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in the Paris Agreement



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Disclaimer

This technical paper explores potential benefits that countries can gain from implementing climate transparency arrangements and products from it, including operationalizing information systems to track and report progress in adaptation and mitigation action, as well as progress in means of implementation. It does not aim to provide any standardized guidelines to the current and future reporting requirements under the UNFCCC.

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Authors

Fernanda Alcobé, Richemond Assié, Jasmin Blessing, Moussa Diop, Lorenzo Eguren, Carlos Essus, Oscar Zarzo Fuertes, Helena Heuckmann, Carine Ingabire, Temuulen Murun, Mijako Nierenkoether, Illari Zulema Aragon Noriega, James Lwasa Fredrick Ouma, Eleni Patra, Mirella Salvatore, Julie Teng, Felipe Gómez Villota, Karen Van Der Westhuizen, Henning Wuester, James Vener.

Contributors

Vivek Adhia, Varun Agarwal, Maria Eugenia Bedoya, Katerina Cerna, Gemma Norrington-Davies, Papa Lamine Diouf, Nino Gogebashvili, Ashwini Hingne, Tugba Icmeli, Jigme, Timothée Kagonbe, Kakha Lomashvili, Noura Mohamed Lotfy, Samuel Mabena, Sandra Motshwanedi, Gloria Namande, Lukas Peiler, Kim Schmidt, Georg Schmid, Sven Schuppener, Atik Sheikh, Alexandra Soezer, Wala Toumi, Tobias Vosen, Tania Zamora.



Editors

Helen Plume, Jigme.

Design/Layout

undstoffers Designbüro

Photo credits/sources

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List of abbreviations and acronyms

BR	biennial report
BTR	biennial transparency report
BUR	biennial update report
CO ₂	carbon dioxide
ETF	enhanced transparency framework (under the Paris Agreement)
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GHG	greenhouse gas
ICAT	Initiative for Climate Action Transparency
iMRV	integrated monitoring, reporting and verification
IPCC	Intergovernmental Panel on Climate Change
ITMO	internationally transferred mitigation outcome
JCM	joint crediting mechanism
MEL	monitoring, evaluation and learning
MPGs	modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement
MRV	measurement, reporting and verification
NAP	national adaptation plan
NC	national communication
NCCRD	National Climate Change Response Database of South Africa
NDC	nationally determined contribution
OECD	Organisation for Economic Co-operation and Development
PATPA	Partnership on Transparency in the Paris Agreement
SDG	Sustainable Development Goal
UNFCCC	United Nations Framework Convention on Climate Change
UNDP	United Nations Development Programme

1. Introduction

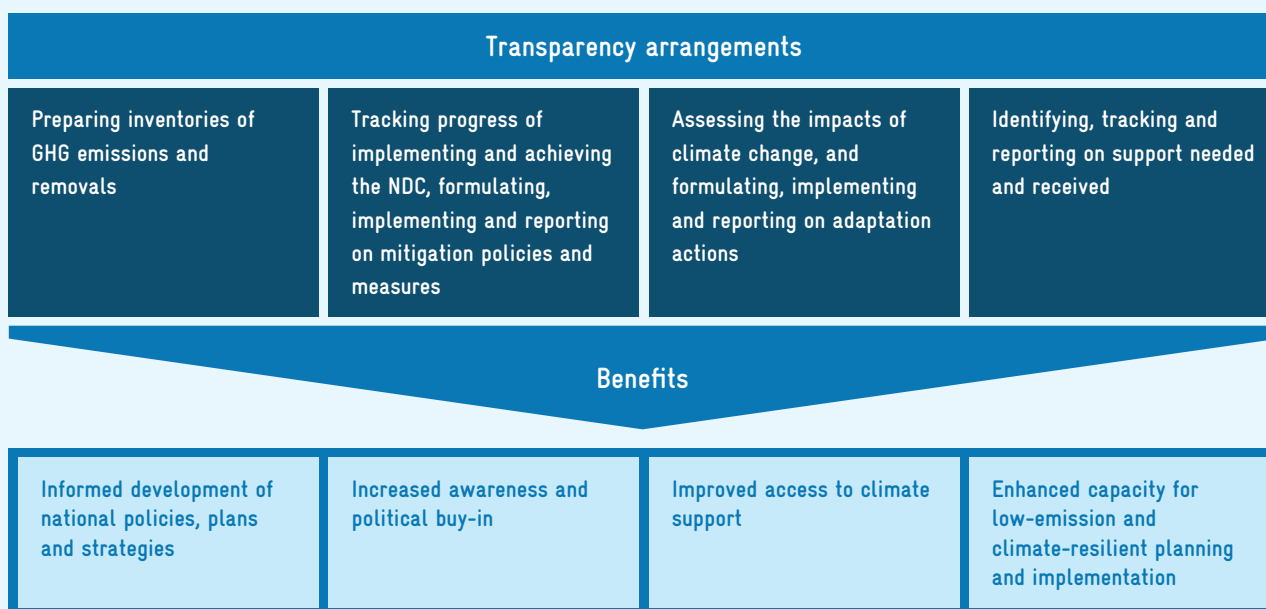
This paper aims to highlight the benefits that robust and self-sustained transparency systems can bring to governments, beyond fulfilling current and future reporting requirements under the United Nations Framework Convention on Climate Change (the Convention) and the Paris Agreement. It also aims to reach climate change policymakers and practitioners from developing country Parties and enhance the reader’s understanding of these benefits, which include (see also figure 1):

- Better information for policy development and decision-making;
- Improved access to carbon markets and climate finance;

- Increased awareness of and political buy-in for climate action;
- Strengthened technical capacities for developing and implementing policies, plans and strategies for low-emission and climate-resilient development, as well as for long-term reporting.

In addition, the paper provides examples from developed and developing country Parties to explain and showcase how increased efforts to allocate human and financial resources for climate transparency can improve political commitment and enhance climate ambition.

Figure 1: National benefits arising from transparency arrangements under the Convention and the Paris Agreement



2. Setting the scene

The Paris Agreement, under its Article 2, aims to hold the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, increase the ability to adapt to the adverse impacts of climate change, and make finance flows consistent with a pathway towards low greenhouse gas (GHG) emissions and climate-resilient development.¹

Parties to the Paris Agreement committed to prepare, communicate and maintain nationally determined contributions (NDCs) and to strive to communicate long-term low-emission development strategies under Article 4; to engage in adaptation planning processes under Article 7, which provides several options for submitting and updating adaptation communications; and to regularly report on their progress under the enhanced transparency framework (ETF) established under Article 13 (see figure 2).

The 2022 NDC Synthesis Report² states that assuming full implementation of the NDCs, including all conditional elements, the best estimate of peak global mean temperature in the twenty-first century (projected mostly for 2100 when temperature continues to rise) is in the range of 2.1–2.4 °C. The Summary for Policymakers of the Synthesis Report of the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) identifies that “there are gaps between projected emissions from implemented policies and those from NDCs and finance flows fall short of the levels needed to meet climate goals across all sectors and regions”.³ The Summary for Policymakers also states that “rapid and far-reaching transitions across all sectors and systems are necessary to...secure a liveable and sustainable future for all”, highlighting that “feasible, effective, and low-cost options for mitigation and adaptation are already available”.⁴

In this scientific and multilateral agreement context, national transparency systems, and the ETF, help advance understanding in terms of the progress, opportunities and improvements necessary to safeguard the climate, as well as the gaps and challenges to be overcome. The ETF is helping to build the international trust and confidence needed for successful implementation of the Paris Agreement and to increase ambition, bringing multiple other benefits to national governments as it does so.

The foundations for the ETF were in place long before the adoption of the Paris Agreement, as it builds on and enhances the existing measurement, reporting and verification (MRV) arrangements under the Convention. Under these existing arrangements, the reporting requirements and the timelines for the submission of national reports are different for developed and developing countries, in accordance with the principle of common but differentiated responsibilities and respective capabilities.

Throughout the years of reporting under the Convention, Parties have gained significant experience in MRV activities, which the Paris Agreement has ultimately recognized as an important basis for the development and implementation of the ETF.

Under the Convention, developed country Parties submit their national communications (NCs) every four years and biennial reports (BRs) every two years. For developing country Parties, the frequency is similar, as they are expected to submit their NCs every four years and their biennial update reports (BURs) every two years, but the legal nature differs, such as the mandatory reporting areas.

1 The Paris Agreement is available at <https://unfccc.int/process-and-meetings/the-paris-agreement>.

2 FCCC/PA/CMA/2022/4, para. 151. Available at <https://unfccc.int/ndc-synthesis-report-2022>.

3 Item A.4, p.10, of IPCC. 2023. Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Core Writing Team, H Lee, and J Romero (eds.). Geneva: IPCC. Available at <https://www.ipcc.ch/report/ar6/syr/>.

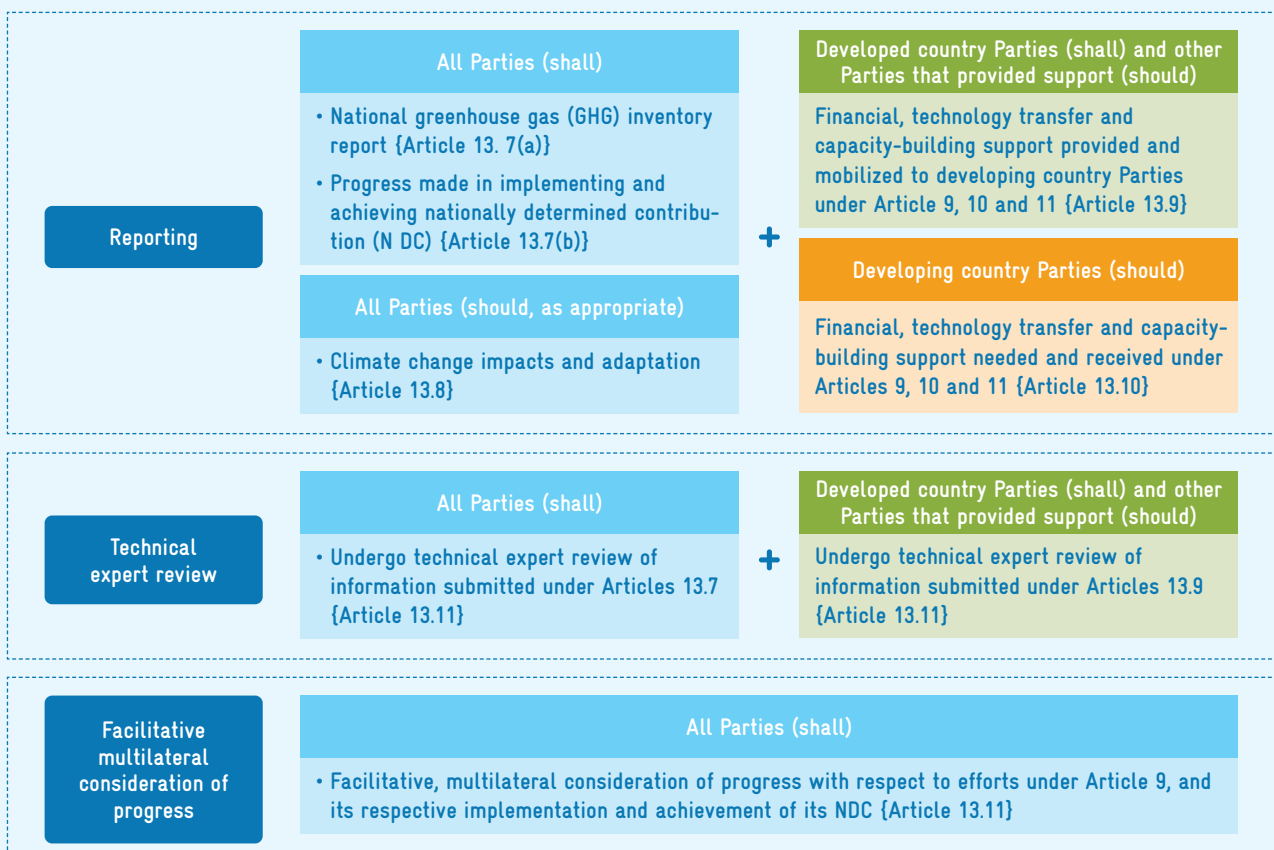
4 Item C.3, p.28, of the Summary for Policymakers referred to in footnote 3 above.

Under the ETF, the two tracks for developed and developing countries are merged: BRs and BURs will be superseded by biennial transparency reports (BTRs). The submission of NCs, a reporting obligation under the Convention, will continue. The first BTRs are due to be submitted at the latest by 31 December 2024. The ETF includes specific flexibilities that are available to those developing country Parties that need flexibility in the light of their capacities. Furthermore, in terms of when BTRs are to be submitted, in recognition of their national circumstances, the least developed countries and small island developing States may submit the relevant information at their discretion.

Glasgow Climate Pact in 2021⁶ provide the technical requirements for the operation of the ETF, such as the reporting time periods, standards and processes. The evolution of the transparency arrangements under the intergovernmental climate change regime calls on countries to develop and improve over time their transparency systems and the processes by which they gather, analyse and report climate information. The advancement of these systems allows governments to use the knowledge, data and information generated for informed decision-making and policy development and can also help them tap into the benefits of enhanced climate transparency.

The modalities, procedures and guidelines (MPGs) agreed on under the Katowice climate package in 2018⁵ and the

Figure 2: Enhanced transparency framework under Article 13 of the Paris Agreement



Note: As per Article 13, paragraphs 2–3, of the Paris Agreement, and decision 18/CMA.1 and its annex, the MPGs address the provision of flexibility to those developing country Parties that need it in the light of their capacities and the special circumstances of the least developed countries and small island developing States.

5 <https://unfccc.int/process-and-meetings/the-paris-agreement/the-katowice-climate-package/katowice-climate-package>.

6 <https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact-key-outcomes-from-cop26>.

Developing, rolling out and maintaining a functional ETF for climate reporting can be a complex task, requiring engagement and cooperation at multiple levels within a country, including by public and private sector actors. As well as supporting the necessary functions for reporting under the Convention and the Paris Agreement, national transparency systems can bring additional benefits to countries. For example, operationalizing the ETF provides opportunities for countries to foster collaboration, leverage political leadership, and build knowledge and a better understanding of the climate challenge. Implementing the ETF also requires countries to establish institutional

arrangements that help align and scale action between institutions and reporting initiatives and can support the development of enabling policies and increased collective ambition. In addition, the ETF and MPGs make it possible to compare the actions taken by Parties against their NDC pledges and targets, building trust and confidence among Parties. Furthermore, NCs, BRs and BURs (under the Convention) and BTRs (under the ETF) provide substantial inputs for the global stocktake and its assessment of collective progress in achieving the goals of the Paris Agreement.⁷

7 The global stocktake is a mechanism established by Article 14 of the Paris Agreement by which the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement is to periodically take stock of the implementation of the Agreement and to assess the collective progress towards achieving its purpose and long-term goals with a view to supporting Parties in updating and enhancing their action and support as well as increasing international cooperation for climate action. For more information, see <https://unfccc.int/topics/global-stocktake>.

3. Benefits of climate transparency

This chapter provides examples of the benefits that can come from operationalizing national transparency systems to meet the requirements of the ETF and highlights how Parties are already making the most of the opportunities arising from implementation of the transparency arrangements. Despite differing national circumstances, the information and

examples presented in this chapter are relevant for most Parties, including developing countries. The examples comprise a small sample of the benefits that could be garnered from implementing the ETF – there may be many more, depending on national circumstances and the priorities and institutional arrangements already in place.

3.1. Providing coherent data for informed decision-making

The ETF has three fundamental components:

- Reporting;
- Technical expert review;
- Facilitative, multilateral consideration of progress.

Putting all three components into practice will require the active engagement of a broad set of national stakeholders, including statistical services, ministries, local authorities, private organizations and civil society, as appropriate. Depending on national circumstances, the institutional arrangements put in place for transparency purposes under the Convention and the Paris Agreement can provide opportunities for subnational entities and other stakeholders to become involved in providing information or compiling, analysing or interpreting the information gathered. Collaborative arrangements can also help statistical services and other organizations ensure the reliability of the data and their coherence across multiple reporting initiatives.

The information gathered for international reporting purposes is also important at the domestic level, providing countries with an essential input to policy development related to emission reduction and climate resilience. This information also provides the basis for countries to analyse the efficiency and effectiveness of policy implementation

and to better understand the linkages between policies and emissions or emission trends, or between policies and strengthened resilience and reduced vulnerability, allowing adjustments and enhancements to be made in support of more ambitious climate action.

The operationalization of the ETF and good governance⁸ go hand in hand. A national transparency system can help improve the reliability and coherence of data – reliable, coherent data are fundamental to informed decision-making and policy development across sectors. Moreover, coherent data can improve the consistency of projections and ‘business as usual’ scenarios, as well as enhance efforts to implement action reflected in the country’s NDC.

The example from Tunisia in box 1 shows how a new emission tracking tool helped improve data collection, develop projections for the energy sector and support national policymaking. In box 2, the example from Germany shows how data generated for reporting under the Convention can be used for long-term climate policy development. Box 3 explains how Japan is assessing the progress of implementation of its climate policies and actions to improve their effectiveness.

⁸ Good governance has eight major characteristics: it is participatory, consensus-oriented, accountable, transparent, responsive, effective and efficient, and equitable and inclusive, and it follows the rule of law. It ensures that corruption is minimized, the views of minorities are taken into account and the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of society. See <https://www.unescap.org/sites/default/files/good-governance.pdf>

Box 1: Tunisia: Tracking emissions in the energy sector

In 2022, Tunisia developed a powerful tool for tracking carbon dioxide (CO₂) emissions from the energy sector that enables the National Agency for Energy Management to monitor progress towards achieving the country's mitigation objectives.⁹ The approach for tracking emissions considers the MPGs for the ETF as well as the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The method uses global information and a national energy information system data set. It quantifies the effects of drivers of GHG emissions in the energy sector and then analyses their impacts in terms of GHG emissions over a given period.

Changes in GHG emissions are attributed to key global and sectoral drivers, generating substantive information for decision-making and policy development. A detailed, transparent analysis of past trends facilitates the construction of forward-looking scenarios and provides information to guide updates to the NDC.

The tool was developed by the Tunisian National Agency for Energy Management through the project titled "Setting up institutional capacities for NDC implementation in Tunisia", which was financed by the International Climate Initiative of the German Federal Ministry for Economic Affairs and Climate Action.

⁹ For more information, see <https://www.international-climate-initiative.com/en/project/setting-up-the-institutional-capacities-for-the-implementation-of-tunisia-s-ndcs-20-i-316-tun-g-ndc/>.

Box 2: Germany: Developing an action plan for 2050 using information from the measurement, reporting and verification system

In 2016, Germany adopted its long-term strategy for climate action, the Climate Action Plan 2050.¹⁰ The document was updated in 2022¹¹ in response to recent policy and regulatory developments in the country, including the approval of the Climate Change Act,¹² which sets out mandatory emission reduction targets, monitoring schemes and a mechanism for constant improvement. The Climate Action Plan 2050 summarizes the German Government's climate protection policy and the governance system for compliance with climate targets and describes the pathway to a GHG-neutral Germany by 2045, with a negative GHG balance after 2050. The updated document sets out ambitious GHG emission reduction targets linked to national and subnational MRV systems that add transparency to implementation efforts aimed at ensuring the achievement of Germany's medium- and long-term climate targets. The German Government

will also harmonize data records for the whole country, making them available electronically to facilitate access. Annual climate action reports prepared by the Government show progress in implementing measures, present current emission trends and estimate the expected emission reductions. These reports will be used for developing more ambitious climate measures.

The Climate Change Act sets annual emission reduction targets for different sectors. To review, on an annual basis, the compliance of these sectors with the targets there is a clear link between the emission data reported internationally and domestic policy response. The German Environment Agency publishes emission data estimates for the preceding year, considering the national GHG inventory. When annual emissions exceed their target for a given sector, the federal ministry responsible for that sector must develop an immediate

¹⁰ Available at <https://www.bmu.de/en/publication/climate-action-plan-2050-en>.

¹¹ Available at <https://unfccc.int/process/the-paris-agreement/long-term-strategies>

¹² For information about the Climate Change Act, see <https://www.bundesregierung.de/breg-de/themen/klimaschutz/climate-change-act-2021-1936846>.

action plan to ensure compliance with the target in the coming years. The Climate Action Plan 2050 functions as a continuous learning process, with a regular revision of targets and steady improvement as per the Paris Agreement.

Furthermore, to help shape a socially just transition, the Federal Ministry for Economic Affairs and Climate

Action and the Federal Ministry of Labour and Social Affairs will establish a climate action social monitoring system that complements the country's transparency framework to evaluate the social acceptance of climate policies and instruments. This monitoring system will assist policymakers in improving policy instruments for a just transition.

Box 3: Japan: Tracking and monitoring the progress of implementation of climate policies and actions to improve their effectiveness

Japan has an ambitious target to achieve net zero GHG emissions by 2050. Furthermore, its NDC target is a 46 per cent reduction in GHG emissions by 2030 compared with the base-year (2013) level. The key legislation for achieving these targets is the Act on Promotion of Global Warming Countermeasures (1998), which was amended after Japan declared in 2021 its commitment to net zero. Japan enhanced its Plan for Global Warming Countermeasures, by setting non-binding targets at each sector for reducing

GHG emissions to achieve the NDC target by 2030. To regularly track implementation and ensure the effectiveness of the Plan, the Japanese Government strictly evaluates the progress of climate policies and actions each year, discloses information publicly, and revises low-performing policies and actions. Evaluation of the implementation of policies and actions is achieved by comparing forecasted annual targets against the measured indicators.¹³

Evaluation results of the implementation of mitigation policies and measures in 2020

Category	Explanation	Number of policies and measures
A	Policies and measures for which the evaluation indicator is expected to exceed the target level if current efforts continue and for which the actual results have already exceeded the target level	6
B	Policies and measures for which the evaluation indicator is expected to exceed the target level if current efforts continue (excluding A)	15
C	Policies and measures for which the evaluation indicator is expected to be equivalent to the target level if current efforts continue	66
D	Policies and measures for which the evaluation indicator is expected to fall below the target level if current efforts continue	21
E	Policies and measures for which quantitative data cannot be obtained	7

The table above presents the five categories under which policies and actions are ranked following evaluation of the progress of their implementation. Policies and actions assessed as being in the C and D categories will be enhanced and reinforced over the next few

years. The data and information generated from this domestic monitoring and evaluation system helps the Government to improve climate policies and actions and to enhance NDC implementation in the country.

13 Japan's 2021 Plan for Global Warming Countermeasures is available (in Japanese) at <https://www.env.go.jp/content/900440195.pdf> and the 2022 progress report on the Plan is available (in Japanese) at <https://www.kantei.go.jp/jp/singi/ondanka/kaisai/dai49/pdf/siryou1.pdf>.

3.2 Promoting coherence among national reporting initiatives, including the Sustainable Development Goals

National governments have reporting requirements under the various international conventions and agreements they have signed or ratified. Parties to the Convention must report on measures they undertake to mitigate and adapt to climate change. Developing countries are required, under the Convention, to periodically report on their national circumstances, GHG emissions, mitigation and adaptation actions, and the capacity-building, technology and financial support they need to tackle the climate crisis. Similarly, Member States of the United Nations report on their progress towards achieving the 17 Sustainable Development Goals (SDGs) and the 169 targets of the 2030 Agenda for Sustainable Development, and Parties to the Convention on Biological Diversity report on the status and trends of biodiversity and their efforts regarding its conservation and sustainable use. Countries may have additional reporting requirements on water quality, air quality, land use, waste management, human rights, and economic and financial performance, among others.

Complying with all international reporting requirements efficiently is a complex task. However, there are opportunities for better connecting existing MRV, monitoring, evaluation and learning (MEL), and information systems and simplifying reporting processes that can bring additional benefits to governments – and to climate action.

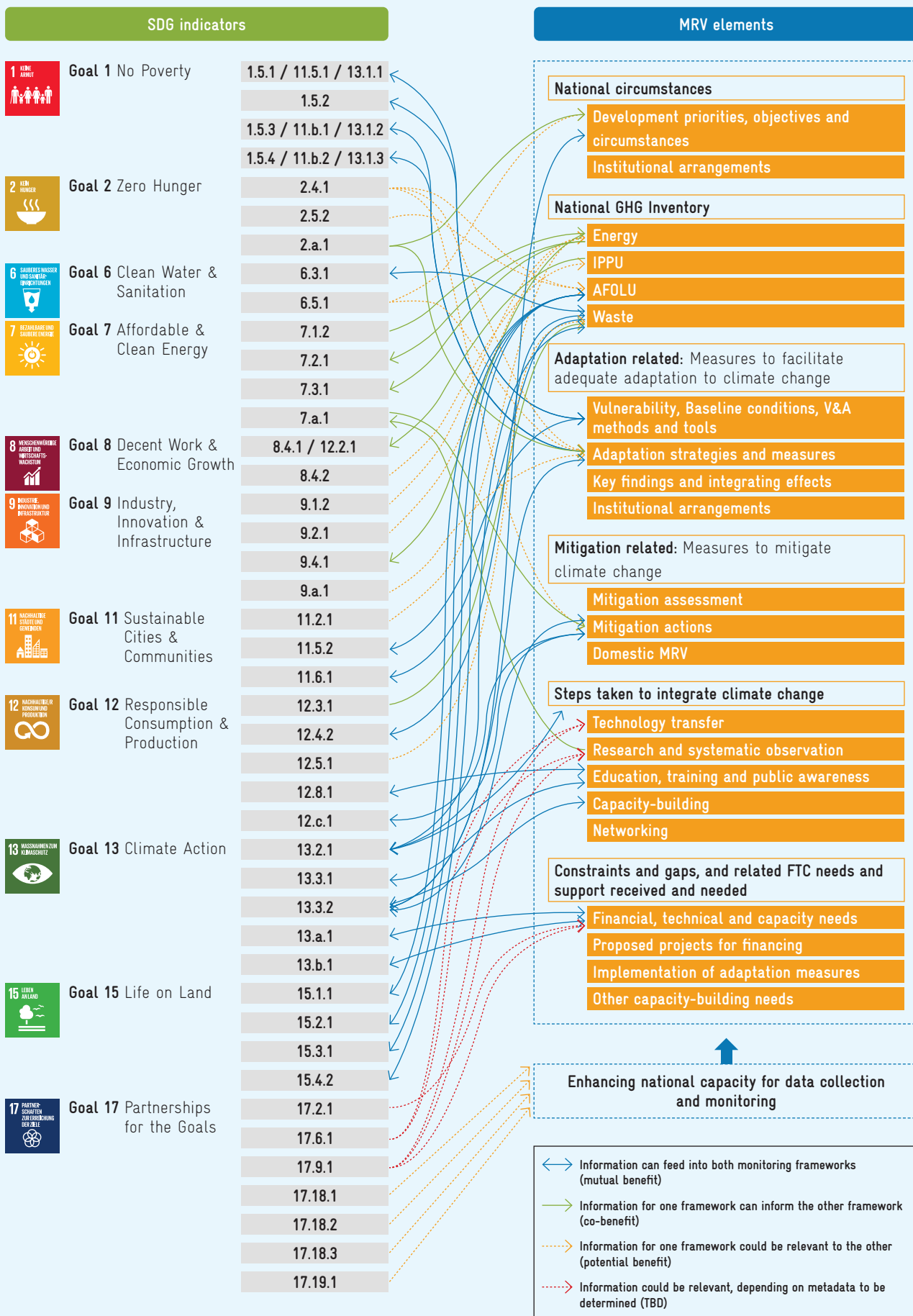
One such opportunity lies in the development of an integrated reporting system that can bring coherence to and foster synergies across different reporting systems. Integrating systems is possible because of the inherent linkages between biodiversity protection, climate action and human development, and the close interconnection between the goals and targets of different international conventions. For example, the 2030 Agenda for Sustainable Development and the objective of the Convention have clear linkages around SDG 7 on affordable and clean energy, SDG 11 on sustainable cities and communities and SDG 13 on climate action (see figure 3).

Setting up a system that combines information on emissions of GHGs and other air pollutants can help countries identify measures with diverse benefits and reduce the duplication of reporting structures. GHGs and other air

pollutants are often emitted from the same sources, so multiple inventory systems can combine data collection and processing and support the development of policies and mitigation measures that target GHG and other air pollutants at the same time. Other opportunities that can be seized when developing MRV and MEL systems relate to shared institutional arrangements and collaboration on climate reporting.

MEL systems are a key component of transparency in the national adaptation planning process because such systems enable countries to better understand which adaptation actions are working and who is benefiting in what ways. Well-designed MEL systems enable countries to make decisions more transparently and ensure that the most vulnerable people and communities benefit from the processes of developing, implementing and updating national adaptation plans (NAPs). Given the need for alignment between NAPs and the adaptation components of NDCs, BTRs and NCs, the countries that already have effective MEL systems established under the NAP are well placed to report effectively and efficiently on their actions that relate to adaptation.

Figure 3: Mapping of Sustainable Development Goal indicators to measurement, reporting and verification elements¹⁴



14 For more information, see [Exploring synergies between measurement, reporting and verification under the Convention and the monitoring of the implementation of the Sustainable Development Goals, UNFCCC, 2017.](#)

The connection between international reporting on progress under the Paris Agreement through the ETF and national climate and other reporting means that governments can facilitate cooperation between institutions to streamline and standardize complementary processes to improve data-sharing and consistency. These can be achieved by:

- Adopting common data standards and protocols or common reporting platforms and databases;
- Enhancing data comparability and consistency;
- Ensuring that the information collected is used to inform decision-making and policy development.

In addition, MRV systems may collect data and information that facilitates the monitoring of the social, economic and environmental dimensions of sustainable development. As such, MRV and MEL systems can provide data and information for tracking progress in achieving SDGs. This is particularly the case if a specific tracking system is not or is only partially in place, but can make use of existing structures for simultaneously tracking SDGs (e.g. SDGs 7,

13 and 15 (life on land)) and climate commitments. Linking the indicators used under different conventions and agreements can also improve the complementarity, reliability and coherence of the information reported.

Adaptation can play a significant role in achieving the SDGs because many of the sectors that are most vulnerable to climate change are key to countries' development, such as agriculture, health, water, infrastructure and urban areas. For instance, promoting sustainable agriculture and addressing climate change in the agriculture sector yields significant benefits with regard to food security and therefore to SDG 2 (on zero hunger), while adaptation measures that prevent or reduce the impact of flooding in urban areas can contribute to achieving SDG 11.

The country cases presented in this section from South Africa (box 4), Egypt (box 5) and Senegal (box 6) show how national governments have developed synergies across separate reporting initiatives, resulting in increased collaboration, accountability, awareness and political buy-in, with stronger MRV and information systems and enhanced transparency.

Box 4: South Africa: Establishing robust institutional arrangements for data collection and national reporting

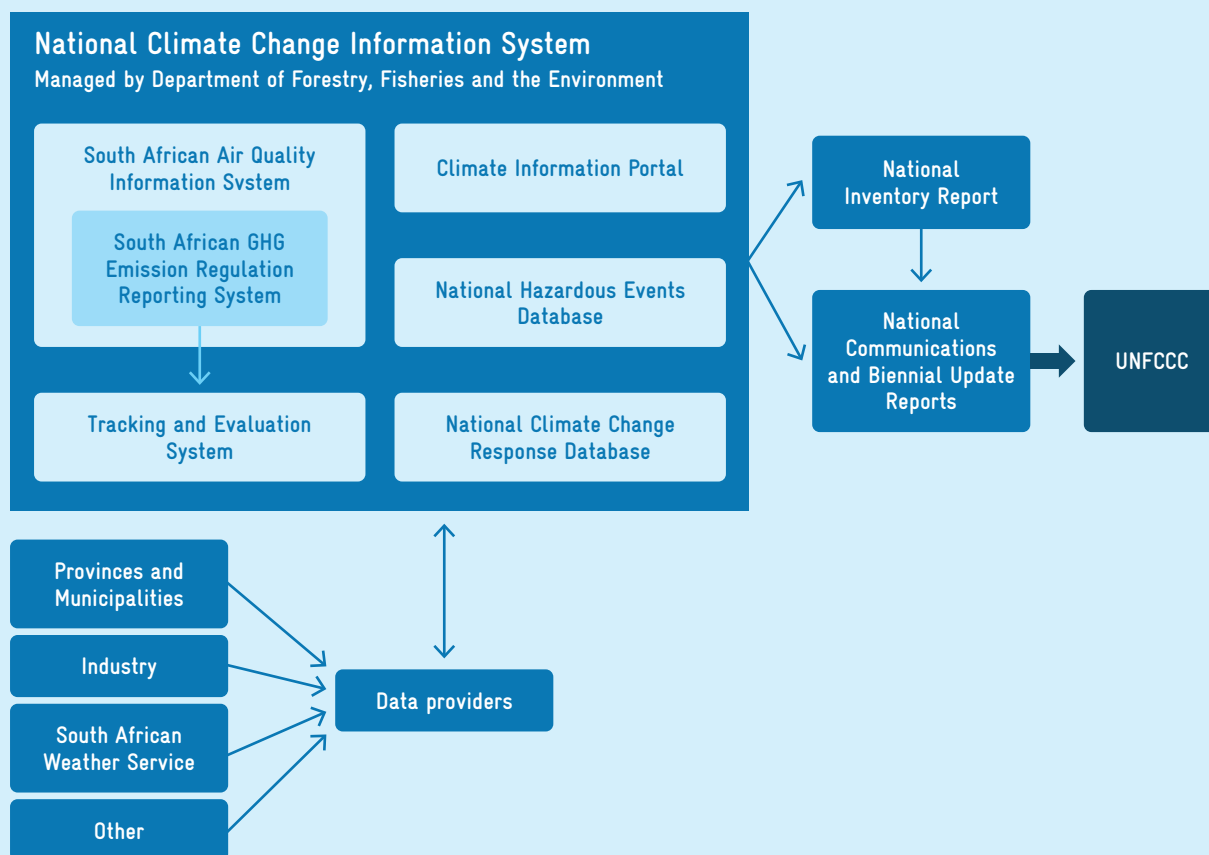
South Africa's climate change MRV system is informed by the National Climate Change Response Policy (2011), for which a system was established to monitor the country's transition to a lower carbon economy and a climate-resilient society. Operational since 2009, South Africa's National Climate Change Response Database (NCCRD) is an online platform that allows users to track national-, provincial- and local-level actions to combat climate change.¹⁵ The NCCRD is part of the National Climate Change Information System, which also incorporates the Climate Information Portal, a hazardous events database, a tracking and evaluation system, and an air quality information system¹⁶ (see the figure below).

The NCCRD, coordinated by the Department of Forestry, Fisheries and the Environment, collects information from voluntarily registered adaptation and mitigation projects. The database records information about these projects such as their location, description, associated impacts, funding sources, supporters and related activities.

¹⁵ The database is available at <https://nccrd.environment.gov.za/>.

¹⁶ For further information, see South Africa's fourth BUR, available at <https://unfccc.int/documents/307104>.

South Africa's National Climate Change Information System¹⁷



The National Climate Change Information System and its NCCRD serve the reporting requirements under the Convention and allow the South African Government to:

- Develop an informed position for international climate change negotiations;
- Avoid duplicating mitigation, adaptation and research projects;
- Identify gaps, needs and opportunities in climate action;
- Track ambition and the impact of climate responses in the country;
- Identify projects to scale up for enhanced climate ambition.

South Africa's MRV system also informs domestic reporting on climate action through annual climate change reports,¹⁸ in which information on climate actions, including their impacts and their contribution to the national development plan imperatives of reducing poverty and addressing inequality and job creation, is compiled. Even though the NCCRD was originally developed to meet the reporting requirements under the Convention, its information content and annual reports have the potential to catalyse additional and more ambitious climate actions and funding and to provide complementary information for other national purposes and international reporting initiatives, such as those related to the SDGs.

¹⁷ Adapted from South Africa's fourth BUR, figure 6.2, pp.219–220. Available at <https://unfccc.int/documents/307104>.

¹⁸ Available at https://cer.org.za/virtual-library/gvt_docs/south-africas-annual-climate-change-reports.

Box 5: Egypt: Connecting a sustainable development strategy to a climate measurement, reporting and verification system

The Government of Egypt established its sustainable development strategy, Egypt Vision 2030,¹⁹ using a participatory strategic planning approach. Various civil society organizations, national and international development partners and government institutions collaborated on setting comprehensive objectives for the strategy. Egypt aims to become a country with a competitive, balanced and diversified economy, dependent on innovation and knowledge, based on justice, social integrity and participation, characterized by a balanced and diversified ecological collaboration system, investing the ingenuity of place and humans to achieve sustainable development and to improve Egyptians' quality of life.

The sustainable development strategy covers the three dimensions of sustainable development set out in the country's 2030 agenda – namely social, environmental and economic – with each dimension structured around a number of pillars. The economic dimension has four pillars:

- (1) Economic development;
- (2) Energy (efficient use of resources);
- (3) Knowledge, innovation and scientific research;
- (4) Transparency and efficient government institutions.

Each pillar includes three types of indicators: input indicators to measure the resources available, outcome indicators to measure results, and strategic results indicators.

The energy pillar includes mitigation targets of a reduction in GHG emissions from the energy sector of 5 per cent by 2020 and 10 per cent by 2030 compared with the 'business as usual' scenario. There are synergies in monitoring progress using energy sector indicators, measuring the emission reductions from climate actions implemented in the energy sector and Egypt's MRV system, which complies with UNFCCC reporting requirements.

The environmental dimension has an environment pillar and an urban development pillar. Under the environment pillar, environmental considerations are integrated into all economic sectors with the aim of preserving natural resources and supporting their efficient use and investment while protecting the rights of future generations. Under the environment pillar, the indicator on the rate of reduction of the expected increasing rates of greenhouse gas emissions is indicated a value of 276 t CO₂ equivalent. Therefore, monitoring the indicators of Egypt's Vision 2030 will be linked with climate reporting, taking advantage of synergies in data collection and analysis between these reporting systems.

¹⁹ Available at https://arabdevelopmentportal.com/sites/default/files/publication/sds_egypt_vision_2030.pdf.

Box 6: Senegal: Developing a measurement, reporting and verification system that can support the tracking of progress in achieving the Sustainable Development Goals

Senegal is in the process of formalizing its MRV system. The country has established institutional arrangements and quality control processes for producing its GHG inventories, NCs and BURs that also make it possible to use the collected information for sustainable development reporting. The Ministry of the Environment and Sustainable Development, supported by international technical partners, is establishing sectoral MRV systems and institutional frameworks for the energy, waste, transport, industrial processes and agriculture sectors.

In developing a robust MRV system, the energy sector is particularly relevant for Senegal, given its importance for the economic transformation of the country (see the Plan for an Emerging Senegal²⁰), its high emissions, and Senegal's previous reporting experience for this sector. In its NDC, Senegal committed to universal access to electricity in rural areas by 2025 and installing approximately 700 MW capacity from renewable energy generation technologies by 2030. These targets closely link the NDC with SDG 7 (affordable and clean energy).

Despite lacking capacity, resources to finance monitoring and an online platform through which energy data can be accessed,²¹ the Government of Senegal has a solid foundation for developing a robust MRV system for the energy sector through its mechanism for data collection and its framework for validation of the data. In this context, the framework for climate reporting that is being developed has the potential to provide the added benefit of supporting the tracking of progress towards achieving SDG 7 by producing information about clean energy generation and rural electrification.

Another example of potential synergies between international reporting requirements is Senegal's proposed monitoring system for tracking adaptation and vulnerability, which can also take stock of progress in achieving various SDGs. In addition, Senegal's climate finance monitoring system will follow private sector engagement in climate action and provide information relevant to redirecting resources towards achieving the SDGs.

20 See <https://www.presidence.sn/en/pse/emerging-senegal>.

21 See the final report, available (in French) at <https://climateactiontransparency.org/wp-content/uploads/2021/09/D1-Rapport-general-de-letude-sur-la-mise-en-place-dun-systeme-de-mesure-notification-et-de-verification-MNV-de-la-contribution-determinee-au-niveau-national-CDN-du-Senegal.pdf>.

3.3 Increasing political buy-in for climate action

The urgent need for implementing NDCs to achieve the long-term goals of the Paris Agreement requires political leadership and commitment to be met. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement, at its fourth session held in Sharm el-Sheikh in 2022, reiterated that the impacts of climate change will be much lower at a temperature increase of 1.5 °C compared

with 2 °C and resolved to pursue further efforts to limit the temperature increase to 1.5 °C.²² However, the 2022 NDC Synthesis Report states that even under the scenario of full implementation of the 166 latest available NDCs from 193 Parties to the Paris Agreement, the best estimate for peak global mean temperature increase is 2.1–2.4 °C by the end of the century.²³

22 Decision 1/CMA.4, para. 8. Available at https://unfccc.int/sites/default/files/resource/cma2022_10_a01E.pdf.

23 FCCC/PA/CMA/2022/4. Available at <https://unfccc.int/documents/619180>.

This highlights the urgency for implementing scaled-up NDCs. Scaling up action depends on the buy-in and sustained support of political leaders at the highest levels, and the rolling out and tracking of sectoral policies that enable the necessary transformations.

Over recent years, public awareness of the threats of climate change has increased as governments, communities and industries feel the increasing impacts of extreme weather events. As a result, civil society and practitioners alike are strongly encouraging policymakers to tackle climate change and implement policies to reduce GHG emissions and increase resilience. Having transparent and reliable information grounded in science helps support decision-making and encourages commitment from politicians, enabling the development of a long-term vision.

Transparency processes can enhance collaboration between government institutions and provide open access to information that raises the awareness and accountability of

policymakers and decision makers, thereby accelerating climate action. A functioning transparency system can also provide a deeper understanding of the causes, gaps and challenges, as well as possible solutions, which, if addressed, could accelerate climate action and increase the engagement of political leaders. Furthermore, buy-in from policymakers can be enhanced by providing additional information from transparency systems on the co-benefits of climate action for job creation, pollution reduction and biodiversity protection. Developing capacities, institutionalizing processes and raising awareness relating to low-emission development and climate resilience can also foster political support.

The two cases presented below, one from the Dominican Republic (box 7) and the other from Sri Lanka (box 8), are good examples of how developing countries have managed to enhance political buy-in for climate action through climate reporting.

Box 7: Dominican Republic: Enhancing political buy-in for climate action through capacity development in climate change reporting

The Dominican Republic had an early start in prioritizing climate change in the national political agenda. In the early 2010s, the country established the National Council for Climate Change and Clean Development Mechanism on the basis of a presidential decree from 2008 and also developed a national strategy for low-carbon development. However, national capacities for conducting vulnerability assessments and estimating GHG emissions remained low for many years, which meant that only a few climate policies were implemented.

In 2014, when the Dominican Republic began preparing its NC3, it decided to develop these national capacities and established a climate change working group comprising experts from different ministries and agencies. International consultants had already prepared GHG estimates, so the working group needed to develop capacities for preparing the country's national GHG inventory report and the vulnerability assessment for inclusion in the NC3. Increasing the capacity for developing the information base required

for international reporting led to an understanding of climate change drivers, impacts and vulnerabilities, and, in turn, improved buy-in among political leaders.

National climate change policy occupies a prominent place on the public agenda, a contributing factor of which is that the Dominican Republic is one of the countries with the highest climatic vulnerability owing to it being an island and its geographical location.

The Dominican Republic's climate agenda has gained relevance in recent years. The climate change working group has contributed to developing the NDC, in which the country commits to reducing GHG emissions by 27 per cent (20 per cent conditional target, 7 per cent unconditional target) by 2030 compared with the baseline. The National Council for Climate Change and Clean Development Mechanism has also been working on a proposed climate change law with the support of other national institutions, which illustrates the benefit of a good information base leading to political buy-in for developing a more climate-resilient economy. In

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