as Germany (CPI 2012) or France (Hainaut and Cochran 2018), among others.

**Finally, initial efforts on Article 2.1(c) tracking cover all financial flows - whether public or private, and across the entire economy.** The OECD Research Collaborative has indicated that tracking *"[...] implies identifying, implementing and monitoring public actions as well as privately-led initiatives for mobilizing finance towards activities that contribute to climate objectives, and for shifting finance away from activities that undermine these objectives"* (Jachnik, Mirabile, and Dobrinevski 2019). This broad interpretation is also supported implicitly by the types of financial flows included in the 2018 Biannual Assessment of Climate that includes data from public and private sources – whether coming from direct public budget, corporate or private household spending, or through intermediated channels (UNFCCC Standing Committee on Finance 2018).

11 The term 'consistent' is typically understood as implying that actions are 'concordant, harmonious, and undeviating'. This is reinforced by the use of 'compatibles' in the French language version of the agreement: in French legal terminology, for documents to be 'compatibles' requires that the other documents comply with the norms and standards set out in the over-arching document.

12 See section 2.1.

## 1.2. A Bottom-up Process Guided by Long-Term National Pathways to achieve Climate and Sustainable Development Objectives

**The Paris Agreement has put in place a bottom-up, country-driven approach for climate action with a ratcheting-up mechanism to ensure increased ambition over time**. The approach is guided by the principles of equity and different national circumstances and is rooted in the broader Sustainable Development Agenda. The resulting framework creates the foundation for an iterative, country-led process to scale up the ambition of national and international climate action. It is designed to provide the information on short- and long-term priorities and pathways to guide actions of governments and economic actors and overcome many of the uncertainties and challenges posed by Paris Alignment.

### 1.2.1. A Framework Integrated as Part of the Broader Sustainable Development Agenda

**Article 2 of the Paris Agreement places this framework for action in the broader context of the Sustainable Development Agenda.** The 2030 Agenda for Sustainable Development and the Addis Ababa Action Agenda of the Third International Conference on Financing for Development were adopted in 2015. While focusing on different aspects, they all contribute to define how country Parties will implement long-term sustainable development pathways, emphasizing on the need to take into account the trade-offs and synergies between agendas. As presented in **Box 5**, these agendas are closely connected and share objectives and goals. Fully exploring the connections between the two is beyond the scope of this paper. Nevertheless, low-GHG climate-resilient development strategies and pathways should be consistent with and contribute to the broader Sustainable Development Goals (SDGs).

### 1.2.2. A Bottom-Up, Country-Led Process Rooted in National Contexts

**Similar to the 2030 UN Sustainable Development Agenda, the Paris Agreement has put in place a bottom-up and country-driven approach aiming to achieve the three global goals.** The Paris Agreement requests that country Parties define their economy's pathway to achieve low-GHG climate-resilient development. Article 3 of the Agreement requires Parties to *"undertake and communicate ambitious efforts […] with the view to achieving the purpose of this Agreement as set out in Article 2"*. The importance of taking into account national strategies while framing climate action is highlighted in different articles of the Paris Agreement detailing the means of implementation.[13] This national focus reinforces the importance for taking into consideration and supporting the transformation needed at the national level and is further discussed in Section 3.

**This country-driven approach relies on a distinction between national near-term actions and long-term strategies.** Article 4 of the Paris Agreement asks country Parties to determine their near-term contribution to the long-

#### BOX 5. INTERACTIONS BETWEEN THE SUSTAINABLE DEVELOPMENT AND THE PARIS AGREEMENT

**The 2030 Agenda for Sustainable Development adopted three months before COP21 provides a global framework for international action on Sustainable Development, relying on 17 Sustainable Development Goals, including one on climate change: *"take urgent action to combat climate change and its impacts."*** Like the Paris Agreement, the 2030 Agenda for Sustainable Development also calls for the transition of the economy towards *"a pathway towards low greenhouse gas emissions and climate-resilient development."* By adopting these 17 goals, countries made a commitment to consider actions as part of the transformation of national and international economies and societies : *"We are determined to take the bold and transformative steps which are urgently needed to shift the world on to a sustainable and resilient path"* (United Nations 2015c).

**A key aspect of the SDGs is that they were developed to be** *"integrated and indivisible and balance the three dimensions of sustainable development: the economic, social and environmental"* (United Nations 2015c, sec. Preamble). Several SDGs include climate change mitigation and adaptation action either explicitly or implicitly highlighting that climate change like other SDGs cannot be addressed in a siloed perspective and calling for a prioritization of actions taking into account both trade-offs and synergies between all SDGs. Supporting a development that results in outcomes both consistent with the climate agenda and the broader sustainable development agenda is seen as the most efficient and effective way of achieving all 17 goals of the sustainable development agenda – including number 13 on climate change.

13 On climate finance, a key evolution of the Paris Agreement is that *"the provision of scaled-up financial resources should aim to achieve a balance between adaptation and mitigation, taking into account country-driven strategies, and the priorities and needs of developing country Parties"* (Article 9.4). On capacity building, the Paris Agreement states *"Capacity-building should be country-driven, based on and responsive to national needs, and foster country ownership of Parties, in particular, for developing country Parties, including at the national, subnational and local levels."* (Article 11.2).

**BOX 6. HOW THE PRINCIPLE OF 'COMMON BUT DIFFERENTIATED' CONTINUES IN THE PARIS AGREEMENT**

**When defining the framework for international action on climate change, Article 3.1 of the Convention introduced two overarching concepts guiding the repartition and level of efforts to be undertaken by Parties to the Convention: the concept of equity and the concept common but differentiated responsibilities and respective capabilities.** These two principles were reaffirmed in the Paris Agreement. Article 2 of the Agreement on the one hand lays out three long-term goals that are common to all country Parties and on the other hand states that these goals should be implemented "to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.*

**In comparison with previous texts, all country Parties commit to undertake ambitious efforts under the Paris Agreement.** However, the Paris Agreement maintains different forms of differentiation between countries in its framework for action. The Paris Agreement maintains a binary distinction between developed and developing countries, most notably on the topic of North-South support for financial resources and technology development and transfer and reaffirms that on mitigation, developed country Parties should "take the lead" according to their historic responsibility and their economic capacities. However, all Parties are requested to seek economy-wide levels of action and emissions peaks as soon as possible. For the definition of national trajectories and more specifically through the NDCs, the Paris Agreement adds and relies on the concept of "different national circumstances" to evolve towards a better consideration of national needs and capacities for both mitigation and adaptation in the context of sustainable development (Bultheel *et al.* 2015).

* The concept of Common but Differentiated Responsibilities (CBDR) was enshrined as Principle 7 of the Rio Declaration at the first Rio Earth Summit in 1992. The declaration states: *"In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command."*

term mitigation goal through short term-focused NDCs.[14] Furthermore, while not mandatory, the Paris Agreement encourages country Parties to formulate and communicate *"mid-century, long-term low greenhouse gas emission development strategies"* (Article 4.19). These long-term strategies aim to guide the definition and revision of NDCs (see Section 3.4).[15]

**Finally to help guide this process, Article 2 of the Paris Agreement highlights the two guiding principles of equity and "common but differentiated responsibilities and respective capabilities, in the light of different national circumstances."** Read in conjunction with the ambition of the Paris Agreement goals common to all country Parties, these principles recognize the differences between countries that should be taken into consideration when implementing the Agreement (see **Box 6**).

### 1.2.3. A Ratcheting-Up Mechanism for Increased Ambition

**The framework for action introduced by the Paris Agreement includes a 'ratcheting-up' mechanism to support increased ambition of national efforts over time.** As of now, current NDCs are not ambitious enough to achieve the long-term goals of the Agreement and according to the IPCC *"most 1.5°C-consistent pathways show more stringent emissions reductions by 2030 than implied by the NDCs"* (IPCC 2018). To ensure progression and the ratcheting up of ambition over time, the Paris Agreement asks Parties to assess, review and improve their NDCs at least every five years as part of a "Global Stocktake" described in Article 14 of the Agreement.[16] Countries are currently in the process of engaging in the first update of NDCs to be submitted by 2020.

**Actors seeking to align their activities with the Agreement must, in turn, take into account and plan for this 'ratcheting' up**. As country objectives and strategies evolve and become more ambitious over time, the strategies of financial and economic actors will also need to evolve.

While the current level of implementation may be insufficient to fully guide action, it is expected that the next revision of national plans and strategies will lead to increased ambition.

14 *"Upon ratification of the Paris Agreement, 183 Parties submitted their national climate plans in their first NDCs under the Paris Agreement, of which 177 contain a vision for low-emission development and 129 set out an overall vision for adaptation and climate-resilient development."* (UNFCCC 2019)

15 *"As at June 2019, 12 Parties had communicated to the secretariat such strategies, and others had indicated that they were developing theirs. The aim of the strategies is to reduce emissions through substantial changes to countries' economies; in this context, some Parties have set a vision of reducing emissions to net zero by 2050. On adaptation, they address reducing the vulnerability of populations and the productive sectors, preserving and protecting ecosystems and environmental services, and increasing the resilience of strategic infrastructure"* (UNFCCC 2019). In parallel, a number of initiatives and tools aim to support country Parties and other actors in the definition of their mid-century, long-term low greenhouse gas emission development strategies. Among them, the 2050 Pathways Platform specifically supports countries, states, regions and cities in developing ambitious long-term climate strategies.

16 Article 14 of the Paris Agreement requires to periodically take stock of the implementation of the Paris Agreement in order to assess collective progress towards achieving the purpose of the Agreement and its long-term goals. This process is called the global stocktake.

# 2. A Double Mandate on Finance for Countries with Implications for Financial Institutions

**KEY TAKEAWAYS FROM THIS SECTION**

- The Paris Agreement presents a double mandate for country Parties in relation to financial resources and financial flows with implications for economic actors and financial institutions:
  - Developed country Parties have to continue and scale up their financial support for developing country Parties in the implementation of mitigation and adaptation measures.
  - Article 2.1(c) creates an additional mandate for all country Parties to put into place the policy and investment frameworks to support the 'consistency' or 'alignment' of all domestic and international financial flows with a "low GHG emissions and climate-resilient development pathway."
- Financial institutions, whether seeking sustainable development impacts or with a commercial focus, have an interest to align their activities with the three goals of the Paris Agreement:
  - Mandated financial institutions with shareholders from developed country Parties are called to scale up their contributions and deliver on climate finance – as well as to ensure that this finance is 'consistent' with national pathways to achieve the long-term goals of the Paris Agreement.
  - Countries will create an evolving investment and finance environment for both mandated and commercial financial institutions.
  - All financial actors will need to take into account and respond to the changing physical climate.
- Since COP21, an increasing number of public and private financial institutions have taken the commitment to "align" with the Paris Agreement:
  - Among commercial financial institutions, initial commitments go beyond climate risk management to focus on pro-actively contributing to the transformation of sectors to achieve the global long-term temperature goal.
  - Development finance institutions have announced alignment frameworks focusing on how they can contribute to the achievement of all three goals of the Paris Agreement, taking into consideration the bottom-up and country-driven approach of the Agreement.

**The Paris Agreement presents a double mandate for country Parties in relation to financial resources and financial flows.** First, developed country Parties must continue the existing mandate to scale up their financial support for developing country Parties in the implementation of mitigation and adaptation measures, often referred to as 'climate finance' or the '100 Billion' commitment. Second, Article 2.1(c) creates the new mandate for all country Parties to put into place the policy and investment frameworks to ensure the 'consistency' or 'alignment' of all domestic and international financial flows with the long-term climate objectives as called for in Article 2.1(c) (see section 1.1.3.).

**These two mandates are separate, but reinforce each other to help direct investments and financial resources to support low-GHG climate-resilient pathways.** They have, in turn, important implications to varying degrees for all types of economic and financial actors as policies should seek to drive the transition needed to meet the Agreement's goals. This section identifies these implications and the elements that should be taken into consideration, particularly for financial actors.

## 2.1. A Mandate to Scale up 'Climate Finance'

**Climate negotiations have included discussions on financial resources and financial flows as a 'means of implementation' to support mitigation and adaptation measures in developing countries since the establishment of the Climate Convention in 1992.**[17] This North-South financial support is based on two principles enshrined in the Convention: First, countries have common but differentiated responsibilities (see **Box 6**); and second, developing country Parties do not have the same capacities as developed country Parties. Above all, this financial support seeks to foster equity and trust within the framework of global negotiations.

**The Paris Agreement calls for scaling up climate finance considering national pathways**. This initial mandate led to the adoption of a volume target at COP16 in Cancun to jointly mobilize USD100 billion a year by 2020 to address the needs of developing countries. The Agreement reiterates the USD100 billion per year commitment and the COP21 decision set it as a floor to be *"[...] enhanced collectively in 2025."*[18] In

17 Article 4.4 of the UN Framework Convention stated that *"developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties"*.

18 Article 9.1 of the Paris Agreement states that *"Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention*". Article 9.2 of the Paris Agreement also invites *"other Parties to provide or continue to provide such support voluntarily."*

addition to the climate finance volume increase, articles 9.3 and 9.4 of the Agreement both insist on the need for climate finance to support country-driven strategies, and to take into account *"[...] the needs and priorities of developing country Parties"*.[19]

**As a result, mandated financial institutions with shareholders from developed country Parties are called to scale up their contributions and deliver on climate finance – as well as to ensure that this finance is 'consistent' with national pathways to achieve the long-term goals of the Paris Agreement**. Since the inception of the '100 billion objective' laid out in the Cancun Agreement in 2010, mandated financial institutions – including development finance institutions as well as other development agencies - have played an integral role in its achievement by 2020 and beyond. They will continue to be called to play this role as they represent the finance and investment arms of developed country Parties. However, the new framework for action laid out by the Paris Agreement is set in the broader objective of "making finance flows consistent". This may have implications on the types of investments that they are to prioritize and to track.[20]

**The Paris Agreement also promotes other types of climate finance flows – particularly between developing countries.** Article 9.2 of the Paris Agreement calls for other countries *"to provide or continue to provide such support voluntarily".* This article has been interpreted as promoting South-South climate finance.

## 2.2. Regulatory and Policy Frameworks to Make All Financial Flows Consistent with a Pathway towards Low-GHG and Climate-Resilient Development

**Countries also have a mandate to foster the 'consistency' of financial flows with the Paris Agreement for all actors and institutions.** On one hand, this will require countries to make financial flows of public budgets, agencies, financial institutions and intermediaries 'consistent'. On the other hand, they must put into place the regulatory frameworks, economic policies and incentives to create an investment environment that will incentivize an increase of private investment and finance in 'consistent areas' – and a decrease or reduction and redirection of 'non-consistent flows'.[21]

**Countries are implicitly called to create an investment environment to facilitate and incentivize the reorientation of flows.** Governments have the possibility to influence the market dynamics and address market imperfections through a wide range policy actions. As an example, the coalition of Finance Ministers for Climate Action launched in 2019 will support, among others, the following principles: *"Align […] policies and practices with the Paris Agreement commitments; […] Work towards measures that result in effective carbon pricing; Take climate change into account in macroeconomic policy, fiscal planning, budgeting, public investment management, and procurement practices; Mobilize private sources of climate finance by facilitating investments and the development of a financial sector which supports climate mitigation and adaptation"*[22].

**Furthermore, countries are implicitly called to address financial regulation and supervision to achieve the goal of Article 2.1(c).** It is increasingly recognized that financial regulation has a role to play in achieving the long-term objectives of the Paris Agreement. Debates remain on how and to what extent financial regulation should be actively used to support the long-term climate objectives (such as the role for different forms of monetary policy and the adjustment of capital requirement rules). However, there is a growing consensus that financial institutions and actors must assess and manage climate risks and opportunities (NGFS 2019, 2018). In turn, financial regulation has a role to play in ensuring that financial actors have the information needed to assess climate-related risks (both physical and transition – see Section 5.1.2.) and take steps to manage these risks. In turn, regulators will also require financial institutions to report transparently how their actions are supporting – or not – international and national climate-related objectives.

**The resulting changes in both the economic and regulatory policy frameworks will create an evolving investment and finance environment for both mandated and commercial financial institutions.** Economic actors and financial institutions will find themselves operating in markets, with shareholders, with intermediaries, and with

19 "NDCs provide new context for finance for developing countries going forward. Most developing country NDCs outline (in varying levels of detail) the estimated financial costs of the emission reduction and climate adaptation scenarios they describe for 2015–2030" (UNFCCC 2019).

20 Under the Paris Agreement, country Parties are officially requested to participate in an enhanced transparency framework detailed in Article 13. The objective of this reporting is to build mutual trust and confidence and to promote effective implementation of the Paris Agreement. Country Parties will continue to report on climate finance. Article 2.1(c) may imply evolutions in the reporting framework and methodologies currently used to identify and calculate climate finance flows, with changes in the scope, as well as potentially additional reporting around the impact of mandated public finance institutions in supporting the objectives of Article 2.1(c) and the 'consistency' of all financial flows across the economy.

21 The Worldwide Fund for Nature Germany (WWF) and Frankfurt School – UN Environment (UNEP) Collaborating Centre for Climate & Sustainable Energy Finance (FS-UNEP Centre) have developed a financial regulation performance tracker tool assessing the adequacy of financial regulations and policies in a given jurisdiction to support the low carbon transition and greening of financial markets. The 3fP methodology assesses: (i) Transparency & Disclosure; (ii) Supervision, Risk management, System Stability; and (iii) Enabling Environment. (3FP 2018)

22 www.cape4financeministry.org/coalition_of_finance_ministers

**BOX 7. NETWORK FOR GREENING THE FINANCIAL SYSTEM (NGFS) WORK PROGRAM AND RECOMMENDATIONS FOR CENTRAL BANKS AND SUPERVISORS**

**In December 2017, central banks and supervisors created the Central Banks and Supervisors Network for Greening the Financial System (NGFS) to better understand and manage the financial risks and opportunities of climate change.** In the NGFS first progress report, its members acknowledged that "climate-related risks are a source of financial risk. It is therefore within the mandates of central banks and supervisors to ensure the financial system is resilient to these risks" (NGFS 2018).

**The NGFS set up three work streams to work on supervision, macro-financial and mainstreaming green finance and recently released a call for action of central banks and supervisors, presenting a set of six main recommendations** (NGFS 2019):

- Recommendation n°1 – Integrate climate-related risks into financial stability monitoring and micro-supervision
- Recommendation n°2 – Integrate sustainability factors into own-portfolio management
- Recommendation n°3 – Bridge the data gaps
- Recommendation n°4 – Build awareness and intellectual capacity and encouraging technical assistance and knowledge sharing
- Recommendation n°5 – Achieve robust and internationally consistent climate and environment-related disclosure
- Recommendation n°6 – Support the development of a taxonomy of economic activities

clients that take the Paris Agreement into account either for voluntary or regulatory reasons. In terms of financial regulation, it is expected that some of the biggest evolutions will come in the areas of transparency and disclosure, as well as financial supervision, policies around risk management and more broadly financial regulation seeking to ensure the stability of the financial system as a whole (as opposed to at an institutional level).

## 2.3. Financial institutions are committing to align their activities with the Paris Agreement

**Since COP21, an increasing number of public and private financial institutions have taken the commitment to "align" with the Paris Agreement.** While there is still no concrete and common understanding of what alignment with the Paris Agreement is, initial frameworks released by financial institutions present guiding principles for their activities.

**Among commercial financial institutions, initial commitments go beyond climate risk management to focus on pro-actively contributing to the transformation of sectors to achieve the global long-term temperature goal.** At COP24 in 2018, five commercial banks, including BBVA, BNP Paribas, ING, Standard Chartered and Société Générale pledged to align lending portfolios with the global climate goals (see **Box 8**). This new commitment goes beyond just managing climate risks with the objective of contributing to *"the ultimate goal of climate neutrality."* These banks highlighted that aligning with the climate goals *"is about more than de-risking. It's about making a positive impact".* As such, their alignment approach aims to maximize their impact towards achieving this goal, taking into consideration the long-term transformation of sectors. In response, a number of tools and methodologies are starting to bridge between existing climate risk approaches and Paris Alignment goals.[23]

**Development finance institutions have also announced alignment frameworks focusing on how they can contribute to the achievement of all three goals of the Paris Agreement, taking into consideration the bottom-up and country-driven approach of the Agreement.** During the One Planet Summit organized in 2017 in Paris, the group of Multilateral Development Banks (MDBs) and the International Development Finance Club (IDFC) both took the commitment to *"Align Financial Flows with the Paris Agreement"*[24]. Moving a step forward in the operationalization of this commitment, on the sidelines of COP24, both groups released initial principles and building blocks of their emerging Paris Alignment approaches. Both approaches address all three goals of the Paris Agreement and highlight the need to consider countries pathways towards low-GHG, climate-resilient development.

23 As an example, the Paris Agreement Capital Transition Assessment or 'PACTA' tool is as a climate scenario analysis tool for listed equity and corporate bonds portfolios. The tool quantifies a financial portfolio's exposure to a 2°C benchmark in relation to a series of climate-related technologies. In doing so, it provides a 'misalignment' indicator that measures the extent to which current and planned assets, production profiles, investments, and GHG emissions are 'aligned' with a 2°C trajectory.

24 Joint Statement "Together major development finance institutions align financial flows with the Paris Agreement", 2017, available at: https://www.afd.fr/en/together-major-development-finance-institutions-align-financial-flows-paris-agreement

### BOX 8. KEY CHARACTERISTICS OF THE KATOWICE COMMITMENT TAKEN BY BBVA, BNP PARIBAS, ING, STANDARD CHARTERED AND SOCIÉTÉ GÉNÉRALE

When committing to align their lending portfolio with the climate goals BBVA, BNP Paribas, ING, Standard Chartered and Société Générale jointly defined the following principles to guide their approach:

- Co-created: *We will work together to co-develop the tools and metrics needed to support our contribution, partnering with organisations like the 2° Investing Initiative.*
- Impact-driven: *We will initially focus on the most carbon-intensive sectors which are key to the transition to the low-carbon economy.*
- Engagement-focused: *We believe in an engagement-focused approach, which means not simply excluding clients but work with them on their transition.*
- Sector-specific: *We believe that each sector has its own transition pathway. Therefore we will use a sector-specific approach and apply the key strategies necessary per sector.*
- Forward-looking: *To effectively steer, we believe in using forward-looking data that will give us the insight we need to know where our clients are headed and how we can support the right investments.*
- Science-based: *We will focus on ensuring that we and our clients are supporting a shift from high- to low-carbon assets in line with science-based scenarios.*

These principles tend to shape alignment approaches focusing on maximizing the impact of activities on the long-term transition of sectors and systems.

*Source: (BBVA et al. 2018)*

### BOX 9. BUILDING BLOCKS OF PARIS ALIGNMENT APPROACHES OF DEVELOPMENT BANKS

The MDBs' approach is based on the six following building blocks (Group of MDBs 2018):

1. "Alignment with mitigation goals. Our operations will be consistent with the different countries' low-emissions development pathways and compatible with the overall climate change mitigation objectives of the Paris Agreement. […]
2. Adaptation and climate-resilient operations. Similarly, in line with Principle 2 of the "Mainstreaming Principles", we will be active in managing physical climate change risks, in a manner consistent with climate-resilient development, and in identifying opportunities to make our operations more climate-resilient.[…]
3. Accelerated contribution to the transition through climate finance. We will strive to actively support low-emissions and climate-resilient development pathways through our interventions. […]
4. Engagement and policy development support. We will build on existing efforts to support the NDCs' revision cycle and develop services for countries and other clients to put in place long-term strategies and accelerate the transition to low-emissions and climate-resilient development pathways. […]
5. Reporting. Building on the joint efforts on climate finance tracking and collaboration on mitigation and adaptation issues, we will further develop tools and methods for characterizing, monitoring and reporting on the results of our Paris-alignment activities. Where possible, we will collaborate to harmonize our respective approaches.
6. Align internal activities. We will progressively ensure that our internal operations, including facilities and other internal policies, are also in line with the objectives of the Paris Agreement".

IDFC Paris Alignment approach covers the following dimensions (IDFC 2018):

1. Increasingly mobilize finance for climate action.
2. Support country-led climate related policies.
3. Seek to catalyze investments, and to mobilize private capital (local & international).
4. Recognize the importance of adaptation and resilience, especially in most vulnerable countries.
5. Support the transition from fossil fuels to renewables financing.
6. Aligning with the Paris agreement is also a process of internal transformation of the institutions, which can build on existing principles and/or practices.

# 3. A Framework for Defining Alignment with the Paris Agreement



**KEY TAKEAWAYS FROM THIS SECTION**

- This report proposes a framework that can be used by a given economic actor or financial institution as it seeks to align strategies and operations with the Paris Agreement. It Is structured around three dimensions:
- *A Comprehensive Scope of Action:* actors should seek to directly or indirectly support low-GHG climate-resilient development across all business areas – and take into account impacts on broader systems and value chains. This goes beyond measuring investment in activities supporting mitigation or adaptation outcomes; rather, it implies that all activities are carried out in a manner consistent with the long-term goals of the Paris Agreement.
- *A Long-Term Time Horizon to Guide Impact:* actors should prioritize actions that are consistent with both near-term climate objectives and long-term goals and do not lead to lock-in or mal-adaptation. It is essential to recognize that activities that result in 'relative' rather than 'absolute' emissions reductions or enhanced resilience may be counterproductive to achieving long-term goals.
- *An Ambitious Scale of Contribution:* actors should seek to increase the ambition of contribution to the goals of the Agreement, ensuring that all activities:
  - Do No Harm: all activities should neither hinder nor be counterproductive to the achievement of climate objectives and should be consistent with long-term national sustainable and low-GHG, climate-resilient development pathways;
  - Support Paris-Consistent Climate Co-Benefits: whenever possible, actors should prioritize activities with direct or indirect mitigation and adaptation co-benefits that are consistent with the national attainment of long-term goals of the Paris Agreement;
  - Foster Transformative Outcomes: whenever possible, actors should prioritize activities with 'transformative outcomes' that reduce the barriers to and support the large-scale, systemic and structural changes needed for the transition of economic, social and natural systems across and within national economies.
- Being Paris aligned does not require 100% of activities of an entity to contribute to specific mitigation and adaptation activities, but rather to ensure all its activities are consistent with and best contribute to low-GHG climate-resilient development pathways.
- To guide this process, the Paris Agreement, the Sustainable Development Agenda and both the research and operational literature increasingly refer to 'paths' or 'pathways' of national and international economies to achieve long-term climate goals.
- To be operational, pathways need to signal both the near-term decisions and changes that will shape the economy and society within the immediate future, as well as the longer-term transformation expected across the economic, policy and physical climate environment to meet climate goals.

**Since the Paris Agreement entered into force in November 2016, a growing body of literature from both the research community and financial practitioners has addressed a number of areas of Paris Alignment – but no overarching framework has been proposed to date.** Part of this body of literature has looked at questions surrounding how to assess the alignment of assets and portfolios with 2°C or other low-GHG scenarios – particularly for asset managers (Science Based Targets Initiative 2015; Thomä *et al.* 2017; Nicol *et al.* 2017; 2° Investing Initiative 2016; 2° investing initiative 2017). These reports provide insights on how to assess the consistency of financial flows and financial institutions actions for mitigation; but do not present an overarching definition of 'alignment' with the Paris Agreement. Another part has focused on the transformation necessary in capital stocks and infrastructure to achieve the Paris Agreement goals, focusing principally on the long-term temperature goal and addressing the issue particularly from a government perspective (OECD, The World Bank, and United Nations Environment Programme 2018; Kessler *et al.* 2018; Whitley *et al.* 2018). Other work has looked at how specific groups of actors – particularly the MDBs and other international development finance institutions – can begin to make their activities consistent with the Paris Alignment goals (Larsen *et al.* 2018; Wright, Hawkins, and Orozco 2018; Les Amis de la Terre France, Oxfam France, and Réseau Action Climat France 2019). The following section builds on this rich initial body of analysis to provide an over-arching framework linking together many of the ideas found initially in this often groundbreaking work.

**This report proposes a framework that captures the implications of the Paris Agreement – both through the long-term goals and the process laid out to achieve them**. The framework presented in this section can be used by all types of economic actors as they seek to align their strategies and operations with the Paris Agreement. It can

help identify the key issues to be taken into consideration and can be used to evaluate the consistency and contribution of their activities to the "pathway towards low greenhouse gas emissions and climate-resilient development" mentioned in Article 2.1(c) of the Agreement and to the achievement of all three goals of the Agreement on mitigation, adaptation and finance.

**The framework presented in Figure 1 is structured around three dimensions: a Comprehensive Scope of Action, a Long-Term Time Horizon to Guide Impact, and An Ambitious Scale of Contribution.** It is designed to assist economic actors to understand the implications of alignment with the Paris Agreement for their overarching strategies, as well as operational frameworks and procedures. They can use these three dimensions to identify the gaps and areas of action to support the development of ambitious and comprehensive approaches evolving over time to progressively integrate changes in climate, technology developments, national and international pathways and socio-economic environment.

**FIGURE 1. A FRAMEWORK TO GUIDE AMBITIOUS ALIGNMENT WITH THE PARIS AGREEMENT**

**A Comprehensive Scope of Action: screen all activities for contribution to low-GHG climate-resilient development**

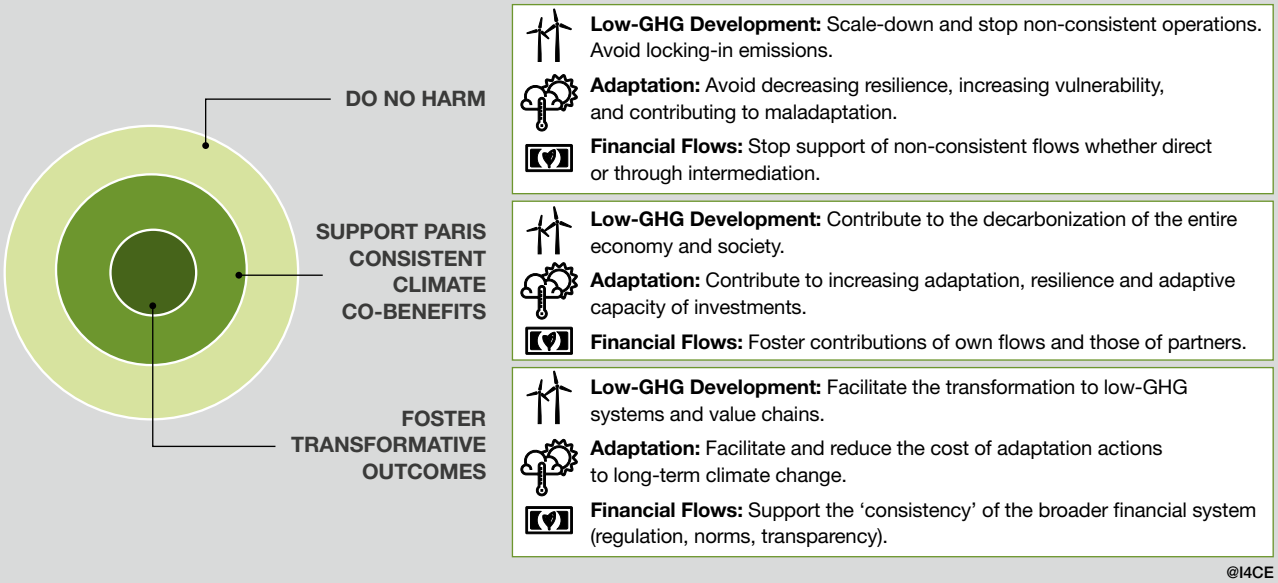
Directly or indirectly support activities consistent with low-GHG climate-resilient development across all business areas.
Take into account impacts and influence on systems and the entire value chains, both at national and global levels.

**A Long-Term Time Horizon to Guide Impact: ensure that near-term actions contribute to the achievement of long-term goals**

Prioritize actions that are consistent with both near- and long-term climate objectives and do not lead to lock-in or mal-adaptation.
Recognize that 'relative' reductions in emissions or increases in resilience may be counterproductive to achieving long-term goals.

**An Ambitious Scale of Contribution: actively support national and international transformations across all activities**

Halt support for non-consistent activities and seek whenever possible to contribute to both the incremental and transformative changes needed to support national and global sustainable long-term low-GHG climate-resilient development.




*Source: I4CE*

## 3.1. A Comprehensive Scope of Action for the Alignment of All Activities

**The Paris Agreement introduces significant changes in framing the 'scope' of climate action**. This change in scope includes the application of the three goals of the Agreement to all country Parties – both developed and developing; the necessity of taking a country-level economy-wide focus; the need to look at individual actions in respect to the broader systems and value chains they affect; and the link with the broader sustainable development agenda.

**First, the long-term goals laid out by the Paris Agreement are shared by all country Parties.** This is a significant departure from the Kyoto Protocol under which only developed countries Parties listed in Annex 1 to the Convention took emission reduction commitments. The Paris Agreement explicitly notes the differences in expectations between developed and developing country Parties, but nevertheless stresses that all country Parties should take ambitious action respective of their national circumstances.

**The Paris Agreement consistently implies that country Parties should aim to take a country-specific, economy-wide approach when striving to achieve the three goals.** Article 4.4 of the Agreement emphasizes that Developed country Parties undertake 'economy-wide' absolute emission reduction targets – with Developing country Parties being encouraged to move over time towards an 'economy wide' focus. This economy-wide focus is reinforced through the ambition required to achieve the net zero emission target and its implications for the economy.

**Third, the Paris Agreement implicitly calls for countries to scale down and stop actions working counter to the achievement of its goals.** The Kyoto Protocol indicated that developed country Parties should implement a *"progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments."* The economy-wide focus of the Paris Agreement builds on this and reinforces that this should be continued to be addressed. Article 2.1(c) further reinforces this objective with the goal of making financial flows 'consistent' with a *"pathway towards low greenhouse gas emissions and climate-resilient development"*, which implicitly requires preventing any non-consistent action.

**Fourth, the high level of ambition of the Agreement implies that climate actions should seek whenever possible to transform the systems and value chains underpinning domestic and global economies and societies.** Climate action frameworks have historically placed a significant emphasis on the direct impacts of project or other action on reducing emissions or increasing resilience. However, achieving the ambition of the mitigation, adaptation and finance goals of the Paris Agreement will require taking into consideration how actions affect the economy at a 'system' level. This is reinforced by latest IPCC report that highlighted the need for *"whole-system transformation"* across energy, land and economic systems to achieve long-term climate goals (IPCC 2018). For example, the construction of electricity transmission lines should not be evaluated only in terms of its direct emissions, but also in terms of its contribution to facilitating the shift from fossil-fuel to renewable energy

**TABLE 3. CHANGES IN FRAMING OF THE SCOPE OF CLIMATE ACTION PRE- AND POST-PARIS AGREEMENT**

| | Pre-Paris | Post-Paris |
|---|---|---|
| **Application to Country Parties** | The Kyoto Protocol defined mitigation targets for developed country Parties only. | Three goals on mitigation, adaptation and finance are common to all country Parties. |
| **Sectors** | The Kyoto Protocol defined economy-wide relative emission reduction targets and provided examples of sectoral policies and measures to be implemented to achieve these targets focusing principally on highly emissive sectors. | The Paris Agreement indicates that all country Parties should eventually take economy-wide focus for mitigation and adaptation. This is reinforced by Article 2.1(c)'s focus on the consistency of all financial flows. |
| **Positive and negative contributions** | The Kyoto Protocol called for progressive reduction of policy support in all GHG emitting sectors that run counter to the objective of the Convention. | The Paris Agreement calls for fostering action consistent with a low-GHG climate-resilient path and implicitly stopping action undermining it. |
| **Action vs System/ Value Chain Focus** | Targets of the Kyoto Protocol imply a principal focus on near-term climate co-benefits. | The long-term and transformative nature of the Paris Agreement goals and the reference to a development path imply supporting the systemic transformation needed across the entire economy. |
| **Links with Sustainable Development Agenda** | Since the Convention, responses to climate change had to *"be coordinated with social and economic development in an integrated manner"*. | The Paris Agreement contextualized climate objectives in the broader Sustainable Development Agenda. |

*Source: I4CE*

based energy systems.[25] A similar 'systemic' analysis of entire economic 'value chains'[26] is needed for the goals on adaptation and finance.

**Finally, the mandate to transform the wider economy to take into consideration both climate and sustainable development objectives is further reinforced throughout the Agreement.** As discussed in Section 1.2.1, Article 2 of the Paris Agreement calls Parties to *"strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty"*. The Paris Agreement thus pushes actors to ensure that actions to address climate change mitigation and adaptation seek to maximize the synergies and minimize any trade-offs with the SDGs.

## 3.2. A Long-Term Time Horizon to Guide Impact

**The Paris Agreement emphasizes the importance of linking near-term actions with the achievement of the long-term climate goals.** Rather than focusing only on near-term targets, the Agreement establishes common long-term goals and puts in place a bottom-up process for countries to identify and present how their near-term actions will contribute to achieving these goals. NDCs and other documents are expected to be implicitly developed as near-term roadmaps to achieve milestones on each country's pathway to achieving low-GHG climate-resilient development. This process is designed to evolve over time with the dynamic role of the Global Stocktake and 'ratcheting up' process that seek to ensure that national near-term action is collectively sufficiently ambitious to achieve long-term goals (see Section 1.2.3).

**The Paris Agreement emphasizes that near-term objectives should be milestones on the long-term low-GHG climate-resilient transformation of the economy and should be at a level of ambition consistent with this goal.**[27] Prior to the Paris Agreement, climate action was principally structured around the achievement of near-term emission reduction targets. By introducing and primarily relying on near-term emission targets, the Kyoto Protocol aimed at maximizing the volume of near-term emission reductions.[28] These emission reduction commitments from the developed countries were an important step in reducing global GHG emissions. However, this resulted at times in maximizing the volume of emission reductions at least cost in the near-term, without questioning the contribution to achieving the long-term objective of the Convention.

**TABLE 4. CHANGES IN FRAMING OF THE TIME HORIZONS OF CLIMATE ACTION PRE- AND POST-PARIS AGREEMENT**

| | Pre-Paris | Post-Paris |
|---|---|---|
| **Near-Term** | Near-term quantified emission targets were introduced in the Kyoto Protocol and revised in the Doha Amendment to the Kyoto Protocol. | Near-term national targets and plans are formalized in NDCs, as contributions to the long-term goals. |
| **Long-Term** | A global common long-term temperature increase threshold for mitigation (2°C) was introduced in the Cancun Agreements. | Definition of three common long-term goals, a global absolute long-term objective to achieve net-zero emissions in the second half of the century and intermediary targets. National Long-Term Low-GHG Emission Development Strategies to be developed to guide the transformation of national economies. |
| **Connecting Time Horizons** | No direct connection was made between near-term climate objectives and the longer-term transformation needed. | Creation of a dynamic process linking national near-term planning tools (NDCs) to long-term strategies. Leveraging of ambition through a recurring Global Stocktake of current efforts and the identification of remaining efforts to achieve the long-term goals. |
| **Efficiency of Action** | Focus principally on achieving the near-term targets as efficiently as possible. | Focus on achieving long-term targets and goals as efficiently as possible, with near-term targets as milestones consistent with the pathway to meet long-term goals. |

*Source: I4CE*

25 While some of this information may be captured in Scope 3 'indirect' emission reporting, a qualitative assessment may at times be needed to understand the indirect ways that certain actions may have in supporting economic systems and value chains that do not contribute and or may be counterproductive to the achievement of long-term goals.

26 This report uses this term to refer to the full range of activities needed to bring services, products and other economic outputs to customers.

27 The 2007 Bali Action plan identified the need for a shared vision for long-term cooperative action, including a long-term global goal for emission reductions and strengthened mitigation and adaptation action, with the support of 1) enhanced action on technology development and transfer and 2) financial resources and investment.

28 The Kyoto Protocol adopted in 1997 aimed to operationalize the objective defined in the UNFCCC Convention of stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. To achieve this, it established near-term quantified emission targets for Developed Country Parties included in Annex I of the Convention relying on the principle of Common but Differentiated Responsibilities. These targets were to be met within the first commitment period between 2008-2012 and were based on returning the emissions of Annex I countries to historic emissions levels.

**Focusing on the efforts needed to achieve long-term objectives rather than the near-term milestones provides a more accurate indication of the effectiveness and efficiency of action**. Cost-effectiveness has been and remains an important consideration in the prioritization of action on climate change since the adoption of the Convention.[29] However, the Paris Agreement's emphasis on long-term goals has significant implications on the cost efficiency of climate action. Rather than focusing on the relative differences in terms of the marginal cost of abatement or increasing resilience and adaptation to achieve near term milestones, the long-term focus of the Agreement pushes governments and other institutions to focus on minimizing the long-term cost of the transformation of the economy. A growing body of research has demonstrated that optimal abatement strategies can vary significantly whether the target being taken in account is the ultimate long-term climate goal or a nearer-term milestone (Vogt-Schilb and Hallegatte 2014; Vogt-Schilb, Meunier, and Hallegatte 2018; Stern 2015).

**Research and practice highlight how the risks of focusing on near-term incremental action could prevent the economy from achieving long-term goals given the inertia of the economy.** A near-term focus could also lead to making the overall transformation more expensive with extra-costs associated to delays in necessary measures (Stern 2015; WBG 2018; Vogt-Schilb and Hallegatte 2014; Vogt-Schilb, Meunier, and Hallegatte 2018; Fay *et al.* 2015). In terms of mitigation, recent research has developed convincing economic arguments that it may be more efficient and cost-effective to start a long-term emission-reduction strategy with significant short-term abatement investments, often in sectors where abatement capital is expensive (Vogt-Schilb, Meunier, and Hallegatte 2018). Similarly, in terms of adaptation, the World Bank has warned that some adaptation interventions reducing vulnerability over the near-term may increase long-term vulnerability and lead to maladaptation.[30]

**Finally, the three goals of the Paris Agreement will require a significant economic transformation and delaying action may increase the overall cost as well as the risks of not achieving the long-term goals.** All countries have the flexibility to define their own pathway and define the profile of ambition over time. However, delaying action may not be cost-effective and may lead to risks of lock in generating a number of other risks (IPCC 2018).

## 3.3. An Ambitious Scale of Contribution

**The high level of ambition of the Paris Agreement implies that contributions of actors willing to align their activities need to be equally ambitious.** Achieving the transformation of the economy is a long-term, dynamic, and economy-wide process. To succeed, it will require that country Parties and, in turn, all economic actors seek to increase the ambition of contribution to the goals of the Agreement, ensuring that all activities:

- **Do No Harm:** all activities should neither hinder nor be counterproductive to the achievement of climate objectives and should be consistent with national sustainable and low-GHG, climate-resilient development pathways;

**TABLE 5. CHANGES IN FRAMING OF THE SCALE OF CONTRIBUTION TO LONG-TERM GOALS OF CLIMATE ACTION PRE- AND POST-PARIS AGREEMENT**

| | Pre-Paris | Post-Paris |
|---|---|---|
| **Scale-down counterproductive activities and do no harm through new actions** | Developed country Parties were asked by the Kyoto Protocol to reduce support for GHG *"emitting sectors that run counter to the objective of the Convention and application of market instruments"*. | Mandate for all country Parties to make all financial flows consistent (i.e. not counterproductive to) with the long-term climate goals. |
| **Support incremental and transformational contributions to achieving goals** | Focus principally on incremental near-term direct mitigation and adaptation outcomes. The Cancun Agreements indicated that a transformation of the economy was needed but focused principally on fostering strengthened near-term incremental mitigation and adaptation efforts. | Continue to support incremental contributions to GHG abatement and adaptation. However, the focus on transformation of economies prioritizes the long-term impact and whenever possible activities with 'transformative' outcomes supporting low-GHG climate-resilient development. |
| **Rooted in National Contexts** | Mitigation targets were defined in the Kyoto Protocol with a top-down approach relying on the concept of common but differentiated responsibilities between country Parties. | An action's impact and its relative level of ambition is rooted in the national context. |

*Source: I4CE*

29 Article 3.3 of the Convention states that *"...policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost."*

30 The IPCC defines maladaptation as *"actions, or inaction that may lead to increased risk of adverse climate-related outcomes, increased vulnerability to climate change, or diminished welfare, now or in the future"* (Intergovernmental Panel on Climate Change 2014).

- **Support Paris-Consistent Climate Co-Benefits:** whenever possible, actors should prioritize activities that result in direct or indirect mitigation and adaptation co-benefits that are consistent with the national attainment of long-term goals of the Paris Agreement;
- **Foster Transformative Outcomes:** whenever possible, actors should prioritize activities with 'transformative outcomes' that reduce the barriers to and support the large-scale, systemic and structural changes needed for the transition of economic, social and natural systems across and within national economies.

**Being Paris aligned does not require 100% of activities of an entity to contribute to specific mitigation and adaptation outcomes, but rather to ensure all its activities are consistent with low-GHG climate-resilient development pathways.** Aligning with the Paris Agreement implies maximizing whenever possible contributions to the national pathways to achieve the three long-term goals in a manner consistent with broader sustainable development objectives. The definition of what constitutes 'harm', 'Paris-consistent climate co-benefits' and 'transformative outcomes' is thus dependent on national circumstances and pathways and the specificities of each of the three goals of the Agreement. Each of these types of actions are detailed in this section.

### 3.3.1. Do No Harm

**A fundamental consideration of whether an actor is 'Paris Aligned' is that across all its operations it does not support activities that are counterproductive to achieving the objectives of the Agreement.** Actors need to take into account the direct impacts of their actions, as well as how they directly or indirectly support systems and value chains consistent with a low-GHG, climate-resilient future in a given country.

- Do no harm in terms of **Article 2.1(a) and the temperature goal** requires actors to scale-down and halt activities that lead to the lock-in of GHG emissions at levels inconsistent with national and international objectives (i.e. insufficiently ambitious energy efficiency projects or less-emissive forms of fossil fuels), as well as activities that support systems and value chains counterproductive to long-term climate goals (such as energy transport networks that indirectly support continued fossil fuel use).
- Do no harm in terms of **Article 2.1(b) and adaptation and resilience** requires institutions to identify and scale-down or adapt their actions that: 1) could decrease resilience or increase vulnerability of people, assets and economies; or 2) could lock-in economic development which would not be able to cope with ongoing and coming climate changes (such as economic development in flood-prone areas or support growth of water intensive industries in a drought prone area). Finally, they should seek to identify and avoid maladaptation.
- Doing no harm in terms of **Article 2.1(c) and financial flows** implies that institutions will take steps to ensure that they will not do harm through their indirect support of inconsistent financial flows of counterparties and partners. This will potentially require increased information on the impacts of the actions of counterparties.

### 3.3.2. Prioritize Actions with Paris-Consistent Climate Co-Benefits

**Across all business lines, proactive and ambitious support for activities that result in direct and indirect contributions to low-GHG climate-resilient development should also be part of an alignment strategy.** This proactive support can take the form of activities that have for principal objective the mitigation of or adaptation to climate change or indirect climate co-benefits – in any case, aligned actors should seek to prioritize core business activities that also result in direct and indirect climate co-benefits. Without support for such activities, the overall transformation of the economy may not occur sufficiently rapidly. Furthermore, as discussed in Section 3.2, careful attention should be paid to the fact that some actions that reduce GHG emissions and enhance resilience in the short-term may not always be consistent with long-term goals.

**As such, actors should ensure that climate co-benefits are "Paris-consistent", i.e. consistent with long-term low-GHG climate-resilient development at the national and international level.** This may require an evolution in how institutions define and assess 'co-benefits' in relation to climate change – with a focus on contributions to the long-term absolute transformation of economies needed rather than relative increases or decreases in near-term mitigation and adaptation co-benefits.[31] Historically mitigation co-benefits have been assessed in terms of the relative reductions in emissions compared to a business as usual or other reference scenarios. Similarly, adaptation co-benefits have been defined as relative gains compared to an initial level. Paris Agreement alignment, however, requires climate co-benefits to be sufficiently ambitious to support both a given country's long-term transformation and short-term needs – or broader changes needed at the global level.

**Additionally, ensuring that climate co-benefits are "Paris consistent" also requires ensuring their consistency with**

31 Some financial institutions have linked the definition of co-benefits to specific climate finance accounting methodologies – particularly among development finance institutions. This report does not promote a specific definition of climate co-benefits, rather it emphasizes the need to ensure activities with climate co-benefits are also "Paris consistent".

**other sustainable development aspects.** As the Paris Agreement embeds climate action in broader sustainable development, contributions to mitigation and adaptation activities that would significantly undermine the achievement of other SDGs could not be considered as "Paris consistent".[32]

**Whenever possible and depending on their business model and mandates, actors should prioritize activities with the most 'Paris-consistent' co-benefits above activities that have limited or no positive climate-related impacts.** This proactive approach focusing on the impact of activities implies that institutions may choose to become involved in projects or transactions that could be modified or improved to result in positive climate impacts. This does not mean only doing activities supporting mitigation or adaptation outcomes; rather, it implies that all activities are carried out in a manner consistent with the long-term goals laid out in the Paris Agreement.

### 3.3.3. Foster Transformative Outcomes

**Thirdly, to be aligned with the ambition of the Paris Agreement, actors should prioritize and proactively support whenever possible activities that reduce the barriers to and support the large-scale structural changes needed for the transition of broader systems and national economies.**[33] Actions with 'transformative' outcomes are a subset of actions resulting in 'Paris-consistent climate co-benefits'. However, they are treated as a separate category in this report given that they have an essential role to play in the deep transformation of systems and value chains over the long term necessary to achieve the ambitious objectives of the Paris Agreement.

**There is no single definition of 'transformative outcomes' or 'transformational change' and what it may qualify will vary between countries, sectors and types of interventions.** As discussed further in **Box 10**, the Climate Funds and a number of development finance institutions use the term "transformational" to qualify certain forms of interventions with certain types of structural impacts. For example, the World Bank has developed based on its experience with 'transformational projects' in a number of different sectors a working definition included in its guidance on the use of concessional resources. In this guidance, actions with transformational impacts are those that *"reduce in a meaningful manner the barriers to implementation faced by future climate-related programs/projects. In economic terms, such projects offer increasing returns to scale by reducing future costs. A program or project is transformational if it not only delivers climate benefits, but also makes it easier to implement future programs or projects that will reduce emissions or boost resilience"* (WBG 2018).

**Assessing transformational change should take into consideration both the transformation needed at the level of countries, as well as internationally in the case of transboundary systems and value chains**. In general, transformational actions seek to influence and push changes at a broader society, market and system-level. In principle, transformational impacts seek to have a larger outcome than the direct impacts of the intervention itself – or seek to directly foster actions that may have systemic outcomes at the policy or regulation level. The identification and prioritization of such activities should occur whenever possible across all areas of business, with a clear focus on maximizing ambition and impact. Nevertheless, as mentioned in the case of Paris-consistent climate co-benefits as well as in Section 5.1, the ability of an actor to support this type of change will be directly related to its mandate and business model.

**A Paris Aligned strategy should prioritize transformational change across the three goals of the Agreement.** The Paris Agreement does not provide guidance on how the transformation of the economy should occur but does provide the basis for a bottom-up approach of the transition of the economy. This, in turn, places an increased focus on the need to focus on the implementation of national forward-looking pathways and strategies as the foundation to, in turn, achieving global goals**.**

- Transformational change in terms of **Article 2.1(a) and the temperature goal** would imply support for the step-changes necessary for the decarbonization of the entire economy and society, including actions that aim to support the evolution towards new decarbonized systems of a country's/region's existing systems (energy production, transportation, buildings stock, agriculture and industry) and the associated value chains.
- Transformational change in terms of **Article 2.1(b) and adaptation and resilience** may imply supporting activities that demonstrate new technologies for resilience, supporting improved national land-use planning, make social protection more reactive to climate shocks, etc. (WBG 2018).[34]

32 Doing no significant harm on other environmental objectives is a condition currently being considered as part of the European Union process on the development of a climate taxonomy, *"Under the proposed Taxonomy regulation, economic activities making a substantial contribution to climate change mitigation or adaptation must be assessed to ensure they do not cause significant harm to all remaining environmental objectives. An activity contributing to climate change mitigation must avoid significant harm to climate change adaptation and the other four environmental objectives."* (EU technical Expert Group on Sustainable Finance 2019)

33 The 2018 report of the Global Commission on the Economy and Climate highlighted that *"the choice we face today […] is not whether or how to act, but how quickly we will do so: we can either make a gradual shift locking us into an unsustainable future or a decisive change of direction towards this new growth agenda"* (The New Climate Economy 2018)

34 This should be differentiated from some emerging concepts that define transformational adaptation as a form of adaptation that aims to transform in specific cases entire systems based on future climate when no incremental changes would be sufficient to preserve it.

**BOX 10. EMERGING CONCEPTS OF "TRANSFORMATIONAL CHANGES" AND "PARADIGM SHIFTS"**

**The concepts of "transformational changes" and "paradigm shifts" were introduced in international negotiations through the implementation of climate specific funds and facilities for the support of mitigation and/or adaptation action in developing countries, notably the Nationally Appropriate Mitigation Actions (NAMA) Facility and the Green Climate Fund (GCF).** The NAMA Facility provides support for the implementation of *"highly ambitious NAMA Support Projects (NSP) that fit into the context of a broader NAMA and have the potential to catalyze transformational change in a partner country towards a low-carbon development path"* (NAMA Facility 2018).

In the context of the NAMA Facility, projects are considered as conducive to transformational change if they:

- *"contribute to enabling either a significant evolution in terms of scope (e.g. scaling-up or replication), or enabling a faster and/or a significant shift from one state to another;*
- *have a catalytic effect and include mechanisms to ensure the sustainability of the impacts, local ownership and political will, the involvement of the private sector and the use of innovative technologies and approaches, and;*
- *allow for systematic learning processes"* (NAMA Facility 2018).

The Green Climate Fund, seeks to *"promote a paradigm shift to low-emission and climate-resilient development, taking into account the needs of developing countries that are particularly vulnerable to climate change impacts"* (Green Climate Fund 2019)**.** It included as part of its six investment criteria the "Paradigm shift potential". It is defined as the *"degree to which GCF can achieve sustainable development impacts beyond one-off project or programme investments by replicating and scaling them up."* (Green Climate Fund 2014)

- Transformational change in terms of **Article 2.1(c) and financial flows** implies supporting the needed evolutions in the financial system itself and in the broader economic environment. The development of financial instruments and approaches that can overcome a number of the barriers that have been identified in relation to climate change is an essential part of achieving long-term objectives.

## 3.4. Contextualizing Paris Alignment in National Low-GHG Climate-Resilient Development Pathways

**While the Paris Agreement laid out shared global objectives, the achievement of the goals will principally depend on the sustainable transformation of national economies and societies.** Actors seeking to align their activities will need to take into consideration how their overarching strategy and operational frameworks and procedures will on one hand be affected by, and on the other hand contribute to this transformation of national economies and societies in both the near- and long-term. In this process, actors will need to take into consideration both the current state and the future evolutions in the climate, technology developments, market dynamics and the socio-economic environment.

**To guide in this process, the Paris Agreement, the Sustainable Development Agenda and both the research and operational literature increasingly refer to 'paths' or 'pathways' of national and international economies to achieve long-term climate goals.** For the purpose of this paper, a 'pathway' refers to a shared 'vision' of how at a national level or the aggregate international level the long-term climate goals could be met. Pathways will vary by country – and a number of different pathways may be possible for a given country to achieve low-GHG climate-resilient development. As discussed in this section and seen in **Table 6**, different types of government plans (including NDCs) and long-term strategies and scenarios are used to define possible pathways and their translation into near-term policy actions.

**To be operational, pathways will need to signal both the near-term decisions and changes that will shape the economy and society within the immediate future, as well as the longer-term transformation expected across the economic, policy and physical climate environment to meet climate goals.** These pathways should provide a 'baseline vision' to link near-term choices with contributions to long-term objectives. Ideally, pathways should be disaggregated to the national level – but it is essential that the sum of national pathways are in turn consistent with the efforts needed to achieve the shared international goals. When national strategies are insufficient or not available, actors may need to fall back on global projections and scenarios to achieve the long-term goals of the Agreement.

**It is important that pathways are consensual and seen as legitimate and credible in order to be effective**

**TABLE 6. DIFFERENT TYPES OF SCENARIOS AND PLANS FOR PARIS ALIGNMENT (NON-EXHAUSTIVE)**

| Goal of the Paris Agreement | Near-Term Government Plans and Documents | Long-Term Strategies and Scenarios |
|---|---|---|
| **Low-GHG Development** | • Nationally Determined Contributions | • Long Term Low-GHG emission Development Strategies<br>• National transition scenarios used as decarbonization pathways<br>• Sectors and technology pathways |
| **Adaptation and Resilience** | • Nationally Determined Contributions<br>• National Adaptation Plans | • Long Term Low-GHG emission Development Strategies<br>• Climate Impact Scenarios (near-term; decadal; centennial) |
| **Financial flows** | • Climate National Finance and Investment Plans<br>• Analyses of national investment needs and current models of funding (domestic climate finance landscapes, capital raising plans, diagnostics of public budgets) | • Information on investments needs of transition scenarios<br>• Scenarios and strategies to finance targets. |

*Source: I4CE*

**in signaling to all actors the direction that a country will take.** Given the differences between the three goals of the Agreement, different types of inputs will be needed to support pathways across the three goals. A key issue is that of uncertainty – both related to whether a country is fully committed to the near- and long-term roadmaps it lays, as well as in relation to what path the transformation will eventually take. Furthermore, this issue of credibility and legitimacy may also depend on whether pathways to address climate-related issues equally contribute to achieving broader sustainable development objectives.

**Fully exploring the structure, make-up, formulation and use of pathways is beyond the scope of this report.** However, the following section will briefly present the emerging roles of national plans, long-term strategies and scenarios to provide a broader understanding to actors seeking to align with the Paris Agreement objectives.

### 3.4.1. Plans and NDCS Signaling Near-Term National Priorities to Achieve Low-GHG Climate-Resilient Pathways

**National government plans and NDCs can provide roadmaps of near-term national priorities and actions to achieve long-term visions.** These documents can provide the information needed to understand how countries are currently planning the transformation of their economy to meet long-term climate objectives. Targets and policies presented in national policy planning tools can contribute to informing actors of some of the near-term systemic evolutions in national pathways, which will be supported by the national government. The Paris Agreement calls for countries to produce national planning documents, including NDCs and National Adaptation Plans (NAP).[35]

**Ideally, these near-term national plans should be 1) available, 2) sufficiently detailed and 3) ambitious to be pertinent for informing decision-making around all three goals of the agreement**. However, it is widely recognized that at the global level, current nationally-focused plans do not meet these three criteria and often are not readily available (UNFCCC 2019). As a result, doing this in practice poses many challenges as taken together near-term national climate plans represented in current NDCs are clearly insufficient to reach the shared long-term climate goals. As such, other tools – whether focusing on the international level or produced in house or by third parties – are needed to guide near-term decisions. This lack of national-level visibility is a significant barrier to Paris Alignment. The development of ambitious and actionable plans by governments – or the identification of different types of proxies that can be identified – is an essential piece in facilitating the alignment of all actors.

### 3.4.2. Strategies and Scenarios to inform long-term pathways and decision making

**Long-term strategies and forward-looking scenarios can provide important insights on the pathways a country may follow and the transformation that will be necessary to achieve the three goals of the Agreement.** As discussed in Section 1.2.2, the Paris Agreement encourages governments to develop "mid-century, long-term low greenhouse gas emission development strategies" (Article 4.19). These long-term strategies aim, in theory, to

35 *"The NAP process, established in 2010, enables developing countries to identify medium- and long-term adaptation needs and to develop and implement strategies and programmes to address those needs with a view to reducing vulnerability to climate change by building adaptive capacity and resilience, and facilitating the integration of adaptation into economic and social policies, programmes and action. As at January 2019, 13 developing country Parties had submitted NAPs to the secretariat"* (UNFCCC 2019).

guide the definition and revision of NDCs. Over the last decade a number of documents that fit in general this description with varying focuses on time horizons have been developed such as 2050 Pathways[36] or Low Emission Development Strategies (LEDS).[37] However, many countries still have to develop a strategy with enough detail or certainty to help economic actors determine for all activities how they can support the national long-term low-GHG climate-resilient transformation of the economy and society. Furthermore, they may not have the long-term buy in of both government and economic actors.

**In addition to formal long-term strategies, different types of scenarios can be used as complementary tools to contextualize actions across the three Paris Agreement goals**. A scenario is *"a plausible description of how the future may develop based on a coherent and internally consistent set of assumptions about key driving forces (e.g., rate of technological change, prices) and relationships"* (TCFD 2017). Different types of scenarios can be used to contextualize the actions of financial institutions in terms of the three long-term goals of the Agreement at the national or international level. Scenarios can be developed either to explore one or several pathways to achieve a specific objective or explore different plausible futures based on specific assumptions (I4CE 2019).

### BOX 11. OVERVIEW OF SCENARIOS FOR ESTABLISHING AND ASSESSING NATIONAL LOW-GHG CLIMATE-RESILIENT SUSTAINABLE DEVELOPMENT PATHWAYS

**A number of different types of scenarios exist that could be of use in contextualizing actions in terms of their contribution to low-GHG climate-resilient development:**

- **Transition scenarios aim to help governments and other actors to better understand the transition to a low-GHG economy.** Transition scenarios have been developed by countries, international agencies such as the International Energy Agency (IEA), businesses such as British Petroleum (BP) or research centers to explore different policy/technology mixes to achieve national and international climate objectives. They can respond to different questions such as: What are the different plausible evolutions of the economy?, What are the policy choices needed to achieve net-zero objectives?, or What are the impacts of achieving mitigation objectives?
- **Climate change scenarios aim to explore the different plausible evolutions of climate represented by specific climate indicators (ex: sea level rise, global temperature mean, etc.), based on the evolution of GHG emissions.** Climate change scenarios are useful to identify the plausible climate change scenarios and scale of climate hazards economic actors will have to adapt to depending on the different possible impacts linked to the evolution of GHG emissions.
- **Climate impact scenarios aim to help actors understand how the evolution of climate change will affect economies based on the scale of climate change but also on the exposure and vulnerability of economies.** Climate impact scenarios can be used to identify adaptation needs at the local, national and international level and over different time horizons. Climate impact scenarios over a short- to medium time horizon can help to identify short-term incremental adaptation needs and climate impact scenarios over a long-time horizon can help ensure short-term activities are not contributing to maladaptation and identify where transformational adaptation may be needed.

**Additionally, the introduction of a specific focus on the consistency of financial flows by article 2.1(c) suggests that information on how the economy is currently being funded – whether consistent or non-consistent with the Paris Agreement – can be a useful tool for policy.** Climate finance flows have long been tracked as part of the international climate policy process, particularly in relation to the achievement of the 100 billion USD commitment. However, over the last decade an increasing number of country-specific studies have been released at varying frequencies that benchmark and track how investments supporting climate objectives and the low-GHG development are currently being financed.

36 *"The 2050 Pathways Platform is a multi-stakeholder initiative launched at COP 22 by High-Level Climate Champions Laurence Tubiana and Hakima El Haite to support countries seeking to develop long-term, net zero-GHG, climate-resilient and sustainable-development pathways. Designed as a space for collective problem-solving, the Platform will also build a broader constellation of cities, states, and companies engaged in long-term low-emissions planning of their own and in support of national strategies"*. For more information, please see: https://www.2050pathways.org/

37 *"The Low Emission Development Strategies Global Partnership (LEDS GP) was founded in 2011 to facilitate peer learning, technical cooperation and information exchange to support the formation and implementation of low emission development strategies. It has a focus on support to developing countries and regions"*. For more information, please see: http://ledsgp.org/about/?loclang=en_gb

- **Landscapes or overviews of domestic climate finance** have been produced in Germany (CPI 2012), France (Hainaut, Cochran, *et al.* 2018), Belgium (Trinomics 2016) and similar studies were produced in Indonesia (CPI 2014), South Africa (McNicoll *et al.* 2017) and Ivory Coast (CPI 2017). These can also take the form of Climate Public Expenditure and Institutional Reviews (CPEIR) focused on public flows.* The results of these studies provide an important knowledge base as well as policy and project assessment tools for shifting domestic investment patterns and to engage financial and economic actors. Landscapes can complement other policy assessment tools (macro-economic modelling of alternative investment scenarios, cost-benefit analysis, cost-effectiveness analysis, etc.) as well as project assessment tools (return on investment analysis, financial sustainability analysis, financial risks analysis, project performance indicators, environmental impact indicators, external costs of projects, cost-benefit analysis, etc.) (Hainaut, Barkman, and Cochran 2016).
- **Forward-looking estimates of investment needs to achieve national and international near-term and long-term climate goals – and scenarios of how these needs could be financed.** In France, I4CE has conducted an assessment of investment needs based on the French long-term low-carbon development strategy (Stratégie Nationale Bas Carbone, SNBC) (Hainaut, Gouiffes, *et al.* 2018).** This information on forward-looking estimates of investment needs to achieve climate objectives has been useful to identify current and future gaps in the investment needs. This information can help identify the actions, tools, instruments and ways that financial flows contributing to the long-term climate goals can be scaled up.

**A key issue around the use of scenarios is their understanding by actors and perceived credibility and legitimacy as they are rarely issued by governments themselves.** Due to the different purposes of scenarios and the diversity of underlying assumptions and hypotheses structuring scenarios, visions of the pathway to achieve the goals of the Paris Agreement could look very different.*** Nevertheless, it is important to take into consideration that scenarios used should respect the principles laid out by the Paris Agreement itself in terms of: 1) situating climate action within the achievement of the broader sustainable development objectives and 2) respecting national circumstances and capacities. These principles for climate action can provide important guidance on what scenarios and other forward-looking assessments should be seen as credible and legitimate.

**Finally, a number of questions remain today about how to do this in practice and can guide ongoing work on how to improve the use of scenarios:**

- How to define what is a sufficient and credible pathway at the global or national scale?
- When is a national or a global focus more pertinent and allows an institution to support the Paris goals?
- How to assess the quality, probability and feasibility of scenarios, plans at both the global and national levels?
- What to do when there are no / unsatisfactory scenarios or plans for a given country?
- How to assess when the granularity of scenarios does not permit analysis at the asset level?
- How to manage uncertainty when evaluating near-term actions in light of long-term pathways?

* For more information see: https://www.climatefinance-developmenteffectiveness.org/index.php

** Similar work is underway in other European countries such as Germany, Latvia, and the Czech Republic on Strategies for Financing the 2030 Targets. https://www.euki.de/en/euki-projects/climate-investment-capacity-cic2030/

*** An overview of the different scenarios that are being used to understand how to achieve the Paris Agreement goals (including those from the International Energy Agency, IPCC, United Nations Environment Programme, International Renewable Energy Agency, Greenpeace etc.) can be found in (German Watch & New Climate Institute 2018).

# 4. From Climate Mainstreaming to Paris Alignment: Insights for Financial Institutions

**KEY TAKEAWAYS FROM THIS SECTION**

- The three dimensions of the proposed framework of scope of action, scale of contribution and time horizon of impact can help identify and ensure the sufficiency of the changes introduced in strategic governance and the assessment framework for decision making and investment process to contribute to the goals of the Agreement.
- The commitment to align with the Paris Agreement should be adopted by the top-level management of an institution and be integrated across its business lines and operations in a manner that ensures uptake by operational teams.
- Rather than focusing on the development of a stand-alone Paris Alignment strategy and dedicated tools or products, an institution should seek to integrate alignment into all strategic plans, objectives and business lines in line with the three goals of the Agreement.
- Paris Aligned strategies should whenever possible be country-specific and consider both the direct and indirect impacts of individual investments in contributing to system-level changes.
- Financial institutions should seek to ensure that their near-term objectives and strategies prioritize actions that contribute to achieving the long-term climate objectives cost-efficiently – and do not lead to the maximization of near-term outcomes that could lead to further GHG emissions lock-in or maladaptation.
- Aligning a financial institution strategy should start by identifying and defining how the institution can contribute to the long-term low-GHG climate-resilient development. Second, the strategy should aim to prioritize actions based on Paris-consistent climate co-benefits and transformational outcomes, taking into account the mandate of the institution as well as other factors that affect ability or willingness to accept varying types of risk.
- Targets and performance indicators used to track progress in contributing to the objectives of a Paris Aligned strategy should aim to support the most ambitious contribution to national and international pathways.
- Metrics, methods and assessment tools should serve to 1) screen all activities for contribution to low-GHG climate-resilient development 2) ensure that near-term actions contribute to the achievement of long-term goals and 3) identify means of supporting national and international transformation across all activities.

**As financial institutions move forward on commitments to align with the goals of the Paris Agreement, the framework presented in this report can assist in determining how an institution can contribute to the achievement of the long-term climate goals.** As discussed in Section 3, a commitment to align is a commitment to adopt the high level of ambition embodied in the Paris Agreement. Being aligned thus requires financial institutions to support the achievement of the three goals by scaling-down non-consistent activities and seeking whenever possible to contribute to both the incremental and transformative changes needed at the national and global levels.

**The commitment to align with the Paris Agreement should be adopted by the top-level management of the Institution and integrated across its business lines and operations in a manner that ensures uptake by operational teams.** In this process, it is important that the changes in scope of action, time horizon of impact and scale of action implicit within the Agreement are taken into consideration. As a result, the alignment of a financial institution's strategy should address all activities and seek to assess the contribution of near-term finance and investment to the achievement of national and international long-term goals. Furthermore, it must define on one hand how it will scale down counter-productive or 'harmful' activities while on the other hand it scales-up whenever possible actions that result in Paris-consistent climate co-benefits and transformational outcomes within the limits of its mandate and business models.

**This section uses the framework presented in Section 3 to identify the key issues and questions that financial institutions will need to take into consideration when aligning with the Paris Agreement.** Given the range of mandates, priorities, business models, sectors and geographies of operation and tools used by financial institutions, there are no 'one size fit all' solutions. As such, providing a comprehensive roadmap of how each type of financial institution should align their strategies and operations is beyond the scope of this report. Nevertheless, it provides an overview of these factors, identifying some of the key issues, concerns and ways forward for further analysis.

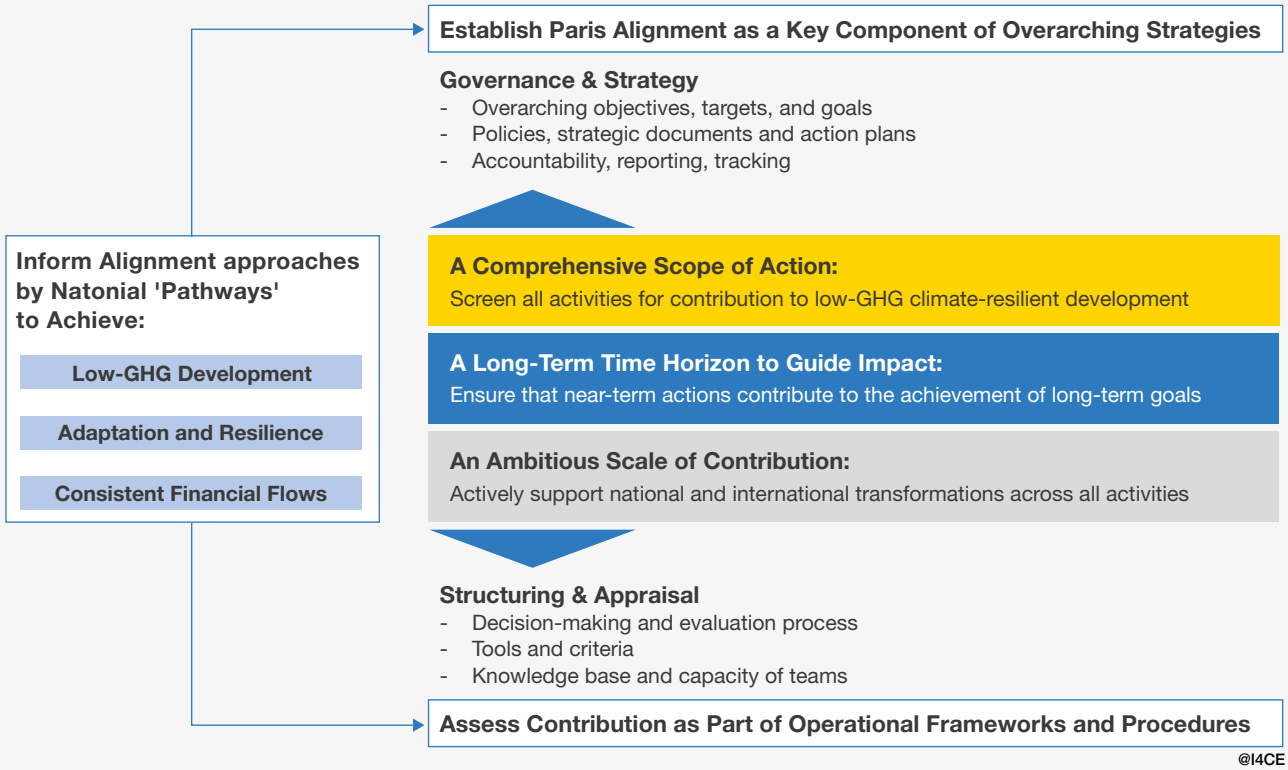
## 4.1. Paris in Practice: Aligning Overarching Strategies and Operational Frameworks and Procedures

**Building on the Alignment framework presented in Section 3, financial institutions alignment approaches should 1) screen all activities for contribution to low-GHG climate-resilient development 2) ensure that near-term actions contribute to the achievement of long-term goals and 3) whenever possible actively support national and international transformation across all activities.** Rather than focusing on the development of a stand-alone Paris Alignment strategy and dedicated tools or products, institutions must bring the changes needed in all strategic plans, objectives and business lines. This process will need to be informed whenever possible by national and international low-GHG climate-resilient pathways to achieve long-term goals (see section 3.4). Doing this in practice requires that financial institutions integrate Paris Alignment considerations across overarching strategies as well as operational frameworks and procedures.

**Financial institutions should focus initially on new transactions but should seize any opportunity they have to align existing portfolios in a manner that produces real impacts on emissions or resilience.**

- **New transactions**: These should be the principal initial focus of a Paris Alignment approach as the decisions on new activities present both opportunities to contribute to long-term goals – as well as risks of locking in counterproductive actions.
- **Existing portfolio**: Decisions concerning existing portfolios should be tailored and prioritize management strategies that result in contributions to the long-term goals in the real economy. For example, institutions may need to go beyond divestment from activities "doing harm" to prioritize strategies that focus on the early retirement of assets, their conversion or adopt other engagement strategies with direct impact on emissions and resilience.

**FIGURE 2. STEERING FINANCIAL INSTITUTIONS' CLIMATE MAINSTREAMING APPROACHES TOWARDS PARIS ALIGNMENT**




*Source: I4CE after (Ian Cochran and Mariana Deheza 2017)*

**At the strategy level, a Paris-Aligned strategy must set overarching objectives to guide and incentivize operational teams and lay out the operational targets and performance metrics to assess progress to achieving the shared global goals laid out in Article 2 of the Agreement.** There is currently no single approach in use as financial institutions are today experimenting with approaches built on existing climate change strategies and metrics. They should be sufficiently linked to the policies, strategies and action plans – as well as accountability and reporting frameworks of the financial institution to be pertinent and actionable. However, objectives and targets should take into consideration that ultimately the alignment of the financial institution's portfolio is a means of supporting the 'alignment' of the real economy at the country level. It is important to underscore that it is not the alignment of the institution per se through the sum of its projects that is at stake; but rather how the institution best supports the low-GHG climate-resilient development in each country of intervention. As such, objectives and performance indicators tracking the contributions in relation to Paris Alignment should retain a focus at sectoral and country levels to ensure that positive contributions in one area are not masking negative contributions in another.

**At the operational level, financial institutions will need to develop and define the approaches and methodologies to assess ex-ante as part of decision-making processes the contributions of assets, projects or transactions to the three goals of the Agreement**. Assessment of the 'consistency' and 'contribution' of assets and activities is an essential component of alignment. Given the broad diversity of actors, assets and contexts that the concept of Paris Alignment refers to, there is no single set of metrics to do so**.** Emerging assessment approaches use quantified, qualitative metrics – or in some instances both. The assessment of assets and activities should take into consideration the three dimensions proposed by this paper of scope of action, time horizon of impact and scale of contribution across all three goals.

**As explored in following sections, the implications for scope of action, scale of contribution and time horizon of impact should be taken into account when developing institution-wide objectives and operational targets as well as performance and assessment metrics.** These will likely need to combine both quantitative and qualitative components to accurately capture and reflect the nuances of contributing to long-term Paris Alignment goals. This process will need to be informed whenever possible by national and international low-GHG climate-resilient pathways to achieve low-GHG, adaptation and resilience and financial flows goals.

## 4.2. A Comprehensive Scope of Action

**As discussed in Section 3, the Paris Agreement introduces significant changes in framing the 'scope' of climate action**. This change in scope includes the application of the three goals of the Agreement to all country Parties; the necessity of taking a country-level economy-wide focus; the need to look at individual actions in respect to the broader systems and value chains they affect; and the link between the climate and sustainable development agenda. This implies that a financial institution should screen all activities for contribution to low-GHG climate-resilient development; directly or indirectly support activities consistent with low-GHG climate-resilient development across all business areas and take into account impacts and influence on systems and the entire value chains, both at national and global levels.

### 4.2.1. Overarching Strategies: Aligning all activities and existing portfolios

**In aligning its strategy with the Paris Agreement, an institution will need to take into account how the 'scope' of climate action is framed by the Agreement**.

**First, financial institutions will need to integrate considerations linked to the three goals of the Agreement across all of their activities, business lines and whenever an opportunity exists to improve consistency of assets held across all portfolios.** However, the screening process will vary from one sector to another. In some instances, different sectors, subsectors, technologies or types of activities should be prioritized for attention – renewables, fossil fuels, protective infrastructures, etc. However, other sectors – such as investments in health and education infrastructure for example – may only undergo a minimal screening process and be qualitatively assessed in terms of their consistency with and contribution to low-GHG climate-resilient development. This may be limited to the level of energy efficiency, resilience to climate impacts, and opportunities to redirect further investments. For example, demonstration of the benefits of resilient building techniques and technologies can lead to shifts in local construction practices that could be further supported by local financing institutions trained to recognize and assess the associated added value.

**Second, Paris Aligned strategies should whenever possible be country-specific and consider both the direct impacts of individual investments, as well as indirect contribution to system-level changes.** Including the consideration of indirect impacts on systems will *in fine* ensure that the process look at individual actions in respect to the broader systems and value chains they affect. This systemic approach can be designed to support both

**TABLE 7. PRELIMINARY ASSESSMENT OF IMPLICATIONS OF CHANGES IN SCOPE FOR STRATEGIES AND ASSESSMENT APPROACHES**

| | Development of Institution-Wide Strategies | Implications for Ex-Ante Assessment Methodologies |
|---|---|---|
| **Application to Country Parties** | Consideration of contributions to national pathways to achieve the three long-term goals across all countries. | Assessment methodologies should be applied in all countries of interventions and be country-specific, potentially adapting and taking into consideration data availability. |
| **Sectors** | Consideration of the coherence of all activities with a low-GHG climate resilient pathway. | Assessment methodologies should be applied for all activities and be sector-specific. |
| **Positive and negative contributions** | Consideration of both actions with positive and negative contributions to achieving the common goals. | Assessment methodologies should address both contributions and counterproductive activities to achieving national and international climate goals. |
| **Action vs System/ Value Chain Focus** | Consideration of the systemic impact of activities. | Assessment methodologies should capture the impacts on systems and value chains. |
| **Links with Sustainable Development Issues** | Consideration of synergies and trade-offs with other Sustainable Development Goals. | Assessment methodologies should foster the maximization of synergies and minimization of trade-offs with other Sustainable Development Goals. |

*Source: I4CE*

emerging changes in existing systems or seek to initiate changes in practice and understand how activities will affect the development of value chains that contribute to the Paris Agreement goals. Determining how and when it makes the most sense to conduct this type of assessment will be important to make it both technically and operationally feasible due to potential transaction costs. The authors recognize that the ability today for financial institutions to do this will vary – particularly in the case of commercially-focused institutions and asset managers investing in global corporates across countries.

**Third, financial institutions should explicitly link Paris Alignment Strategies with the broader sustainable development agenda – particularly in the case of public financial institutions.** When considering both direct and indirect impacts of investments and activities, financial institutions should seek to contextualize all actions in relation to sustainable development and thus aim to maximize the synergies and limit trade-offs with other sustainable development goals. As described in Section 3.4, this can occur through the use of low-GHG, climate-resilient scenarios and pathways that are consistent themselves with the 17 SDGs.

### 4.2.2. Operational Frameworks and Procedures: Expanding the scope of assessment

**The change in Scope of Action related to the Paris Agreement implies that 'Paris-consistent' climate assessment methodologies should be applied to all assets and activities and take a broader range of information into consideration.** This will require the development of qualitative and quantitative metrics particularly around two areas:

- **Systems & Value Chains**: Assessing how assets and activities fit within broader systems and value chains will require information on both current systems, as well as on expectations of the changes needed in systems to achieve climate goals at the national and international levels. This will involve the use of sectoral analyses and country profiles across different time horizons using information from NDCs and long-term Strategies, among others (see section 3.4).
- **Links with Sustainable Development Objectives:** The scope of analysis should take into consideration information available concerning the SDGs – and more specifically any potential trade-offs to be minimized and synergies to be maximized. Ideally, the SDGs will be taken into consideration in the development of a country's NDCs, long-term strategies, certain scenarios and other documents.

## 4.3. A Long-Term Time Horizon to Guide Impact

**As discussed in Section 3, the Paris Agreement highlights the importance of long-term goals over short-term impacts.** Focusing on the efforts needed to achieve long-term objectives rather than the short-term milestones provides a more accurate indication of the effectiveness and efficiency of action. The three goals of the Paris Agreement will require a significant economic transformation and delaying action may increase the overall cost as well the risks of not achieving the long-term goals. Financial institutions should ensure that near-term actions contribute to the achievement of long-term goals. To this end, they should prioritize actions that are consistent with both near-term climate objectives and long-term goals and do not lead to lock-in or mal-adaptation. Furthermore, they should recognize that 'relative' reductions in emissions or increases in resiliency may be counterproductive to achieving long-term goals.

### 4.3.1. Overarching Strategies: Prioritizing actions In terms of their contribution to long-term climate goals

**A strategy aligned with the Paris Agreement must ensure the contribution of near-term actions to achieving long-term objectives.** Financial institutions should seek to ensure that their near-term objectives and strategies prioritize actions that contribute to achieving the long-term climate objectives cost-efficiently – and do not lead to the maximization of near-term outcomes that could lead to further GHG emissions lock-in or maladaptation. This will require financial institutions to develop qualitative or quantitative ways of assessing across all business lines how actions are consistent with and contribute to both near-term and long-term climate objectives and goals.

**Ideally, Paris Aligned strategies should use of near-term plans and long-term strategies and scenarios to identify how to best contribute to country-specific pathways**. As discussed in Section 3.4, a range of different tools can inform the national and international pathways to achieve the three goals. In terms of mitigation, short-term mitigation action plans will need to be contextualized within the framework of long-term decarbonization pathways. In terms of adaptation, connecting short- and long-term horizons is more difficult especially as there is uncertainty on the level of global warming societies should adapt to. Different approaches exist to integrate the long-term horizon in short-term decisions taking into account this uncertainty factor, either based on the vulnerability of projects 'bottom-up' or on climate change impact scenarios 'top-down'.[38] In both cases, the thresholds effects as well as assets lifespan need to be taken into consideration. Finally, assessments of how climate action is currently funded in countries – and estimates of future investment and finance needs can be useful to contextualize an institution's contribution to supporting the evolution of the financial architecture.

### 4.3.2. Operational Frameworks and Procedures: Extending the time horizon to assess impact

**Assessing activities for their relative level of 'coherence' or 'alignment' and contribution to the goals of the Paris Agreement could be seen to have two parts:** first, assessing activities against the near-term policy and economic scenarios (such as NDCs and national adaption plans) to determine whether actions are aligned with current national priorities – and ensuring that in turn these priorities are aligned with long-term objectives. Second, actions and

**TABLE 8. IMPLICATIONS OF CHANGES IN TIME HORIZON FOR STRATEGIC ALIGNMENT AND ASSESSMENT APPROACHES**

| | Development of Institution-Wide Strategies | Implications for Ex-Ante Assessment Methodologies |
|---|---|---|
| **Short-Term** | Consideration of the contribution/ hindrance of action towards near-term climate outcomes and, when sufficient, targets included in national near-term plans such as the NDCs. | Criteria and metrics will need to capture the contribution/hindrance of action towards short-term national targets that are consistent with long-term national and international climate policy objectives. |
| **Long-Term** | Consideration of mitigation actions against the long-term net-zero objective, and pathways to achieve it in each country, involving the use of forward looking and back-casting scenarios. Consideration of long-term climate change impacts. | Impact of mitigation actions should be assessed against the long-term net-zero objective, and the pathway to achieve it at both the country and international level (when appropriate). This may involve the use of forward-looking and back-casting scenarios.<br>Impact of adaptation actions should be assessed against near-term and longer-term needs and the influence on economies and societies over the longer-term. |
| **Connecting Time Horizons** | Rely when possible on the country-driven approach of the Paris Agreement to connect near-term and long-term time horizons. | Assessment methodologies should as much as possible rely on tools informing national pathways to achieve the long-term goals. Assessment criteria of action are to evolve over time and need to integrate the uncertainty associated to the process. |
| **Efficiency of Action** | Ensure that objectives do not lead to the maximization of near-term outcomes that could lead to further GHG emissions lock-in or maladaptation. Ensure assessment methodologies include safeguards to avoid counter-productive impacts of near-term action. | Base evaluations on estimates of how to optimize the long-term transformation of the economy at least cost. |

*Source: I4CE*

38 The IPCC AR5 presents two different approaches aiming to manage the uncertainty of future climate impacts. On one hand, with the 'predict-then-act framing', also known as 'top-down', *"climate or impact uncertainty is described independently of other parts of the decision problem"*. On the other hand, the 'assess-risk-of-policy' framing, also known as 'bottom-up' or 'context-first', "starts with the decision-making context". The IPCC notes that *"a 'predict-then-act' framing is appropriate when uncertainties are shallow, but when uncertainties are deep, an 'assess-risk-of-policy' framing is more suitable"* (IPCC 2014).

activities should be assessed with their coherence and potential to contribute to the different long-term pathways and economic scenarios for a country to achieve its long-term objectives (such as Long-Term Decarbonization Pathways - or when national pathways are deemed insufficient, available international long-term policy and diagnostic assessment scenarios (see Section 3.4)). However, these do not exist for all countries and the quality and sufficiency of these documents may imply that institutions will need either to rely on other existing official plans and documents, or to develop their tailored means of contextualizing their action within a country's low-GHG, climate-resilient development pathway.

**The long-term focus of the Paris Agreement goals requires that assessment approaches aim whenever possible to move from static to dynamic criteria integrating evolutions in both global and national long-term needs**. In turn, the assessment of the cost-effectiveness of actions should ideally be based on the efforts needed sector by sector, country by country to reach the shared long-term goals of the Agreement. As discussed in Section 3, taking into account the long-term goals can have a significant impact on decision making systems within financial institutions that focus on maximizing the cost effectiveness of GHG abatement or resilience to achieve an annual or near-term target. It is essential that the near-term institutional targets (whether annual or otherwise) are set in a manner to best contribute to achieving long-term goals.

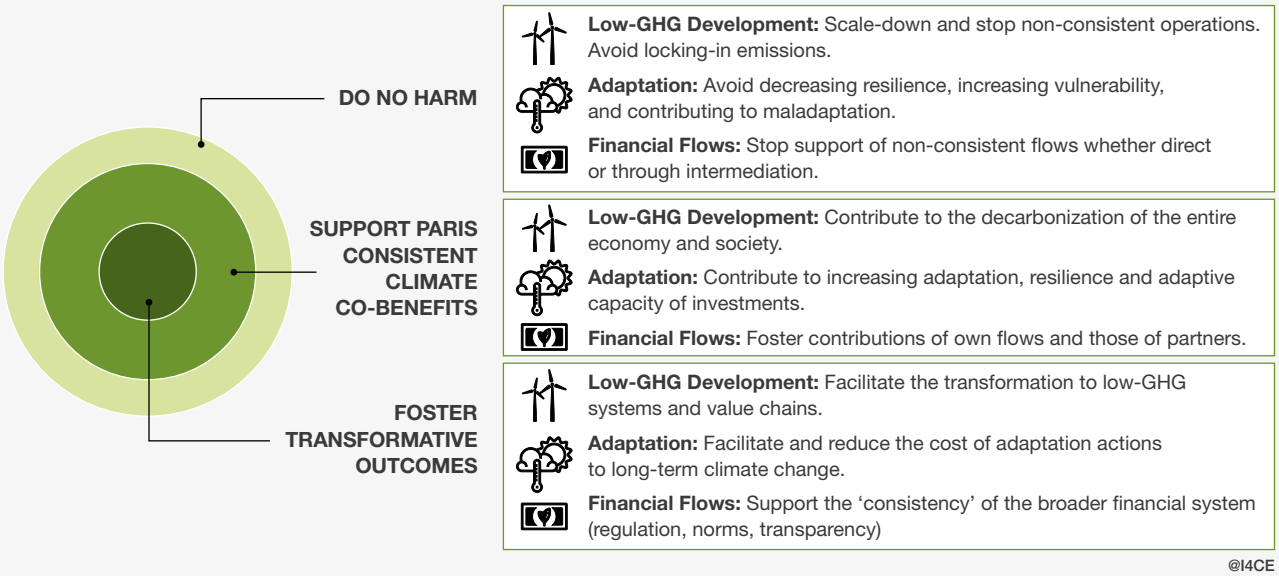
## 4.4. An Ambitious Scale of Contribution

**The high ambition of the Paris Agreement implies that efforts of actors to align their activities must be equally ambitious.** All actions should be adapted to maximize contribution to national and international low-GHG climate-resilient development pathways. Financial institutions should halt support for non-consistent activities and seek whenever possible to contribute to both the incremental and transformative changes needed. As illustrated in **Figure 3**, it will require that actions of financial institutions ensure that all new transactions and activities – and as opportunities present themselves to modify existing portfolios - 1) Do No Harm; 2) Support Paris-Consistent Climate Co-Benefits; and 3) Foster Transformative Outcomes.

### 4.4.1. Overarching Strategies: Three areas of action to meet the high ambition of the Agreement

**Achieving Paris Alignment requires that financial institutions set strategic orientations and overarching objectives at the level of ambition of the Paris Agreement that will in turn be integrated into the institution's decision-making and assessment procedures.** Aligning a financial institution strategy should start by identifying and defining how the institution can contribute to the long-term low-GHG climate-resilient development. Second, the strategy should aim to prioritize actions based on Paris-consistent climate co-benefits and transformational outcomes, taking into

**FIGURE 3. THE PARIS ALIGNMENT 'PORTFOLIO BULLS EYE': INCREASING AMBITION OF CONTRIBUTION OF ALL ACTIVITIES TO LOW-GHG CLIMATE-RESILIENT PATHWAYS**




*Source: I4CE*

account the mandate of the institution as well as other factors that affect ability or willingness to accept varying types of risk (see Section 5.2).

**Targets and performance indicators used to track progress in contributing to the objectives of a Paris Aligned strategy should aim to support the most ambitious contribution to national and international pathways**. Two types of targets and performance metrics can be identified, those focusing on tracking the volume or 'share of portfolio' dedicated to eligible actions, and those focusing on the outcomes of actions themselves. Striking a balance between these two types of targets and performance metrics can help financial institutions track how the overall portfolio is resulting in contributions to the long-term goals but do it in a manner that also indicates what the overall resulting contribution is itself.

There is currently no single definition of what in each country context constitutes a counterproductive activity, a Paris-consistent climate co-benefit, or a transformational outcome. Whenever possible, financial institutions should aim to identify nationally appropriate definitions taking into consideration national circumstances and available information on low-

**BOX 12. ADVANTAGES AND LIMITS OF THE DIFFERENT TYPES OF TARGETS AND PERFORMANCE INDICATORS TO ASSESS CONTRIBUTION**

### Volume and 'Share of Portfolio' Targets & Performance Indicators

**Financial institutions often use volume-based climate finance targets expressed as a total volume target or a relative share of their portfolios**. These targets are useful when seeking to scale up and track the direct contributions of financial institutions to achieving outcomes with climate co-benefits. However, financial institutions will most likely need to combine volume-based climate-finance tracking metrics with other metrics based on a methodology capturing 1) the volume of finance contributing to counterproductive or 'harmful' activities and 2) the volume of finance that is consistent with the Paris Agreement, but may not necessarily result in direct Paris-consistent climate co-benefits 3) and when possible the volume of finance contributing to transformative outcomes.

**The country pathway focus of the Agreement implies that financial institutions will need to adapt methodologies used to classify and track the share of their activities and increasingly focus on outcomes and impacts**. Currently, methodologies to track climate finance often use criteria that classify actions and financial flows based on positive-list eligibility criteria or definitions of climate co-benefits. However, these methodologies are often disconnected from the context of the country of intervention, and do not assess contribution to long-term outcomes, and impacts on systems and value-chain. These criteria will need to be adapted to take into account the national focus of Paris Agreement alignment – as well as the changes in terms of scope of action, scale of contribution and time horizon of impact.

### Outcome-Based Portfolio Targets & Performance Indicators

**As part of their climate strategies, a number of financial institutions have set outcome-based targets.** These targets are either focused on the aggregate impacts of the portfolio of an institution – such as GHG-related impacts (absolute footprint, relative emission reduction), or on scaling up a specific set of outcomes – such as volume of new renewable energy generation capacity, renovation of building stock, etc. Outcome-based targets can help set priorities for institutions in terms of their internal operations and the type of impacts that they wish to support when contributing to the Paris Agreement objectives.* However, these targets are often not sufficient to understand the overall 'alignment' of a financial institution's activities unless directly connected with the contribution to achieving national low-GHG climate-resilient pathways.

**Outcome-based portfolio targets may need to be paired with additional performance indicators to take into consideration the contribution of a given activity to national and international pathways.** Portfolio-level GHG emission targets and performance metrics – whether focusing on reducing a given volume of emissions, stabilizing emissions at a given level, or achieving GHG neutrality at the portfolio level – may not alone be able to inform whether a financial institution is contributing to the Paris-consistent pathways at the national or international level. Closer attention should be paid to absolute rather than relative GHG emission levels – and absolute levels must be contextualized to understand whether they are consistent with achieving national long-term objectives. Without being combined with other indicators, a global portfolio-level 'net-zero' targets could incentivize an institution to offset 'harm' in country by doing 'good' in another. Finally, the level of aggregation of outcome-based performance indicators is important to ensure the metrics capture an institution's contribution to different pathways. For example, aggregation may be needed to occur at the country and sectoral level to assess contributions to a national decarbonization pathway.

* For corporate actors, one of the principal outcome-focused methodologies is the Science-Base Target approach. This approach today makes sense to guide the actions and assist economic actors to set targets principally around greenhouse gas mitigation. However, it is potentially more applicable for real-economy actors given their direct relationship with emissions generated. The methodology of attribution of responsibility for emissions may be less applicable and useful for financial institutions. Furthermore, this approach does not seek to ground targets within specific national contexts. A methodology is currently being developed specifically for financial institutions and will be launched at the end of September 2019. https://sciencebasedtargets.org/

GHG climate-resilient development pathways. As discussed in Section 3.4, when this level of granularity at the national level is not available the use of international assessments, scenarios and plans may be used. The following section lays out how this may vary for financial institutions across the three goals of the Agreement.

### Contributions around the temperature goal

**Do no harm in terms of the temperature goal requires financial institutions to put into place a strategy preventing them from financing or supporting activities undermining national or global decarbonization trajectories**. Assessments of harm should consider the impacts of actions on long-term absolute emissions and the risks of 'locking-in' future emission levels incompatible with long-term goals. For example, while some energy efficiency actions may lead to near-term emissions, they may extend the life of emissive infrastructures when retirement and replacement may have led to more desirable climate-related outcomes.

**Positively contributing to the temperature goal requires pro-actively maximizing activities with Paris-consistent climate co-benefits that contribute to achieving a net-zero economy in the long-run**. Contributions can take the form of investments that directly result in emission reductions as well as incremental contributions to the roll-out and development and expansion in general of the low-GHG economy and value chains such as investments in renewable energy infrastructures, technological development and deployment or related service companies. As discussed previously, it is important to ensure that incremental GHG abatement activities do not inadvertently lead to the locking-in of emission levels that are not consistent with national long-term trajectories.

**A financial institution's Paris Aligned strategy should prioritize transformational low-GHG climate-resilient development to support the step-changes necessary for the decarbonization of the entire economy and society**. It could aim to support the evolution towards new decarbonized systems of a country's existing systems (energy production, transportation, buildings stock, agriculture) and their related value chains. This can include different types of actions and means of intervention depending on the type of institution – such as policy lending to support capacity building, policy support and client engagement, the creation of facilities to support investments in demonstration and pilot programs, investment in R&D activities with a focus on supporting the development of services companies and value chains. For example, the Green Climate Fund Board accepted a project aiming to mainstream renewable energy in Mauritius and reduce its reliance on fossil fuels by removing bottlenecks to investments in low-GHG development in two steps. The first step aims to strengthen the ability of the energy grid to use electricity generated by renewables and support institutional strengthening through the operationalization of the Mauritius Renewable Energy Agency (MARENA). The second step aims to establish a photovoltaic mini-power grid for Mauritius' principle outer island, Agalega to be replicated.[39]

### Contributions around adaptation and resilience

**Do no harm in terms of adaptation requires financial institutions to assess whether their actions may reduce resilience, increase vulnerability or lock in development pathways which would not be able to cope with impacts of climate change**. This will require all financial institutions to assess how underlying assets are and might be in the future exposed to both chronic and acute changes in climate impacts. A Paris aligned strategy would incite financial institutions to only take actions that do not reduce adaptive capacity and the resilience of counterparties. Thus, financial institutions should also avoid maladaptation – particularly in the case of development finance institutions.

#### BOX 13. THE WORLD BANK'S GUIDANCE ON TRANSFORMATIONAL IMPACTS

**The World Bank's guidance on concessional finance present a detailed framework ranging across four levels (high, moderate, low and no) on the transformational potential of mitigation and adaptation activities.** It includes within this definition: 1) High project expects to durably improve government processes, economic incentives, or price signals; significantly improve access to finance for long-term, low-carbon, or resilience projects; or reduce the cost of technologies. 2) Program or project expects to provide important foundations for future investments, programs, or projects that reduce emissions or increase resilience; build technical and institutional capacity that will facilitate future action.

The two second categories of 'low and no potential' correspond to what in this paper would classify as 'incremental' contributions: 1) low: the program or project helps build momentum, without affecting the basic incentives or costs in the country (e.g., a large-scale renewable power plant in a country where a similar plant already exists or a large flood management project) and 2) None: The program or project may reduce emissions or increase resilience but does not trigger any structural change or improvement in incentives or barriers to implementation for future projects (e.g., a small renewable power plant or a small drainage project).

*Source: Authors based on WBG 2018*

39 PROJECTFP033 "Accelerating the Transformational Shift to a Low-GHG Economy in the Republic of Mauritius"

**Positive contributions to the adaptation goal require supporting activities that increase adaptive capacity and resilience and other adaptation co-benefits in line with low-GHG climate-resilient sustainable development trajectories**. Preferred options should prioritize robustness, reversibility, adaptability of decisions or resilience capacities. Activities can include those contributing to the resilience of assets, individuals and economies to short-term impact of climate change and/or to the adaptation of economies over the longer-term. Actions contributing to adaptation could include investments in both 'hard' infrastructures and investments to transform existing systems, as well as 'soft' investments and forms of support to change governance in specific sectors such as land-use planning and other policy areas. These activities are context-specific and need to be considered with regards to local vulnerability and adaptation planning. Assessing contributions around adaptive capacity and resilience raises the issue of the acceptable level of risk for a given operation or transaction. For some very critical assets or activities, this level might be very low. In this case a positive contribution implies to prepare for a range of possible future climates, including worst case/high-end scenarios. Some level of risk might also be deliberately accepted. To ensure that no investments are at cross purposes with adaptation, current research on the alignment of financial institutions with the Paris objectives promotes a systematic integration of these adaptation considerations in financial institutions operations through process-based approaches (Larsen *et al.* 2018).

**For adaptation, transformative impacts could foster either the transformation of the economy and society in a given country when it is necessary or its ability to respond to the varying levels of possible long-term changes in the global climate**. The World Bank defined transformational resilience projects as contributing to *"make it significantly easier and cheaper to adapt to climate change and reduce climate and disaster risks in the future"* (WBG 2018). It should be noted that in some specific cases, incremental adaptation, through adjustments of existing systems to future climate will not be possible and adaptation to future climate change will require the transformation of systems, economies or societies. As an example, the GCF Board accepted a project aiming to promote resilient agricultural practices in the face of changing climate patterns, by integrating climate change risks into water and land management practices that affect smallholder farmers and reduce the risk and impact of climate change induced landslides during extreme events that disrupt market access.[40]

### Contributions to ensure the consistency of financial flows

**Doing no harm in terms of Article 2.1(c) implies that financial institutions take steps to ensure that beyond their direct activities they will not support inconsistent financial flows through their financial intermediaries or other counterparties**. Many financial institutions are involved in intermediary lending and a range of secondary financial transactions – including the management of in-house funds and asset portfolios. A Paris Alignment Strategy should seek to ensure that intermediated and secondary financial activities – whether conducted by themselves or through counterparties – do not support financial flows inconsistent with the achievement of the long-term climate objectives. This will, in many instances, require increased transparency vis-a-vis counterparties on the direct and indirect impacts of their activities.

**A Paris Alignment Strategy should support whenever possible positive contributions in terms of Article 2.1(c) that foster the redirection and scaling up of the flows of counterparties towards Paris-consistent climate co-benefits**. Depending on the scope of intervention of financial institutions, this could involve developing technical capacity components of intermediated lending programs, actively prioritizing underwriting and syndicated lending for projects and activities with Paris-consistent climate co-benefits or supporting counterparties to implement internal policies prioritizing such impacts.

**Fostering transformational action supporting the financial flows goal implies developing and deploying financial instruments – as well as supporting the needed evolutions in the financial system itself.** The strategic use and development of financial instruments and approaches that can overcome a number of the barriers that have been identified to implement national low-GHG climate-resilient development pathways is an essential part of achieving long-term objectives. Discussions today focus principally on subjects such as: risk sharing mechanisms and blended finance; upstream / early stage access to capital; access to long-term capital; intermediated financing; and other gaps in respective markets. While many of these approaches and tools may not support transformational investments, their development, testing and scaling-up is transformational until they reach scale. Staying on the forefront of emerging practices and supporting the development of financial tools and associated processes, technical assistance and counterparty engagement can help redirect and foster the flows of institutions themselves as well as partners. Furthermore, actively contributing to the changes needed in the financial system and financial practice - particularly in terms of transparency & disclosure and supervision, risk

40 PROJECTFP107 "Supporting climate resilience and transformational change in the agriculture sector in Bhutan"

management, and system stability is needed.[41] This may entail taking into account the 'financial ecosystem' both locally and internationally to see whether climate-aligned financial products are present; or for mandated institutions more generally whether the investment and finance instruments, institutions and regulation are in place to support the alignment of financial flows. As an example the GCF Board accepted and qualified as transformational a program providing loans and technical assistance to create self-sustaining markets in energy efficiency, renewable energy and climate resilience in 17 developing countries.[42]

### 4.4.2. Operational Frameworks and Procedures: Contextualizing impacts and outcomes of underlying assets and counterparties

**The assessment of the scale of contribution to the goals of the Paris Agreement will require metrics and decision-making tools that can contextualize the impact and outcomes of actions compared with national and international low-GHG climate-resilient development pathways.** A key component will be to root this assessment within the context of the real economy impacts of actions – taking into consideration whenever possible contributions to the national development pathways.

**Different approaches have been proposed concerning how to conduct this assessment, some combining multiple types of metrics.** One of the most promising types of approaches involves using 'decision-tree' based analysis to assess whether activities are aligned or misaligned. This approach developed by Germanwatch and NewClimate Institute recognizes the conditional nature of many activities in terms of their contribution to achieving – or working against – the objectives of the Paris Agreement (German Watch & New Climate Institute 2018). The European Commission also promotes the use of decision-trees to ensure contribution to near-term objectives does not undermine long-term objectives (EU technical Expert Group on Sustainable Finance 2019). This same approach could be further developed to help identify those aligned actions that equally have the potential for transformative outcomes compared to incremental climate co-benefits.

**However, there is no one-size-fits-all solution and each financial institution will need to determine transparently, taking into consideration its mandate and areas of operation, the answers to the following questions**:

- How to dynamically define and assess across all activities and value chains what is:
  - **Harm**?
  - **Contribution**?
  - **Transformational**?
- What type of metrics provides the most pertinent insights depending on business lines, sectors and data availability?
  - **Qualitative**: Positive / Negative Lists (by sectors, subsectors, technologies, etc.); ESG like check lists
  - **Quantitative**: GHG emissions (net, absolute); Performance criteria (emission, resilience); Carbon Budgets
  - **Exposure**: Financial exposure; Physical risk exposure.

**TABLE 9. IMPLICATIONS OF CHANGES IN SCALE OF AMBITION FOR ASSESSMENT APPROACHES**

| | Development of Institution-Wide Strategies | Implications for Ex-Ante Assessment Methodologies |
|---|---|---|
| **Scale-down counterproductive activities and do no harm through new actions** | Take pertinent action to scale down counter-productive activities and ensure the strategy would not promote new activities hindering the achievement of climate objectives. | Assessment methodologies need to:<br>• Compare project outcomes with long-term low-GHG climate-resilient development pathways and acceptable levels of resilience and physical risk.<br>• Identify activities locking-in emissions or contributing to maladaptation at the local level. |
| **Prioritize actions with Paris-consistent climate co-benefits and transformative outcomes to achieving goals** | Prioritize actions based on the level of Paris-consistent climate co-benefits within mandate and acceptable thresholds of risk-weighted returns. | Assessment methodologies need to identify and prioritize activities based on the level of direct and indirect Paris-consistent climate co-benefits. These will require qualitative criteria to assess the potential for different actions to have systemic impacts on market development, underlying systems and value chains. |
| **Rooted in National Contexts** | Consider and support national strategies whenever possible. | Assessment criteria need to be context-specific and provide information on the contribution to both near-term and long-term national strategies. |

*Source: I4CE*

41 While there are extensive discussions today on how specific components of financial regulation could be improved to foster climate-related objectives, there are limited comprehensive overviews of what this could imply as a whole. To fill this gap, the Worldwide Fund for Nature Germany (WWF) and Frankfurt School – UNEP Collaborating Centre for Climate & Sustainable Energy Finance (FS-UNEP Centre) have developed a financial regulation performance tracker as a means of discussing this issue. The methodology underlying the "Finance Fit for Paris" – tracker (3fP) aims at assessing the adequacy of financial regulations and policies in a given jurisdiction to support the low carbon transition and greening of financial markets. https://www.3fp-tracker.com/

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# 5. Ways Forward: Building on Existing Practice and Overcoming Internal & External Factors

**KEY TAKEAWAYS FROM THIS SECTION**

- Financial institutions are not starting from zero and can build on existing climate mainstreaming and emerging climate risk management approaches.
- However, while addressing many similar issues, these approaches do not have the same objective nor address the same needs as alignment with the Paris Agreement to rapidly scaling down 'harmful' activities and scaling up the positive contributions to the long-term low-GHG climate-resilient development that is at the heart of Paris Alignment.
- Nevertheless, these existing approaches can serve as a basis or be adapted to take into account the changes around scope, scale and time horizon introduced by the Paris Agreement.
- The scale of contribution of a financial institution is connected to a number of external factors that should be engaged with, but cannot be seen as barriers to act today.
- These include on one hand, the mandates from shareholders and other sources of formal oversight, and on the other hand the credible and ambitious level of action taken by country Parties and other economic actors to create low-GHG, climate-resilient development models to finance.
- Financial institutions seeking to align their activities with the Paris Agreement objectives should recognize and take into consideration external factors to actively work to bring about the needed changes to further contribute to the Paris Agreement objectives.
- Fully aligning the activities of a financial institution with the Paris Agreement will take time as in some cases it implies significant shifts in business areas and internal expertise. Nevertheless, institutions that have committed to align should transparently demonstrate both progress as well as where further efforts will be required through ambitious timelines and roadmap to align all their activities.

**The Paris Agreement has mandated governments to take the ambitious actions necessary to rapidly put countries on low-GHG climate-resilient development pathways.** This poses a number of challenges both for countries themselves, as well as for the economic and financial actors who are committing to align their activities and support this process. Alignment with the objectives of the Paris Agreement will not be an easy or simple process for most economic actors as in many instances it will require changes in terms of both business models and mandates and imply a number of technical challenges.

**A commitment to 'Paris Alignment' is a commitment to adopt the high ambition embodied in the Paris Agreement.** But, the scale of contribution and the speed of the alignment process of a financial institution is connected to a number of external factors that should be identified, understood and addressed as much as possible. These include on one hand, the mandates from shareholders and other sources of formal oversight, and on the other hand the credible and ambitious level of action taken by governments and other economic actors to create low-GHG, climate-resilient development models to finance. Financial institutions seeking to align their activities with the Paris Agreement objectives should recognize and take into consideration these external factors, but also actively work to bring about the needed changes to further contribute to the Paris Agreement objectives.

**It is important to note that financial institutions are not starting from zero and can rely on existing activities and approaches to integrate or mainstream climate change internally.** Aligning with the Paris Agreement requires systematically integrating the contribution to the Paris Agreement objectives. This may require substantial changes in institutional organization, culture, instruments, assessment tools, and incentives. Moving forward, financial institutions can rely on existing climate mainstreaming and climate risk management approaches and adapt them taking into consideration the three dimensions of the Paris Agreement framework for action. However, while addressing many similar issues, these approaches do not have the same objective nor address the same needs as alignment with the Paris Agreement. Paris Alignment often requires going a step further than climate mainstreaming or risk management to committing and rapidly scaling down non-consistent financial flows and rapidly scaling up activities with incremental and transformational impacts. Adapting existing approaches implies that financial institutions take into consideration the changes in scope of action, scale of contribution and time horizon of impact presented in Section 3.

# 5.1. Climate Mainstreaming & Climate Risk Management: A Foundation for the Paris Alignment Approaches of Financial Institutions

## 5.1.1. Adapting Climate Mainstreaming Approaches

**Many of the challenges and actions needed to align with the Paris Agreement are part of the growing body of practice on 'climate mainstreaming'.** The concept of climate 'mainstreaming' refers to the integration of climate-related considerations across all activities of an institution. Taken to its fullest extent, mainstreaming of climate change or the transition to a low-GHG climate-resilient development model implies both formal and informal integration into all activities of a given financial institution and *"implies a shift from financing climate activities in incremental ways, to making climate change – both in terms of opportunities and risk – a core consideration and a "lens" through which institutions deploy capital"*. This approach implies that climate change is taken into account across all finance activities – as well as development plans, country and regional strategies, and institutional policies – is understood and analyzed.[43]

**Both public and private financial institutions have moved forward with the concept of mainstreaming climate change across their activities**. In 2015 at COP21, a coalition of public and private financial institutions launched the Climate Action in Financial Institutions or 'Mainstreaming' Initiative built around five voluntary Principles for Climate Mainstreaming supported by 44 financial institutions at the highest level of management.[44] The pertinence of climate mainstreaming for Paris Alignment has already been confirmed by the use of the 5 Voluntary Principles for Climate Mainstreaming by both the group of MDBs and the IDFC in defining the building blocks of their Paris Alignment approaches (see **Box 9**).

**The Principles for Climate Mainstreaming present a foundation to guide the process of aligning all activities with the Paris Agreement, but financial institutions must go further to take into account the ambition and framework of the Paris Agreement.** There is a growing body of emerging practice on how financial institutions are committing to climate strategies, managing climate risks, promoting climate-smart objectives, improving climate performance and accounting for climate action.[45] Many of these practices can be adapted and scaled-up to support Paris Alignment efforts moving forward. However, current mainstreaming approaches do not specifically aim to contribute to the Paris Agreement objectives and thus may not address all three dimensions of scope of action, time horizon of impacts and scale of contribution implications of Paris Alignment. Nevertheless, emerging practices for mainstreaming climate change can act as a foundation to ensure that Paris Alignment considerations are disseminated across the institution both at the strategic and operational level.

## 5.1.2. Adapting Emerging Climate Risk Management Approaches

**The importance of identifying and managing the climate-related changes in economic and regulatory environments is increasingly seen as part of core risk management practice for financial institutions.** As a first step towards empowering financial institutions in assessing, managing and disclosing their exposure to climate risks, the G20's Financial Stability Board put in place the Task Force on Climate-Related Financial Disclosures (TCFD), which released recommendations in 2017.[46] The creation of the TCFD was a clear recognition by one of the principal governing bodies of the financial sector that steps will be needed for financial institutions to better take climate change into account. Aiming to foster the disclosures of climate transition and physical risks and opportunities by companies, the TCFD has drawn the attention of the financial sector on why and how to assess and manage these risks and opportunities. Beyond climate risks and opportunities assessment, the TCFD provides a broader framework for financial and non-financial disclosures on climate change. In June 2017, the TCFD presented its final recommendations in four different areas: governance, strategy, risk management, and metrics and targets and presented a broadly accepted climate risks typology.

43 In 2018, I4CE published an extensive overview and presented a set of 'building blocks' addressing many of the issues to be taken into consideration when 'mainstreaming' climate change across the operations of institutions. This report looked principally at development finance institutions, but nevertheless presented examples relevant for all financial institutions. (Ian Cochran and Mariana Deheza 2017)

44 For more information on the Climate Action in Financial Institutions Initiative, see https://www.mainstreamingclimate.org/initiative/

45 The Climate Mainstreaming Practices Database gathers case studies written and submitted by supporting institutions of the Climate Action in Financial Institutions Initiative. It provides an overview of how they are integrating climate change in their operations. See the database: https://www.mainstreamingclimate.org/climate-mainstreaming-practices-database/

46 Put in place by the G20's Financial Stability Board the Task Force on Climate-Related Financial Disclosures was composed of 32 international experts mandated to *"develop voluntary, consistent climate-related financial risk disclosures"*. The TCFD was announced at the end of 2015 and presented its final recommendations in June 2017. These recommendations have been broadly taken up by other initiatives and promote disclosures in four different areas: governance, strategy, risk management, and metrics and targets. As of June 2019, over 785 organizations have expressed their support for the TCFD.

**BOX 14. THE 5 VOLUNTARY PRINCIPLES FOR CLIMATE MAINSTREAMING**

The Principles intend to make climate change considerations a core component of how financial institutions conduct business, parallel to and in addition to the necessary development of appropriate regulatory and enabling environments at the domestic and international levels. Based on practices implemented by many types of financial institutions worldwide over the last two decades, the Principles aim to support and guide financial institutions moving forward in the process of adapting to and promoting climate smart development.

1. **COMMIT to climate strategies:** Be strategic when addressing climate change. Institutional commitments to address climate change are demonstrated by senior management leadership, explicit strategic priorities, policy commitments and targets, which allow for the integration of climate change considerations within a financial institution's lending and advisory activities over time.
2. **MANAGE climate risks:** Be active in understanding and managing climate risk. Assess your portfolio, pipeline and new investments. Work with clients to determine appropriate measures for building resilience to climate impacts and improving the long-term sustainability of investments.
3. **PROMOTE climate smart objectives:** Promote approaches to generating instruments, tools and knowledge on how best to overcome risks and barriers to investment in low carbon and resilient investments. This may include mobilizing and catalyzing additional financing and developing specialized financing vehicles/products, such as green bonds, risk sharing mechanisms or blended finance. Engage clients and other stakeholders (e.g. rating agencies, accounting firms) on climate change risks and resilience, and share lessons of experience to help further mainstream climate considerations into activities and investments.
4. **IMPROVE climate performance:** Set up operational tools to improve the climate performance of activities. Financial institutions track and monitor indicators tied to climate change priorities, including GHG reporting, lending and advisory volumes supporting green investment, climate related asset allocations, and the institution's own climate footprint.
5. **ACCOUNT for your climate action:** Be transparent and report, wherever possible, on the climate performance of your institution, including increases in financing of clean energy, energy efficiency, climate resilience or other climate-related activities and investments. Be transparent and report, wherever possible, the climate footprint of the institutions' own investment portfolio, and how the institution is addressing climate risk.

*Source:* https://www.mainstreamingclimate.org/5-principes/

**The recommendations of the TCFD are being used as a starting point for the integration of climate change, particularly by commercial financial institutions and represent an important part of climate mainstreaming approaches**. The recommendations and guidance of the TCFD provide a useful framework for financial institutions – especially commercial financial institutions - to identify, disclose and develop management strategies to address climate-related physical and transition risks. This has in particular been useful to help guide commercial actors to take these risks into account and disclose the type of information that financial actors need, in turn, to evaluate potential exposure to these risks.

**However, the improved management of these risks does not necessarily imply that financial institutions will be 'Paris Aligned'.** Managing climate risks may lead to a decrease in activities exposed to physical climate risks or to future stranded assets. Ensuring that the improved management of climate-related risks results in Paris Alignment depends on whether financial institutions choose to 1) manage these risks in the near-term and 2) deploy risk management strategies that lead to real-economy impacts. For example, a risk management strategy that prioritizes divestment from fossil fuel assets – rather than early modification or retirement of assets – may have little impact on actual emissions with a limited contribution to achieving climate-related goals. As such, risk management approaches would need to be adapted to lead to either real reductions in emissions, increases in resilience the redirection of financial flows from at-risk activities and assets to activities and assets that do not undermine and/or have direct and indirect contributions to the three goals of the Agreement. Financial institutions that are principally approaching Paris Alignment from a climate risk perspective must question their strategies to determine "At what point does managing risks lead to increasing direct and indirect contributions to long-term low-GHG climate-resilient development"?

**TABLE 10. OVERVIEW OF CLIMATE-RELATED RISKS**

| Transition Risks | | Physical Risks |
|---|---|---|
| **Policy and legal** | **Markets** | **Acute** |
| • Increased pricing of GHG emissions<br>• Enhanced emissions-reporting obligations<br>• Mandates on and regulation of existing products and services<br>• Exposure to litigation | • Changing customer behavior<br>• Uncertainty in market signals<br>• Increased cost of raw materials | • Increase severity of extreme weather events such as cyclones and floods<br>*(causing damages on facilities, reduction or disruption in production capacity…)* |
| **Technology** | **Reputation** | **Chronic** |
| • Substitution of existing products and services with lower emissions options<br>• Unsuccessful investment in new technologies<br>• Upfront costs to transition to lower emissions technology | • Shift in consumer preferences<br>• Stigmatization of sector<br>• Increased stakeholder concern or negative stakeholder feedback | • Changes in precipitation patterns and extreme variability in weather patterns<br>• Rising mean temperatures<br>• Rising sea levels<br>*(causing damages on facilities, increased operating costs, impacts to workforce management and planning…)* |

*Source: Nicol et al. 2017 after TCFD 2017*

## 5.2. Internal Factors: Taking into Consideration Differences between Impact-Orientated and Commercial Business Lines

**The scale of contribution of financial institutions will vary as institutions may be involved in different types of business lines that have impact-oriented objectives or more commercial objectives**. The alignment of financial institutions, no matter whether they are impact- or commercially-oriented should seek to maximize their contribution to the achievement of the Paris Agreement goals by scaling down counterproductive activities and doing no harm as well as scaling up positive contributions to achieving long-term goals at national and international levels. However, the scale of this contribution will vary from one institution to another.

**First, the institution's valuation of non-financial returns on investments and finance may influence overall levels of positive contributions.** The two types of business lines may use different metrics to assess value and make decisions. In general, both sustainable development impact- and commercially-oriented business lines assess activities using risk-weighted financial returns as a key metric. However, actors involved in impact-focused business lines – particularly those with a mandate from stakeholders such as development finance institutions– may also take into consideration non-financial impacts. As such, actors involved in impact-focused business lines may be in a position to take into consideration non-financial outcomes as per their mandates. They would most likely have a high level of overall positive contribution to the Paris Agreement objectives. Conversely, those financial institutions principally involved in commercial activities will prioritize positive contributions when perceived risk-weighted returns of incremental activities fit defined limits.

**Second, a financial institution's relative risk-appetite or capacity to accept relatively high levels of risk for lesser financial returns can influence both overall levels of positive contribution, as well as the relative shares of incremental and transformational outcomes.** An assessment of risk-weighted financial returns is often at the heart of an institution's decision-making process. Financial institutions involved in impact-oriented business lines may be in a position to accept activities that have relatively higher level of risk compared to returns – as often in the case of climate-related investments. As a result, they may be willing to accept both lesser returns and a higher level of risk if the activity fits within their mandate. As transformational projects are often perceived as riskier and may result in non-financial benefits, these actors will most likely be more active in supporting activities with transformational impacts.

**Therefore, there may be substantial variations in the relative levels and share of positive incremental and transformative activities supported by financial institutions**. Nevertheless, the high level of ambition embodied within the Paris Agreement requires that institutions that seek to be aligned with its goals prioritize both incremental and transformational actions whenever feasible given their relative appetite for non-financial returns and the thresholds of risk-weighted returns.

## 5.3. External Factors Influencing the Paris Alignment of Financial Institutions

**The scale of contribution of a financial institution is also connected to a number of external factors that should be engaged with, but not seen as barriers to act today**. While financial institutions, particularly publicly-mandated financial institutions, have the capacity to support and influence them, success will require that it is accompanied by credible action from both governments, as well as wider economic actors.

### 5.3.1. Changes in Mandates (public or private) to Foster Alignment

**The ability of financial institutions to act on climate change and align their strategies with the Paris Agreement is linked first of all by their mandate and strategic objectives.** On one hand, publicly-mandated financial institutions are mandated to support the implementation of government policy, often tasked with assisting in the creation of new markets and filling different market financing gaps (Cochran *et al.* 2014; OECD 2015, 2016). On the other hand, commercial institutions are mandated by different governance structures representing both private commercial interests – as well as different forms of fiduciary duty to ensure the appropriate management of capital and assets under management (TCFD 2017; NGFS 2018; OECD 2016).

**The mandate of publicly-mandated finance institutions and agencies, donors and mandating governments should formally include the long-term climate goals as key components of an institution's objectives.** Government ministries, agencies and other bodies set the mandates, priorities and the rules by which mandated financial institutions function. To be aligned with the Paris Agreement objectives, public financial institutions need a clear and formal mandate setting the ambition of their strategy (including both a mandate to do no harm as well as scaling-up direct positive investments and transformative outcomes) and guidance on how they should aim to contribute to the three goals of the Paris Agreement– including the acceptable levels of risk to be taken, means of intervention, as well as the types of outcomes to prioritize.

**The mandate of commercial financial institutions should recognize that aligning strategies with the Paris Agreement is increasingly seen as consistent with and part of fiduciary duties in light of climate-related risks and opportunities**. In many cases, commercial financial institutions are seen as having a legal fiduciary duty to maximize the returns to investors that often have a short-term time horizon. The effective development and implementation of a Paris Alignment approach can allow institutions to meet fiduciary duties through the management of both physical and transition climate risks (Nicol *et al.* 2017). In June 2019 the Canadian Expert Panel on Sustainable Finance[47] included in its final recommendations to *"issue a public statement from the Minister of Finance articulating that the consideration of climate factors is firmly within the remit of fiduciary duty"* (Expert panel on sustainable finance 2019).

### 5.3.2. Changes in Government Policy and Clear Commitments to make the Low-GHG, Climate-Resilient Development Economically Viable

**The ability of financial institutions to successfully implement a Paris Alignment process will be dependent in part on the ambition and progress of countries and other economic actors to act ambitiously.** Countries are essential in creating the policy and investment 'environments' that lead to the development of projects, programs and other activities. A strong commitment to placing their economies and societies on a sustainable, Paris Agreement consistent trajectory is the foundation of achieving sustainable development and climate objectives (OECD 2015; NCE 2014; The New Climate Economy 2018). Climate finance and investment-related discussions for the last decade have touched on the lack of 'project pipelines' and the financial viability of investments aligned with long-term climate objectives. As such, it is essential that countries act rapidly to put into place the regulatory and economic policies needed to disincentivize and halt investments in emission-intensive, non-resilient development and prioritize and make low-GHG, climate-resilient development pathways economically feasible and sound (OECD 2015; NCE 2014; The New Climate Economy 2018).

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**The Alignment process will probably be resource- and time-intensive as in some cases it will imply significant shifts in business areas and internal expertise and will evolve and progress over time.** Institutions that have committed to align should transparently demonstrate both progress as well as areas where further efforts will be required. Committing to an ambitious timeline and roadmap to align activities with the Paris Agreement can both ensure that commitments are taken as credible – as well as signal to markets intentions to reallocate capital and priorities.

47 The Canadian Expert Panel on Sustainable Finance is an industry-based panel appointed by government of Canada. https://www.canada.ca/en/environment-climate-change/services/climate-change/expert-panel-sustainable-finance.html

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