

DATA GAPS INITIATIVE 3

People. Planet. Economy. Third Phase of the G20 Data Gaps Initiative (DGI-3) First Progress Report

Prepared by the IMF Staff, in close collaboration with the Inter-Agency Group on Economic and Financial Statistics (IAG), the Financial Stability Board (FSB) Secretariat, and with inputs from the Indian G20 Presidency and the G20 and participating economies.

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Acronyms

ABS	Australian Bureau of Statistics
ACPR	Autorité de Contrôle Prudentiel et de Résolution
ACS	Australian Climate Service
BAT	Banks Association of Türkiye
BCB	Brazil Central Bank
BD4	Benchmark Definition of FDI, 4th Edition
BEA	Bureau of Economic Analysis (US)
BIS	Bank for International Settlements
BOE	Bank of England
BOPCOM	Committee on Balance of Payments Statistics
BPM6	Balance of Payments and International Investment Position Manual, sixth edition
BRSA	Banking Regulation and Supervision Agency
CBDC	Central Bank Digital Currency
CBS	Central Bank Survey
CDIS	Coordinated Direct Investment Survey
CMB	Capital Markets Board
CNV	National Securities Commission (Argentina)
CPPI	Commercial Property Price Index
CSDB	Centralized Securities Database
DWA	Distributional Wealth Accounts
DESTATIS	Federal Statistical Office of Germany
ECB	European Central Bank
EG DNA	Expert Group on Disparities in a National Accounts Framework
EPEA	Environmental Protection Expenditure Accounts
ESCB	European System of Central Banks
ESG	Environmental, Social and Governance
EUROSTAT	Statistical Office of the European Union
FAIS	Financial Advisory and Intermediary Services
FAS	Financial Access Survey
FDI	Foreign Direct Investment
FMCBG	Finance Ministers and Central Bank Governors
FSB	Financial Stability Board
GFS	Government Finance Statistics
GFSM	Government Finance Statistics Manual 2014
GHG	Greenhouse Gas
GSF	Green and Sustainable Finance
HKMA	Hong Kong Monetary Authority
IAG	Inter-agency Group on Economic and Financial Statistics
IBGE	Brazilian Official Statistics Institute
IBS	International Banking Statistics
IFC	Irving Fisher Committee on Central Bank Statistics
IIP	International Investment Position
IMF	International Monetary Fund
IOT	Input-Output Tables
INEGI	National Institute of Statistics and Geography (Mexico)
INSEE	National Statistical Office (France)
IPSASB	International Public Sector Accounting Standards Board
ISIC	International Standard Industrial Classification
ISDSD	Information Systems Development and Support Department
ISTAT	National Statistical Institute (Italy)
ISWGNA	International Statistics Working Group on National Accounts
MFSMCG	Monetary and Financial Statistics Manual and Compilation Guide 2016
MNE	Multinational Enterprise
MOF	Ministry of Finance
NBS	National Bureau of Statistics (China)
NBFIs	Nonbanking Financial Institutions
NCA	National Natural Capital Accounting (South Africa)

NCRA	National Climate Risk Assessment
NGFS	Network of Central Banks and Supervisors for Greening the Financial System
NFC	Nonfinancial Corporation
NMEG	Non-bank Monitoring Expert Group
OECD	Organisation for Economic Co-operation and Development
ONS	Office of National Statistics (UK)
PBOC	Peoples Bank of China
PEDS	Potentially Environmentally Damaging Subsidies
PEFA	Physical Energy Flow Accounts
PPI	Prepaid Payment Instruments
PSDS	Public Sector Debt Statistics
RBA	Reserve Bank of Australia
ROSSTAT	Federal State Statistics Service (Russia)
RPPI	Real Property Price Index
SARTTAC	South Asia Regional Training and Technical Assistance Center
SAFE	State Administration of Foreign Exchange (China)
SAMA	Saudi Central Bank
SARB	South African Reserve Bank
SDG	Sustainable Development Goals
SDDS	Special Data Dissemination Standards, IMF
SEEA	System of Environmental-Economic Accounting
SEEA-CF	System of Environmental-Economic Accounting Central Framework
SNA	2008 System of National Accounts
SPACE	Study on the payment attitudes of consumers in the euro area
SRF	Standard Reporting Forms
SUT	Supply and Use Table
UK	United Kingdom
UNCEEA	United Nations Committee of Experts on Environmental-Economic Accounting
UNFCCC	United Nations Framework Convention on Climate Change
UNSD	United Nations Statistics Division
WGSD	Working Group on Securities Databases

I. Introduction

1. In their April 2021 communiqué, the G20 Finance Ministers and Central Bank Governors (FMCBGs) under the G20 Italian Presidency recognized that “improving data availability and provision, including on environmental issues, and harnessing the wealth of data produced by digitalization, while ensuring compliance with legal frameworks on data protection and privacy, will be critical to better inform our decisions”.

2. The G20 FMCBGs asked the International Monetary Fund (IMF), in close cooperation with the Inter-agency Group on Economic and Financial Statistics (IAG)¹ and the Financial Stability Board (FSB), to prepare a concept note for a possible new Data Gaps Initiative (DGI). The G20 FMCBGs called for the IAG and G20 and participating economies to address critical data gaps in the area of climate change, economic inclusion and digitally driven financial innovation, noting that the new initiative should build on the close collaboration among the participating economies and the international organizations that characterized previous iterations of the G20 DGI.

3. In July 2021, the G20 FMCBGs took note of the concept note for a new DGI (DGI-3)². They requested that the IAG and FSB work with the G20 and participating economies to develop a detailed workplan. Subsequently and throughout 2022, under the leadership of the Indonesian G20 Presidency, the IAG and the G20 and participating economies worked on developing a high-level workplan to address these critical data gaps.

4. The first version of the workplan for the DGI-3 was submitted to the July 2022 Meeting of the G20 FMCBG for their endorsement. In the July 2022 Chair’s Summary, the G20 FMCBGs asked the IMF, IAG and FSB, in close consultation with participating economies, to develop a more fine-tuned workplan, taking into account country circumstances.³ Subsequently, further work was conducted to take these considerations into account and fine-tune the workplan. To ensure a balance between data needs and the statistical capacities of the G20 and participating economies, several rounds of consultation with the participating economies were conducted during April to September 2022.⁴

5. The revised DGI-3 workplan, based on the feedback received during the consultation processes, (i) builds on existing work; (ii) reflects differences in resources, statistical capacities, and levels of development among the G20 economies; (iii) incorporates existing methodological and statistical frameworks; (iv) leverages on existing data sources; and (v) includes flexible targets and timelines.

6. Given the urgency of the data needs in the identified priority areas, the workplan is designed so that data gaps can be closed within the first few years of the launch of the DGI-3. As with the DGI-1 and DGI-2, it is expected that the targets and timelines will be revisited regularly and adjusted as needed to align with the availability of data sources, the development of methodological guidelines, national and international circumstances, and other developments. The G20 FMCBGs will be informed of the progress through annual progress reports. Implementing the DGI-3 recommendations will span over a five-year horizon. The IAG and FSB in close coordination with G20 and participating economies will monitor implementation progress and advise economies on the exit strategy closer to the end of the initiative.

7. The revised DGI-3 workplan was welcomed by the G20 FMCBGs, in both the G20 FMCBGs October 2022 meeting and the G20 Bali Leaders’ Declaration—November 2022. The G20 Leaders asked the IMF, the IAG and the FSB, along with the G20 and participating economies, to begin closing the data gaps outlined in the workplan.

¹ Members of the IAG are Bank for International Settlements (BIS), European Central Bank (ECB), Statistical Office of the European Union (Eurostat), International Monetary Fund (IMF, Chair), Organisation for Economic Co-operation and Development (OECD), United Nations Statistical Division (UNSD), and the World Bank.

² <https://www.mef.gov.it/inevidenza/2021/00045/12.Communique-Third-G20-FMCBG-meeting-9-10-July-2021.pdf>

³ [G20 Chairs Summary 3rd FMCBG 15-16 July 2022.pdf](#)

⁴ Further to the feedback received during the November 2021 to March 2022 consultations, during which compilers from the participating economies as well as two key user groups of the G20—the G20 Sustainable Finance Working Group and Global Partnership for Financial Inclusion—provided feedback.

The workplan of the DGI-3 includes 14 recommendations addressing four statistical areas (i) climate change; (ii) household distributional information; (iii) Fintech and financial inclusion; and (iv) access to private sources of data and administrative data, and data sharing.

8. The present report prepared by the IMF in cooperation with the IAG and FSB, with inputs from G20 and participating economies, provides an overview of the progress made since November 2022. The report is structured as follows: Section II provides an overview of the governance structure of the DGI-3; Section III presents the new DGI-3 progress reporting framework; Section IV summarizes the activities of the task teams during the first year of the DGI-3; Section V provides an overview of current methodological frameworks and data availability to support the development of the indicators; Section VI summarizes progress achieved in the implementation of recommendations since the G20 FMCBGs welcomed the DGI-3 workplan; and Section VII proposes the way forward. Annex 1 includes the progress reporting dashboard for the G20, and participating economies and Annex 2 presents the commentary prepared by each G20 and participating economy on their assessment and status of implementing the respective DGI-3 recommendations.

9. As part of the process of drafting the DGI-3 progress report, the IAG and the FSB extended an invitation to G20 and participating economies to report updates on the implementation of the DGI-2 recommendations. Results of these updates are presented in Annex 4.

II. The DGI-3 Governance Framework

10. The DGI-3 is characterized by strong support and guidance from the G20, and close collaboration between the participating economies and the international organizations. It is coordinated by the IMF which provides the DGI Secretariat, in close cooperation with the IAG, the FSB and the G20 Presidency, and reports to the G20 FMCBGs. The IAG will continue to play the role of global facilitator and coordinator, contributing to the enhancement of the global statistical infrastructure. In addition to its role as facilitator, the IAG also monitors progress. The FSB Secretariat also participates in the IAG meetings.

11. For each recommendation, lead and contributing international organizations are identified (Table 1), according to their mandate and previous contributions in the relevant areas of work.

Table 1. Leading and Contributing International Organizations (Continued)	
Recommendation	Leading and Contributing International Organizations
Rec 1: Greenhouse Gas (GHG) Emission Accounts and National Carbon Footprints	IMF, UNSD, Eurostat (leads), and the OECD.
Rec 2: Energy Accounts	UNSD (lead), as Secretariat of the United Nations Committee of Experts on Environmental-Economic Accounting (UNCEEA), with Eurostat and IMF.
Rec 3: Carbon Footprints of Foreign Direct Investment (FDI)	IMF (lead), with OECD.
Rec 4: Climate Finance (Green Debt and Equity Securities Financing)	BIS and ECB (leads), with IMF, OECD, FSB (user perspective) and with the work being coordinated by the BIS-ECB-IMF Working Group on Securities Databases (WGSD).
Rec 5: Forward Looking Physical and Transition Risk Indicators	IMF (lead), with World Bank, ECB, OECD, FSB, and BIS/Irving Fisher Committee on Central Bank Statistics (IFC).

Table 1. Leading and Contributing International Organizations (Concluded)	
Rec 6: Climate-Impacting Government Subsidies	IMF, OECD, and UNSD (leads) with Eurostat.
Rec 7: Climate Change Mitigation and Adaptation Expenditures	IMF and UNSD (leads), with Eurostat, World Bank, and OECD.
Rec 8: Distribution of Household Income, Consumption and Savings	OECD (lead), with Eurostat, UNSD, World Bank and IMF.
Rec 9: Distribution of Household Wealth	OECD (lead), with ECB, Eurostat and UNSD.
Rec 10: Fintech Credit	FSB (lead), with BIS/IFC and ECB.
Rec 11: Digital Money	IMF (lead), with BIS/IFC, ECB, and FSB (user perspective).
Rec 12: Fintech-enabled Financial Inclusion	IMF and World Bank (joint leads), with BIS/IFC, and OECD.
Rec 13: Access to Private and Administrative Data	IMF (lead), with Eurostat and ECB in consultation with the G20 and participating economies will lead the implementation of this recommendation.
Rec 14: Data Sharing	Eurostat and ECB (leads) with World Bank, and other IAG members.

12. Given the range of topics covered by the DGI-3 and the scope of the initiative, DGI task teams have been established to organize and implement the workplan. By end-January 2023, the IAG extended a formal invitation to the G20 and participating economies to nominate their DGI-3 task team representatives. The nomination process concluded in mid-March 2023 and details of the respective task teams were shared with the IAG and leading organizations to start planning their meetings and thematic workshops.

13. The DGI task teams are comprised of representatives from the IAG designated lead agencies, G20 and participating economies and other key stakeholders⁵. Each task team has a chair and secretariat (members of the IAG designated lead agencies) and technical expert members from the G20 and participating economies. Ten task teams have been established (Table 2).

Table 2. The DGI-3 Task Teams (Continued)	
Recommendation	Task Team
Rec 1: GHG Emission Accounts and National Carbon Footprints Rec 2: Energy Accounts Rec 3: Carbon Footprints of FDI	Task Team on GHG Emissions, Carbon Footprints and Energy Accounts.
Rec 4: Climate Finance (Green Debt and Equity Securities Financing)	Task Team on Climate Finance (led by the existing WGSD).

⁵ Key stakeholders include but are not limited to: United Nations Framework Convention on Climate Change (UNFCCC), Secretariat, System of Environmental-Economic Accounting (SEEA) Technical Committee, Intersecretariat Working Group on National Accounts (ISWGNA), IMF Committee on Balance of Payments Statistics (BOPCOM), Expert Group on Disparities in a National Accounts framework (EG DNA) (OECD), Network of Central Banks and Supervisors for Greening the Financial System (NGFS), WGSD, non-bank monitoring expert group (NMEG), and the International Public Sector Accounting Standards Board (IPSASB). The DGI Task Teams should be engaged for the period January 2023 – December 2027.

Table 2. The DGI-3 Task Teams (Concluded)

Rec 5 : Forward Looking Physical and Transition Risk Indicators	Task Team on Forward Looking Physical and Transition Risk Indicators.
Rec 6 : Climate-Impacting Government Subsidies Rec 7 : Climate Change Mitigation and Adaptation Expenditures	Task Team on Climate Impacting Subsidies, Climate Change Mitigation and Adaptation Expenditures.
Rec 8 : Distribution of Household Income, Consumption and Savings Rec 9 : Distribution of Household Wealth	Task Team on Household Incomes, Savings, Consumption and Wealth. The OECD will be using the Expert Group on Disparities in a National Accounts framework (EG DNA) to coordinate the work of Recommendation 8 and has launched a new Expert Group on Distribution of Household Wealth (EG DHW) to coordinate the work of recommendation 9.
Rec 10 : Fintech Credit	Task Team on Fintech Credit. The FSB will be using the non-bank monitoring expert group (NMEG) to coordinate the work of recommendation 10.
Rec 11 : Digital Money	Task Team on Digital Money.
Rec 12 : Fintech-enabled Financial Inclusion	Task Team on Financial Inclusion.
Rec 13 : Access to Private and Administrative Data	Task Team on Data Exchange.
Rec 14 : Data Sharing	Task Team on Data Sharing.

14. The DGI-3 task teams have the objective to execute the project plan for each DGI recommendation (or group of recommendations), including undertaking stocktaking exercises; establishing the methodological and data collection frameworks, questionnaires, report forms, and tools; implementing guidance and facilitating the compilation of data required by the targets; engaging with stakeholders to ensure complementarity, consistency and to avoid overlap in work programs. The DGI-3 task teams also facilitate the sharing of compilation methods across G20 and participating economies and the compilation of estimates, and review results and coordinate the dissemination of the resulting information. The DGI-3 Task teams report to the DGI Secretariat and the IAG regarding the progress on the implementation of the DGI-3 project plan through semiannual questionnaires, as well as during the DGI-3 Global Conferences.

15. G20 country coordinators coordinate the DGI-3 implementation on national level and serve as a DGI-3 focal point to the DGI Secretariat. They provide inputs to the DGI Secretariat on individual economies' progress necessary for drafting the DGI-3 progress report; they participate in the DGI-3 Global Conferences as well as in workshops organized by the DGI-3 task teams, as needed; they oversee coordination of nomination and provision of regular updates of the DGI-3 task team members to the DGI Secretariat. The DGI Global Conferences will serve as a platform for G20 country coordinators to meet and discuss with the IAG and international organizations progress on the implementation of the DGI-3 recommendations, issues of strategic relevance, and exchanging country practices and peer learning experiences.

III. Monitoring the DGI-3 Progress: Progress Reporting Framework

16. The objective of the DGI is to encourage economies to provide data to assist policymakers in addressing the most relevant policy needs and filling critical data gaps. Similar to the DGI-1 and DGI-2, G20 and participating economies will provide a yearly progress report outlining the implementation of the DGI-3 workplan, which the IMF will present to the G20 FMCBGs.

17. The G20 and participating economies indicated that the DGI-3 progress reporting framework should consider the different levels of statistical development and statistical capacity, legislative constraints, and priorities among the participating economies. As an initial step in the development of the DGI-3 progress reporting framework, the IAG developed a survey soliciting the views of the G20 and participating economies. The survey was conducted in March and April 2023 and received responses from 21 economies (excluding the EU). The DGI Secretariat organized four regional workshops on May 3, 2023, with G20 and participating economies and discussed the results and the way forward. Subsequently, the DGI Secretariat developed a proposed progress reporting framework based on the feedback received from the survey and during the regional workshops.

18. The final version of the DGI-3 progress reporting framework was presented and agreed at the June 2023 DGI-3 Global Conference hosted in Washington D.C. The framework aims at tracking the progress in implementation, acknowledging accomplishments, and serving as a benchmark for the following years. It also ensures the necessary flexibility to alleviate concerns expressed by the G20 and participating economies regarding the relevance for their economy to implement specific targets, as well as limitations on resources and capacities.

19. The progress reporting framework presents four levels of progress in the implementation of the DGI-3 recommendations: (1) Data gap is closed, (2) Data gap is being addressed, (3) Data gap is not material for the economy, and (4) Data gap is not an immediate priority area for the national authorities, given the available resources. An economy should report the data gap as closed when the data are publicly disseminated on an official government website. When an economy reports that the data gap is being addressed, it is assumed that it has a work program in place or plan to put a program in place to address this data gap. An economy can report data gaps as “not material” when national stakeholders and data users indicate the data gap is not material and that the lack of data is not an impediment to the development of effective policy. Finally, when an economy assesses the data gap as material and required for effective policy, but it is unable to allocate resources to address this data gap given other priorities and resource constraints, the economy can report this data gap under the category “Data gap is not an immediate priority area for national authorities, given the available resources.”

IV. Implementing the DGI-3 Workplan During the First Year

20. Progress has been made in the implementation of activities scheduled for the first year of the DGI-3. DGI-3 task teams were established for all recommendations, IAG lead agencies conducted stocktaking exercises to assess data availability and establish methodologies. DGI-3 task teams conducted several virtual meetings since the Workplan was endorsed by the G20, to make progress on the implementation of each recommendation. These meetings were with representatives of participating economies, though not all are represented in all task teams. Therefore, to complement the work where needed and be sure to reach out to all participating economies, several workshops were conducted to discuss existing methodological frameworks, data gaps, results of stocktaking surveys as well as to discuss ways to overcome challenges and advance the implementation of recommendations.

21. During the first seven months of 2023, the following six workshops were successfully conducted:

- Recommendations 1-3—GHG Emissions, Carbon Footprints and Energy Accounts: May 22-24, 2023, first virtual workshop was organized by the IMF,
- Recommendation 4—Climate Finance: May 15-16, 2023, a virtual kick-off workshop was organized by the WGSD,

- Recommendation 6-7—Climate Impacting Subsidies, Climate Mitigation and Expenditures: May 30-31, 2023, first virtual workshop was organized by the IMF,
- Recommendation 8— Distribution of Income, Consumption and Savings: June 29-30, 2023, first in-person workshop of the EG DNA Framework was organized by the OECD in Paris,
- Recommendation 9—Distribution of Wealth: May 23, 2023, virtual kick-off meeting was organized by the OECD.
- Recommendation 11—Digital Money: July 10-12, 2023, first hybrid workshop was organized by the IMF, in collaboration with BIS, ECB, and FSB, in London.

22. The objective for the first workshop on recommendations 1-3—GHG Emissions, Carbon Footprints and Energy Accounts was to provide the participating economies an overview and understanding of the importance of air emission accounts, energy accounts, and national carbon footprints and their compilation methods. International organizations (UNSD, OECD, IMF, Eurostat, UNFCCC and IEA) presented various initiatives undertaken in this domain, which the participating economies could leverage to address these data gaps. Agreed methodology for energy and air emission accounts is already well developed and several G20 countries are regularly compiling these statistics. European countries are required to report to Eurostat annual energy and air emission accounts and UNSD and OECD have recently launched a global data collection to cover non-EU countries. The questionnaires used for the data collection are being used as reporting templates for the DGI. Some of the countries already releasing air emission and/or energy accounts, such as Costa Rica, Italy, Turkey, United States, Indonesia, and Netherlands, shared their experiences in producing and disseminating these accounts. Nevertheless, more than half of G20 countries do not compile these statistics on a regular basis. As a next step it was agreed that the Lead agencies would work with G20 economies and participating economies by using the existing templates and tools in the development of air emission accounts, carbon footprints and energy accounts. The templates and tools would be presented at a workshop in the fall, after which targeted regional, or country specific, workshops would be initiated to assist in the compilation of the accounts.

23. The virtual workshop on recommendation 4—Climate Finance took stock of the recommendation 4 project plan, the draft reporting templates, and existing experiences with climate finance data. Task team representatives agreed to leverage the existing reporting infrastructure and self-commitment reporting approach established under the DGI-2 recommendation 7. Following the workshop, the draft reporting templates were circulated for written consultation to the task team members. The lead agencies will prepare a fine-tuned version of the templates based on the feedback received for the workshop organized by the WGSD and hosted by the South African Reserve Bank in Cape Town, South Africa on October 5-6, 2023; with the support of the BIS IFC. The main goals of the workshop are to (1) agree on the final reporting templates for recommendation 4, (2) kick off the work on methodology for defining green securities, and (3) deepen the exchange of experiences on ongoing work and challenges in compiling climate finance statistics, including data sources, use of security-by-security data, and user needs on green securities data. Future work on the methodology for green securities should be closely coordinated with the SNA manual update and user needs.

24. The workshop on recommendation 6-7—Climate Impacting Subsidies, Climate Mitigation and Adaptation Expenditures took stock of existing data and initiatives and provided an opportunity for participating economies to share their work in this area and discuss specific challenges in meeting the recommendations. Results of the stock-taking survey on Climate-Impacting Subsidies were also presented and discussed. The key outcomes of this workshop were: (1) clear support for basing indicators on existing statistical guidance, (2) the scope of indicators however needs to be established—whether to restrict the indicators to subsidies as defined in statistical manuals, or include other transfers, indirect/induced subsidies and tax expenditures, (3) the importance of consistency between recommendations 6 and 7—including the definition of ‘climate mitigation and adaptation’ and data sources, (4) different approaches may be needed to define climate-sustaining and climate-damaging, given intent of government policy vs. impact, and (5) it is important to involve other initiatives, expert groups, and committees (like the UNCEEA) already working in this space and for international organizations to coordinate across different initiatives. For instance, the [OECD Inventory of Support Measures for Fossil Fuels](#) documents over 1500 government measures that encourage fossil-fuel production or consumption (direct budgetary transfers and tax expenditures) in 51 countries (G20, OECD, other). In addition, the OECD and the IEA produce a combined estimate of fossil fuel support over a greater number of countries. The OECD’s broad definition of support was

adopted in 2019 to track and measure the Sustainable Development Goal Indicator 12.c.1 on fossil-fuel subsidies, in a [joint publication](#) by UNEP, IISD and OECD. A guidance document on measuring fossil fuel subsidies is under preparation.

25. The first in-person workshop on recommendation 8— Distribution of Income, Consumption and Savings, focused on the exchange of country practices in compiling the results, discussion of updates to the existing collection template (as developed by the Expert Group on Disparities in a National Accounts framework) to reflect the DGI recommendations and on specific compilation issues (e.g., interhousehold transfers, micro-macro gaps). It also included an update on the centralized approach, based on R, that may assist countries in implementing parts of the methodology, for example to apply adjustments to correct for possibly missing rich. Furthermore, the workshop explored possible nowcasting techniques to arrive at more timely estimates and sensitivity analyses to assess the margins of error surrounding the results. Finally, the group discussed the organization of a new data collection round which will likely take place in the second half of 2024.

26. The virtual kick-off meeting on recommendation 9—Distribution of Wealth focused on the terms of reference for the new Expert Group on Distribution of Household Wealth and highlighted ongoing work in this area via presentations by the United States and the European Central Bank. The group also started to reflect on the wealth concepts to use in the compilation of distributional wealth results and discussed the launch of a questionnaire to obtain more insights in the available information in countries both at the micro and at the macro level. This stock-taking exercise, which will be conducted over the summer, will provide relevant input for developing the collection template and to start developing generic guidance to compile the distributional results.

27. The workshop on recommendation 11—Digital Money discussed the state of play, including data priorities, possible data sources, challenges related to data collection, as well as regulations pertaining to digital money and crypto assets in G20 and participating economies. Several economies including Brazil, South Africa, USA, China, India, Switzerland, and the European Union (Germany and Italy) during their presentations highlighted that regulations are being developed often focusing on addressing risk management of crypto assets but may include data requirements. However, the extent to which these regulatory provisions will meet the needs for compiling monetary statistics and cross-border flows and stocks for macroeconomic and macroprudential purposes is still uncertain. The participating economies recognized that collecting data based on three key dimensions is crucial: (1) the type of digital asset, (2) the sector of the holder, and (3) the residence of the holder (counterpart country) to address the question of "who holds what and where". Given the absence of official statistics, the workshop also discussed methods to identify and estimate crypto capital flows, involving indirect inferences and direct inferences using off-chain and on-chain data. Weaknesses in terms of anonymity and unreliability associated with some of these data sources were noted. Collaboration, data sharing agreements, and thinking outside the box by incorporating a mix of traditional and non-traditional data sources were key recommendations provided by panel participants during the final day of the workshop.

28. The task team on recommendation 5—Forward Looking Physical and Transition Risk Indicators held a launch meeting on June 5, 2023 (virtually). During the meeting, representatives of the G20 and participating economies shared their expectations from the task team, while the lead agencies presented their initiatives that could support the countries in their work on the recommendation. The participants agreed to the proposed workplan for the task team.

29. The task team on recommendation 14—Data Sharing and Data Exchange has prepared a concept note outlining key strands of its work (principles/conditions of data sharing, including maturity model, description of a standardized approach to share data and an option to develop self-commitments) alongside surveys collecting best practices, references, and experience of task team members with data sharing within and across organizations at the national and international level.

V. Overview of Current Methodological Frameworks and Data Availability

30. To address the data gaps identified by the G20 FMCBGs, national statisticians require three inputs before they can produce the required statistics. They require an agreed upon conceptual and accounting framework, they require a framework to report and disseminate the information and they require source data to produce the necessary statistics on a sustained basis.

31. The starting point to address the data gaps identified by the G20 FMCBGs differs across the 14 DGI-3 recommendations. In some cases, the G20 economies are well advanced and can develop initial estimates within the next year. In other cases, significant conceptual and source data development work is required.

32. The following Table highlights the availability of the above noted inputs for each recommendation. An overall readiness score (high, moderate, low) has been assigned to each recommendation. Recommendations are rated as high if all 3 inputs exist for the recommendation, moderate if 2 or more input factors exist and low if less than 2 input factors exist. Considering the qualitative nature of recommendations 13 and 14, they have been excluded from the dashboard.

Recommendation	Readiness	Conceptual and Accounting Frameworks	Reporting Templates	Source data
1. GHG Emissions Accounts and National Carbon Footprints	High	<ul style="list-style-type: none"> • <i>Manual for Air Emissions Accounts, Eurostat</i> • <i>2008 System of National Accounts (2008 SNA)</i> • <i>System of Environmental-Economic Accounting Central Framework (SEEA-CF)</i> 	Yes	<ul style="list-style-type: none"> • GHG Emissions • Input-Output Tables (IOTs) or Supply and Use Tables (SUTs)
2. Energy Accounts	High	<ul style="list-style-type: none"> • <i>SEEA-CF</i> 	Yes	<ul style="list-style-type: none"> • Energy Statistics and Balances, • SUTs
3. Carbon Footprints of FDI	Moderate	<ul style="list-style-type: none"> • <i>Benchmark Definition of FDI, 4th Edition (BD4)</i> • <i>Balance of Payments and International Investment Position Manual, sixth edition (BPM6)</i> 	Yes	<ul style="list-style-type: none"> • FDI Statistics • International Trade Statistics by Enterprise Characteristic • Activities of Multinational Enterprise (MNE) statistics • Carbon emission intensities by industry and use (obtained from recommendation 1)
4. Climate Finance	Low	<ul style="list-style-type: none"> • No (In Development based on <i>Handbook on Securities Statistics</i>) 	No (In Development)	<ul style="list-style-type: none"> • Debt securities issuances and holdings • Listed shares issuances and holdings

Table 3. Readiness of the G20 Economies to Address the Data Gaps (Concluded)

5. Forward Looking Physical and Transition Risk Indicators	Low	<ul style="list-style-type: none"> No (In Development) 	No	<ul style="list-style-type: none"> Physical risk: Geographically coded estimates of population, GDP, and built-up area and land; Geographically coded estimates of climate hazards; Damage functions for different hazards, or aggregation methods across different hazards Transition risk: Geographically coded estimates of firm revenues, output, value added, produced assets
6. Climate-Impacting Government Subsidies	Low	<ul style="list-style-type: none"> No (In development based on <i>2008 SNA</i>, <i>Government Finance Statistics Manual 2014 (GFSM 2014)</i>, and the <i>SEEA-CF</i>) 	No (In Development)	<ul style="list-style-type: none"> Government Subsidies by type of program
7. Climate Change Mitigation and Adaptation Expenditures	Low	<ul style="list-style-type: none"> No (In development based on SEEA-CF, the GFSM 2014, the 2008 SNA and the Classification of Environmental Activities) Review of COFOG under the UNSD initiative Ad hoc taxonomy efforts by economies 	No (In Development)	<ul style="list-style-type: none"> Current and capital government and private expenditures by purpose Environmental Goods and Services Account SUTs / input-output tables with significant product detail
8. Distribution of Household Income, Consumption and Savings	Moderate	<ul style="list-style-type: none"> SNA EG DNA guidelines 	No (In Development)	<ul style="list-style-type: none"> Household Sector Accounts Household Survey or Administrative data on incomes and consumption
9. Distribution of Household Wealth	Low	<ul style="list-style-type: none"> No (In development based on SNA) 	No (In Development)	<ul style="list-style-type: none"> Household Sector Accounts Household Survey or Administrative Data on Wealth
10. Fintech Credit	Low	<ul style="list-style-type: none"> No (In development based on <i>2008 SNA</i> and review of the <i>International Standard Industrial Classification (ISIC)</i>) 	No (In Development)	<ul style="list-style-type: none"> Fintech credit flows and stocks
11. Digital Money	Low	<ul style="list-style-type: none"> No (In development based on <i>2008 SNA/BPM6</i> updates) 	No	<ul style="list-style-type: none"> Estimates of the transactions and stocks of digital money by counterpart institutional unit and by country
12. Fintech-enabled Financial Inclusion	Low	<ul style="list-style-type: none"> No (In development based on the <i>Financial Access Survey (FAS) Guidelines and Manual 2019</i>, <i>Monetary and Financial Statistics Manual and Compilation Guide 2016 (MFSMCG 2016)</i>, and other sources) 	No (In Development)	<ul style="list-style-type: none"> Supervisory data Administrative data on fintech companies Household survey Global Findex Other sources to be explored

VI. Progress on Closing the Data Gaps

33. The overall status of the DGI-3 implementation is presented in Table 4. This table provides information on the progress G20, and participating economies reported on closing the data gap for each of the DGI-3 recommendations as of September 2023. Given the qualitative nature of recommendations 13 and 14, they have not been included in the table. For some recommendations such as energy accounts, air emissions accounts, the source data are already available for several G20 and participating economies. G20 economies have made the most progress across the climate change statistics data gaps—specifically on recommendation 1—GHG Emissions Accounts and National Carbon Footprints reported 29 per cent of economies that have closed the data gap, and recommendation 2—Energy Accounts reported 48 per cent of economies reported the data gap closed. Progress has also been made in developing estimates of the distribution of income, consumption, saving and wealth across households, while in the area of digitalization and financial innovation G20 and participating economies need further assistance and guidance on the implementation of recommendations 11 and 12.

Recommendation	Data Gap is Closed	Data gap is being addressed	Data Gap is not Material for the Economy	Data gap is not an immediate priority area for the national authorities, given available resources	Unable to assess at this time, further consultation with national stakeholders is required
By number of economies					
1. GHG Emissions Accounts and National Carbon Footprints	7	9	1	1	7
2. Energy Accounts	11	10	0	0	4
3. Carbon Footprints of FDI	0	15	0	2	8
4. Climate Finance	0	20	0	0	5
5. Forward Looking Physical and Transition Risk Indicators	0	14	0	0	11
6. Climate-Impacting Government Subsidies	0	10	0	2	13
7. Climate Change Mitigation and Adaptation Expenditures	0	9	0	3	13
8. Distribution of Household Income, Consumption and Savings	1	14	0	6	4
9. Distribution of Household Wealth	0	17		4	4
10. Fintech Credit	0	14	0	1	10
11. Digital Money	0	7	1	1	16
12. Fintech-enabled Financial Inclusion	0	14	2	0	9

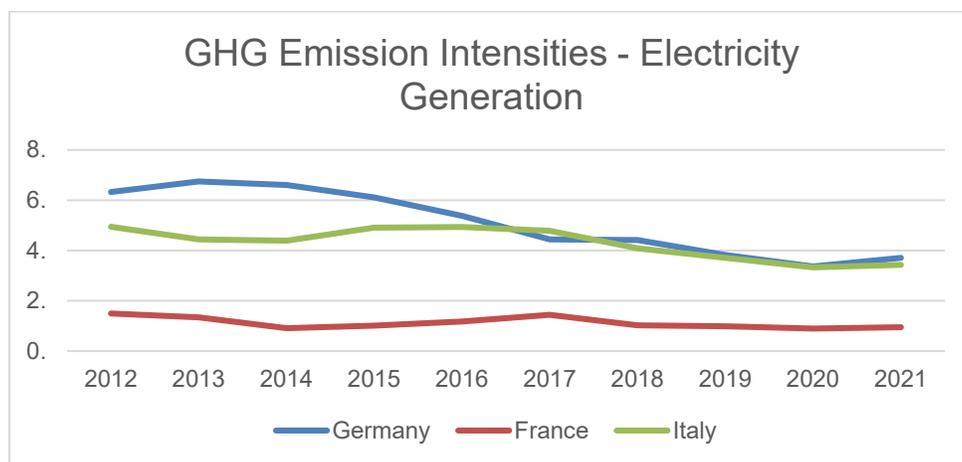
34. Annex 1 presents the information for each G20 and participating economy vis-à-vis the implementation of the DGI-3 targets as of September 2023. For some recommendations/targets, further IAG guidance or consultation with national stakeholders is required and, therefore, economies were unable to assess the progress at this stage. Furthermore, given the qualitative nature of recommendations 13 and 14, they have been excluded from the dashboard. To complement the dashboard, brief summaries of progress and key challenges for each of the G20 and participating economies, as prepared by the G20 country coordinators are presented in Annex 2.

Box 1. Air Emission Accounts (Continued)

Worldwide emissions have rebounded at levels higher than earlier, after declining by 3.3 percent in 2020 (due to decreased mobility caused by the COVID-19 pandemic)⁶. While there are several global datasets that can be used to track GHG emissions, data gaps exist across the G20, specifically GHG emissions data that can be readily integrated with mainstream economic data. Emissions data that uses the same classifications and concepts as mainstream economic data helps policymakers understand the impact economic activity is having on the carbon budget and also in monitoring the effectiveness of policies framed for mitigation of climate change. Air Emission Accounts (DGI-3 REC 1) are specifically designed for this purpose. Several G20 economies are already releasing Air Emission Accounts – providing policymakers in those countries with an important tool for informing climate policy.

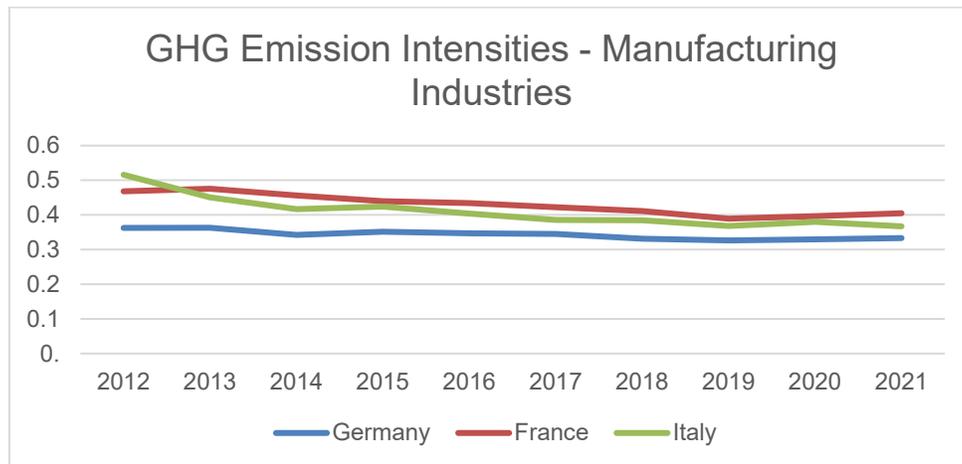
A key indicator that can be derived by combining National Accounts with Air Emissions Accounts are GHG emission intensities per unit of output and value added. GHG emission intensities are calculated by dividing GHG emissions by real output or real value added for a given industry. Falling GHG emission intensities indicate that an industry is decoupling growth from emissions, mainly by transitioning to lower carbon emitting energy sources or by increasing the efficiency of its operations.

Among the G20 economies, GHG intensities have been falling across the G20 European economies for the better part of the last decade. Among the G7, the decline in the electricity generating industry in Germany over the last 10 years has been pronounced. However, emissions per euro in Germany and Italy are still well above France which relies heavily on nuclear power as a source of electricity generation. Similar declines were registered in the manufacturing sector as manufacturers in France and Italy were able to reduce their emission intensities by over 20 percent during this period.



⁶ Economic Activity Indicators, IMF Climate Change Indicators Dashboard, <https://climatedata.imf.org/pages/re-indicators>

Box 1. Air Emission Accounts (Concluded)



Source: OECD

Note: The use of constant price estimates of value added instead of current price estimates may affect the changes in emission intensities as shown in the above charts.

Combining Air Emissions Accounts with National Economic Accounts permits G20 policymakers to understand which industries are making progress towards lowering GHG emissions and whether policy measures are succeeding in decoupling GHG emissions from economic growth.

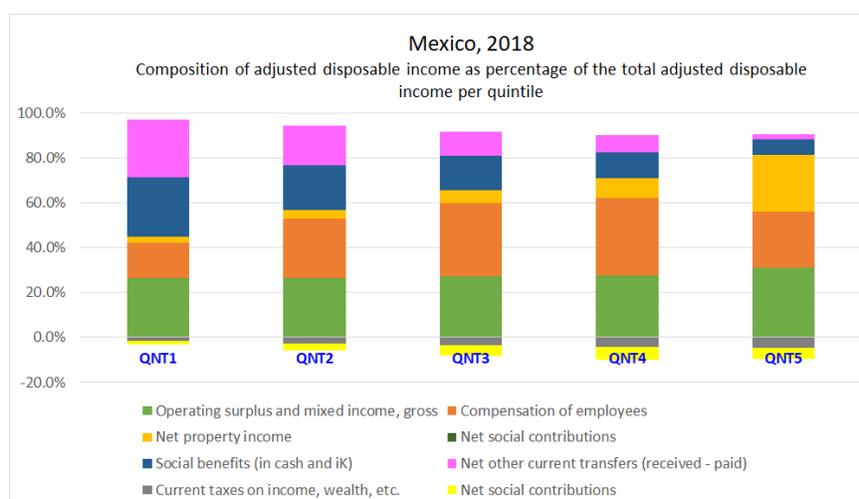
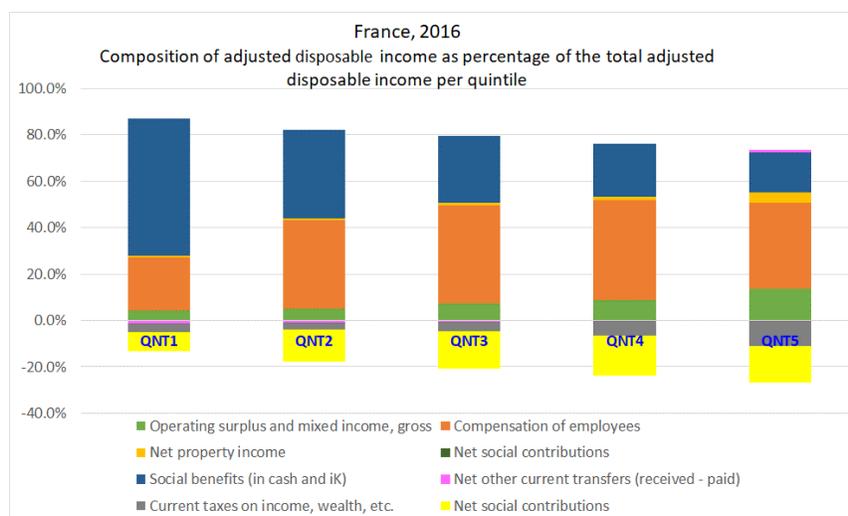
Box 2. Distribution of Household Income, Consumption and Wealth (Continued)

Gross Domestic Product is an indicator of aggregate economic activity. It is about as macro as a macroeconomic indicator can get! While it helps policymakers track aggregate national incomes, it “says” little about how they are distributed across the population. GDP does not tell us which segments of the population are benefiting from growth or who is most impacted by a downturn. This is one of the Data Gaps identified by the G20 FMCBGs. In order to answer the question of whether one group is benefiting more from growth or whether government programs (e.g., income support programs) are having the desired distributional impact, the G20 FMCBGs need statistics that measure the distribution of income across households. At the same time, there is also a need for distributional measures on consumption and wealth, in order to have a more comprehensive overview of material well-being of various groups of households.

Over the last ten years, the international community has been developing international standards and guidelines for distributional household income, consumption and saving estimates consistent with national accounts concepts. The G20 DGI-3 is leveraging this work to go “beyond GDP” in their analysis of the distributional effects across economies. As an outcome of the work of the Expert Group on Disparities in National Accounts, several G20 economies regularly publish estimates of the distribution of household income, consumption, and saving. Recently, the OECD launched the Expert Group on Distributional Household Wealth to work on the distribution of wealth based on the work undertaken by the European Central Bank and by several countries. Once the two work streams are combined, consistent information on income, consumption and wealth will provide a more comprehensive understanding of distributional impacts and household conditions. Around 40 G20 and non-G20 countries and five international organizations are working with both Expert Groups to improve the quality, granularity, and timeliness of the results as well as enhance the measurement methodology.

Box 2. Distribution of Household Income, Consumption and Wealth (Continued)

Key insights can be shown through comparison between and across countries. An analysis of income distribution between France and Mexico, for example, reveals that social benefits (the colored blue blocks) are the most important source of income in the lowest quintile for France, as a result of high social transfers and taxes, against lower shares of social benefits across all quintiles in Mexico, reflecting institutional differences between the two countries. In Mexico, current transfers (mainly remittances received) shown in the color pink are a notable source of income for the lowest quintile while also featuring across all income quintiles. Another notable difference between the two economies is the role of operating surplus and mixed income, shown in the color green, as a source of income for households that produce goods and services (including imputed rent from owner-occupied housing), which are higher in Mexico than in France, largely driven by the larger role of the informal economy.



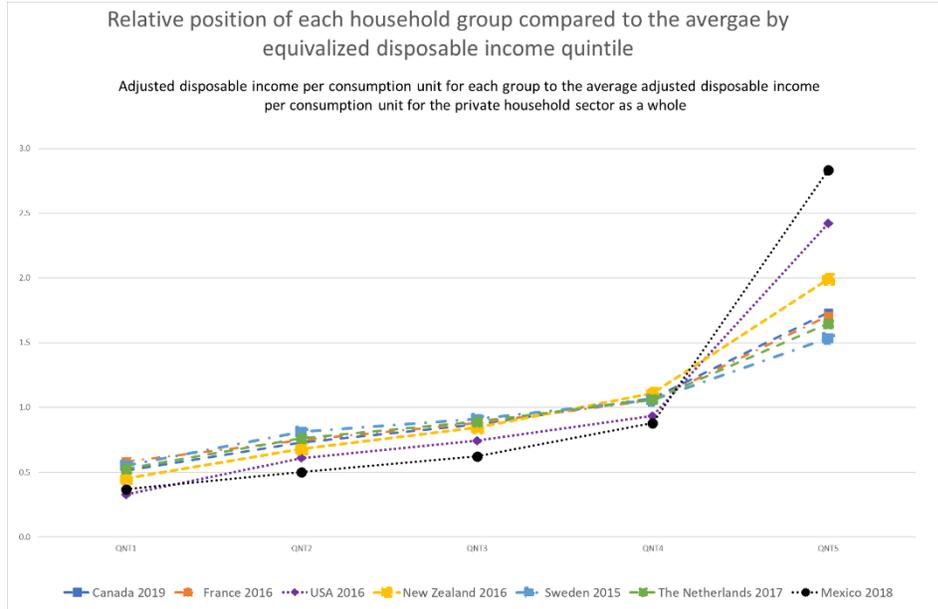
Sources: OECD, and country estimates

Comparisons across countries can also be made with measures of disparity, for example, the difference in ratios between the value of the adjusted disposable income⁷ per household by quintile against the average adjusted disposable income for all households for the country. This ratio provides a measure of disparity along quintiles across countries.

⁷ The adjusted disposable income is the preferable measure of income for national accounts purposes. It is a measure after the redistribution process that includes social transfers in kind, such as education and health care.

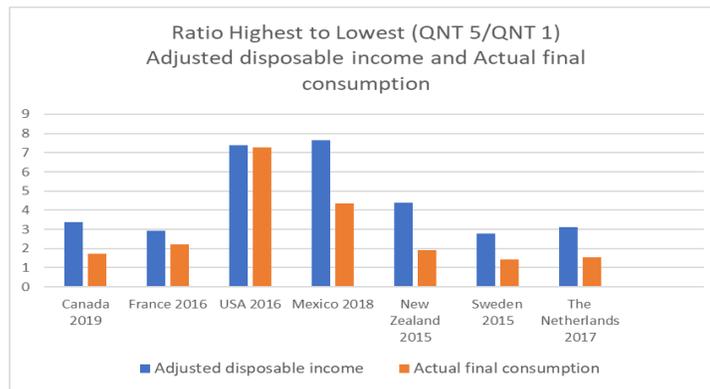
Box 2. Distribution of Household Income, Consumption and Wealth (Concluded)

The higher the ratio, the greater the disparity. The disparity measure starts below 0.5 increasing to around 2.0 for Australia, Canada, France, The Netherlands, New Zealand, and Sweden (meaning four times the average of the QNT1), while in the USA and Mexico the ratio reaches around 2.5. In other words, those in the top income quintile have on average five times more adjusted disposable income than those in the lowest income quintile in the USA and Mexico.



Sources: OECD, and country estimates

Another analysis of inequality is the ratio of highest to lowest, which represents how many times the value of the highest quintile is exceeding the value of the lowest quintile for a specific income or consumption item. The results for a set of countries for adjusted disposable income and actual final consumption show that the inequality is generally more pronounced in income rather than consumption. The sole exception comes from the USA, where consumption disparity is on par with income disparity.



Sources: OECD, and country estimates

VII. Way Forward

35. The IMF will, in close cooperation with the IAG and the FSB as well as through the DGI Global Conference, continue to monitor the implementation of the DGI-3 and report progress to the G20 FMCBGs. To support implementation and progress reporting, as part of the 2024 DGI-3 work program, various forms of consultations and coordination with the participating economies are planned by means of workshops, meetings of task teams as well as regional and/or bilateral meetings, as needed, and will be carried out in in person or hybrid manner.

36. The experience so far, and as with DGI-1 and DGI-2, suggests that the workshops are the most effective way to facilitate progress, in particular for the most difficult recommendations. Therefore, the 2024 work program will include eight thematic workshops: four virtual and four in person (Annex 3). It will also include consultation and bilateral meetings as needed, and an annual Global Conference (planned for June 2024). The workplan in 2024 will also focus on drafting methodological frameworks and reporting templates where they are still not in place or updating existing ones as well as developing and/or disseminating (experimental) estimates.

Annex 1. Status of Progress in the Implementation of the DGI-3 Recommendations by G20 and participating economies—as of September 30, 2023

	Argentina	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Republic of Korea	Mexico	Russia	Saudi Arabia	South Africa	Turkiye	United Kingdom	United States	European Union	Hong Kong	Netherlands	Singapore	Spain	Switzerland
Recommendation 1: Greenhouse Gas Emissions Accounts and National Carbon Footprints	2	2	1	1	2	1	1	2	2	1	2	1	2	2	2	2	1	1	1	2	1	n/a	1	2	
Recommendation 2: Energy Accounts	1	1	2	1	1	1	1	2	2	1	1	2	2	2	2	1	1	1	1	2	1	2	1	2	
Recommendation 3: Carbon Footprint of Foreign Direct Investment	2	2	1	2	2	1	2	2	2	1	1	2	2	2	2	2	2	2	1	2	2	1	2	2	
Recommendation 4: Climate Finance	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	sc	
Recommendation 5: Forward Looking Physical and Transition Risk Indicators	1	1	2	2	2	1	2	2	2	2	1	2	2	2	2	1	2	1	2	1	2	1	2	2	
Recommendation 6: Climate-Impacting Government Subsidies	1	1	1	1	2	2	1	2	1	1	2	2	2	2	2	2	2	2	1	1	2	1	2	2	
Recommendation 7: Climate Change Mitigation and Adaptation Expenditures	1	2	1	2	2	2	2	2	1	1	2	2	2	2	2	2	2	2	1	2	2	1	2	2	
Recommendation 8: Distribution of Household Income, Consumption and Savings	2	2	2	1	2	1	2	2	2	1	2	1	1	2	2	2	2	2	1	1	2	2	2	2	
Recommendation 9: Distribution of Household Wealth	2	2	2	1	2	1	1	2	2	1	2	1	2	2	2	1	2	2	2	1	2	2	2	2	
Recommendation 10: FinTech Credit	2	2	2	2	2	2	2	1	2	1	2	2	1	2	2	2	2	2	2	2	2	1	2	2	
Recommendation 11: Digital Money	2	2	1	2	2	2	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	1	2	n/a	
Recommendation 12: FinTech-enabled Financial Inclusion	1	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2	2	2	1	2	n/a	1	n/a	2	

LEGEND:

a. Data gap is closed.	Green
b. Data gap is being addressed.	Orange
c. Data gap is not material for the economy.	Light Grey
d. Data gap is not an immediate priority area for the national authorities, given available resources	Purple
e. Unable to assess at this time, further consultation with national stakeholders is required.	Dark Grey
1. Target ¹	1
2. Second-best Target ²	2
3. Self-commitment by economies	sc
4. Not Applicable-economy selected, "data gap is not material for the economy"	n/a

Source: Stocktaking surveys undertaken by economies.

1/ The assessment by economies may be subject to revision during the next reporting cycle.

2/ Targets and second-best targets as reflected in the DGI-3 workplan welcomed by the G20 FMCBGs October 2022 meeting.

[G20 DGI-3 Workplan Welcomed by the Finance Ministers and Central Bank Governors, October 2022](#)

Annex 2. Status of the DGI-3 Data Gaps by G20 and participating economies—as of September 30, 2023

To assess progress in addressing data gaps the IAG surveyed the G20 and participating economies. For each of the data gaps identified by the G20 FMCBGs, economies were asked to indicate their progress in closing the data gap. For each of the selected targets, economies were asked to assess if:

- **Data gap is closed.** Data are publicly disseminated on an official government website.
- **Data gaps is being addressed.** You have a program of work in place or plan to put a program in place to address this data gap (Task Team members have been assigned and resources within your country have been identified or will be identified to address this data gap).
- **Data gaps is not material.** Based on the assessment of your key stakeholders and data users, the data gaps are not material in your economy and the lack of data in this area is not an impediment to the development of effective policy.
- **Data gap is not an immediate priority area for the national authorities, given available resources.** Based on your assessment the data gap is material and required for effective policy, but you are unable to allocate resources to address this data gap given other priorities and resource constraints.
- **Unable to assess at this time, further consultation with national stakeholders is required.** G20 country coordinates require further dialogue with national stakeholders before they can commit to indicating how they will proceed in addressing the data gap.

Given this is the first iteration since the workplan was welcomed in October 2022, in some cases the information provided reflect the starting point for each of the economies attempt to assess (self-assessment) and address the recommendations as set out under the DGI-3 workplan.

Argentina

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is not an immediate priority area for the national authorities, given the available resources. A study to allocate GHG emissions to International Standard Industrial Classification (ISIC) classes is currently in progress. Further financial support is required to update SUTs and elaborate consumption-based carbon footprints.

Rec 2: Energy Accounts. The data gap is closed. Data on energy accounts are published⁸ in tons of oil, with the possibility of conversion to terajoules.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. The economy is working towards publishing FDI stocks and flows by type of industry.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. Argentina's sustainable market is mostly composed of debt instruments (corporate or sub-sovereign bonds and financial trusts). The National Securities Commission (CNV) is regulating the capital market and collecting information on thematic bonds (including sub sovereign bonds) and financial trusts. The data includes information on green, social, sustainable and sustainability-linked bonds, financed projects, currency, maturity and bond yields. There is no comprehensive data collection process in place to collect the data on reduction of GHG emissions of the issuers of these securities. While specific steps to address data gaps and quantify the impact on emissions reduction have not been defined yet, the CNV, within the framework of its powers, has plans to develop policies that

⁸ <https://www.argentina.gob.ar/economia/energia/planeamiento-energetico/informacion-energetica>

enhance transparency and consistency in the information provided by thematic bond issuers. The CNV has developed a sustainable debt report⁹ that analyzes the state and growth of the sustainable debt market in Argentina, serving as an additional tool to promote responsible investment locally.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. Work towards better defining climate risks with a regional and sectoral basis has been in progress over the past three years. Given the wide geographic extension, the huge diversity of ecosystems and population across the country, as well as federal political system, this exercise has been carried out progressively, in conjunction with the jurisdictions and areas of competence. This also implied improving and generating new data to accurately define climate risks, based on science but also on local, traditional and indigenous people knowledge. In December 2022, Argentina published the National Adaptation and Mitigation Plan¹⁰, which defines a set of targets based on the identified climate risk. Currently a process to define and develop their corresponding targets is being carried out. The economy has identified and prioritized 24 climate risks for the five regions (COFEMA – Environmental Federal Council): Patagonia, Northeast, Northwest, Cuyo, and Center. This regional risk assessment is combined with a sectoral approach, addressing water, health, energy, ecosystems services, agriculture, livestock and fishery, mobility, habitat and housing, productive development, tourism and sports and cultural heritage. After a characterization of each risk, a package of targets to be achieved by 2030 are established. Currently, an exercise to associate the measures established by different governmental areas to achieve those targets is being carried out. Additionally, an analysis of the current indicators is being made, in conjunction with the identification of the need of new indicators.

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is being addressed.

Rec 8: Distribution of Household Income, Consumption and Savings and Rec 9: Distribution of Household Wealth. Unable to assess at this stage, further consultation with national stakeholders is required. The economy is unable to assess at this stage assess whether it is aiming at the target or the second-best target.

Rec 10: Fintech Credit. The data gap is being addressed. The Central Bank of Argentina issues a semestral report on non-banking credit providers. This report covers fintech credit activity, including the credit granted by a non-bank credit provider that has the potential ability to grant the credit by electronic means, without any physical involvement. Some of the aspects evaluated on fintech credit are interest rates, the stock of loans, the number of debtors, type of debtor (human or legal person, age and gender) and non-performing loans. Fintech credit providers lend with their own funds and also raise funds in the capital markets through the securitization of their portfolios.

Rec 11: Digital Money. The economy was not able to assess progress at the time of drafting of the progress report. Further consultation with national stakeholders is required.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. Argentina can determine the channel for electronic payments indicators (payments and transfers of funds), including information on values and volumes. For credit products, channel can only be identified for a small number of credit providers that only operate online. Regarding account ownership, payment accounts can only be opened online, while bank accounts can be opened through digital channels or in branches. Bank accounts can be operated by digital channels. Electronic payment statistics cannot be disaggregated by gender at the moment. The amount of people and MSMEs with at least one credit product and the amount of the credit balance can be disaggregated by gender, as well as by other demographic variables such as age and geographic location (at the municipality level). The amount of people with at least one bank account and one payment account (or both types of accounts simultaneously) can be disaggregated by gender, as well as by other demographic variables such as age and geographic location (at the municipality level). Information on income is not available for the selected indicators.

⁹ https://www.argentina.gob.ar/sites/default/files/sustainable_debt_market_in_argentina-report_2022.pdf

¹⁰ <https://www.argentina.gob.ar/ambiente/cambio-climatico/plan-nacional>

Australia

Rec 1: GHG Emission Accounts and National Carbon Footprints. Unable to assess at this stage, further consultation with national stakeholders is required. Australia produces SUTs and UNFCCC national GHG inventories which has been mapped to Australia's economic industry classifications (ANZSIC). Carbon footprints are not currently produced.

Rec 2: Energy Accounts. The data gap is closed. The Australian Bureau of Statistics (ABS) publishes an Energy Account publication¹¹ which presents physical estimates of energy supply and use, including renewable energy use, end use, COVID-19 impacts, and energy stocks.

Rec 3: Carbon Footprints of FDI. Unable to assess at this stage, further consultation with national stakeholders is required. Calculation of carbon footprints from FDI is dependent on national carbon footprints from recommendation 1. The economy assessed that the second-best target is achievable by 2025Q2.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). At the time of drafting the progress report, the economy was unable to assess progress in addressing the data gap, further consultation with national stakeholders is required. Australia is developing a sustainable finance taxonomy that is credible, useable, and internationally interoperable while reflecting the Australian economy and its context. Once completed, the taxonomy can be used to identify climate related finance.

Rec 5: Forward Looking Physical and Transition Risk Indicators. At the time of drafting the progress report, the economy was unable to assess progress in addressing the data gap, further consultation with national stakeholders is required. Australia's first National Climate Risk Assessment (NCRA) will be delivered over 2 years from 2023 to 2024. The NCRA will identify and prioritize the most valued areas that are of national significance and at risk of climate change, related to environment, biodiversity, health, infrastructure agriculture, and the economy. The NCRA will deliver a shared national framework to inform national priorities for climate adaptation and resilience actions and will enable consistent monitoring of climate risk across all jurisdictions. The NCRA will deliver a baseline of current climate risks, it will consider new and emerging risks, and will be evidence-based. It will draw on the expertise and capability of world-leading scientists through the Australian Climate Service (ACS). The ACS is a partnership between the Bureau of Meteorology, Geoscience Australia, Commonwealth Scientific and Industrial Research Organisation and the ABS.¹²

Rec 6: Climate-Impacting Government Subsidies. Some information on climate related subsidies is currently available through the Government Finance Statistics data collection process. Availability of more detailed information requires further assessment and further consultation with national stakeholders.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required. Data sources to collect information on climate mitigation and adaption expenditures have not been developed in Australia. Limited information on climate mitigation and adaption expenses may be available from existing data collections.

Rec 8: Distribution of Household Income, Consumption and Savings and Rec 9: Distribution of Household Wealth. The data gaps are being addressed. The Australian National Accounts release on distribution of household income, consumption and wealth integrates the ABS micro and macro data to produce distributional information of household income, consumption and wealth— - latest release reference period was for 2021-22 financial year¹³.

¹¹ [Energy Account, Australia, 2020-21 financial year | Australian Bureau of Statistics \(abs.gov.au\)](https://www.abs.gov.au/energy-account-australia-2020-21-financial-year)

¹² [National Climate Risk Assessment - DCCEEW](#)

¹³ [Australian National Accounts: Distribution of Household Income, Consumption and Wealth, 2021-22 financial year | Australian Bureau of Statistics \(abs.gov.au\)](https://www.abs.gov.au/australian-national-accounts-distribution-of-household-income-consumption-and-wealth-2021-22-financial-year)

Rec 10: Fintech Credit. The data gap is being partially addressed. The Reserve Bank of Australia (RBA) is participating in a pilot exercise currently being conducted by the Financial Stability Board's NMEG on fintech credit. The RBA is able to populate part of the NMEG template as it relates to 'balance sheet platform' lenders, using available data on finance companies collected by the prudential regulator. The template also seeks data on marketplace lenders, however, this sector is not material in Australia, so data will not be provided for these lenders.

Rec 11: Digital Money and Rec 12: Fintech-enabled Financial Inclusion. Economy unable to assess at the time of drafting of the progress report, further consultation with national stakeholders is required.

Brazil

Rec 1: GHG Emission Accounts and National Carbon Footprints. Data gap is being addressed. Development of air emission accounts is ongoing, but further consultation with national stakeholders is needed to assess the progress.

Rec 2: Energy Accounts. The data gap is being addressed. Brazil has already published Energy Accounts for 2015-2018, but only with biomass products¹⁴. Environmental and National Accounts are produced by the National Accounts sector of the Brazilian Official Statistics Institute (IBGE). Currently, all the efforts of the National Accounts sector are directed towards the process of changing the base of the National Accounts. After its conclusion, the production and publication of a new Energy Accounts with all energy products will be resumed.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. Brazil compiles and disseminates annual FDI stocks and flows and participates regularly on Coordinated Direct Investment Survey (CDIS). Sectoral breakdowns are available on disseminated FDI statistics and the publication of MNEs data is now under consideration. Brazil actively participates on the discussions about trade by enterprise characteristics discussions on Current Account Task Team. GHG emissions have already been estimated for Industry, Agriculture and Livestock, Energy, Residuals and Land Use Change. Further steps will be required to extend these estimates to FDI recipient economic sectors.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. Work on this recommendation will build on the experience gathered and the data sources used on DGI-2 recommendation. 7. Availability of data on the securities features is yet to be verified. Data on listed shares is not available.

Rec 5: Forward Looking Physical and Transition Risk Indicators. Data gap is being addressed. Preliminary climate change related forward-looking physical risk indicators have already been compiled. Further consultation is required for more detail on the progress in addressing the data gap.

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed. Currently Brazil produces data on climate impacting subsidies for the IMF Climate Change Indicators Dashboard. Brazil aims to improve the methodology as guidance on recommendation 6 develops.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Data gap being addressed. Brazil publishes data on government environmental expenditure and intends to compile climate change mitigation and adaptation expenditure following recommendation 7. To be able to assess if an expansion of coverage beyond the general government will be possible to attain, the economy will need more information on the coverage that will be required and on the methodology.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed with experimental studies at income quintile level. IBGE is planning to release estimates of the distribution of household

¹⁴ <https://www.ibge.gov.br/estatisticas/economicas/contas-nacionais/32395-contas-economicas-ambientais-de-energia-produtos-da-biomassa.html?edicao=32479&t=resultados>

income, consumption, and saving in line with national accounts totals after methodological review associated with the update of SNA 2025.

Rec 9: Distribution of Household Wealth. Data gap is being addressed; however, it is recognized that Brazil is not in a position to close the data gap in the short or medium term, it is a long-term initiative. First, the economy is focused on measuring the non-financial balance sheet, and currently it is working on compiling capital stock and consumption of fixed capital to calculate net aggregates. It is noted that this initiative involves other stakeholders (departments and institutions) with the aim of developing data sources for compiling statistics on household wealth.

Rec 10: Fintech Credit. The data gap is being addressed. In Brazil, only the regulated fintech credit entities can grant credit directly, while non-regulated entities need to partner with a financial institution. The Brazil Central Bank (BCB) reports in the FSB NMEG annual monitoring exercise data on outstanding loans granted via regulated Peer-to-Peer (P2P) Fintech credit platforms or other regulated fintech credit entities, when the loans are kept in their balance sheets. Collecting data on loans granted by regulated fintech credit entities sold with no risk retention, (that are removed from the entity's balance sheets and usually end up in investment funds or structured financial vehicles) is a challenge for the economy. An additional challenge is to identify the non-regulated Fintech credit entities, as no official register of Fintech entities exists. In addition, collecting data on loans granted via identified non-regulated fintech platform with no risk retention is difficult. The economy is working on estimating the amount of outstanding loans granted via regulated and non-regulated fintech credit entities, however scarce resources at the BCB are limiting the ability of to commit to any deadline. In addition, some data requested in the framework proposed in the Fintech Credit Data Gap Group, such as total financial assets of non-regulated fintech credit entities, are still not in the scope of the BCB's information gathering initiative.

Rec 11: Digital Money. The data gap is being addressed. The BCB already publishes some data on crypto-assets¹⁵ in the trade balance of goods, including data on change of ownership from resident (non-resident) to non-resident (resident). Data are obtained from monitoring of foreign exchange (FX) contracts. In June 2023, a presidential decree assigned to the BCB the mandate to regulate and supervise crypto-assets. Therefore, when this regulation comes into force the BCB is expected to cover other crypto-asset transactions with settlements outside the FX market.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. The task team on recommendation 12 is collecting information through a stocktaking survey from all jurisdictions, enabling the development of the relevant methodologies, guidelines, and templates to further inform the implementation of this recommendation.

Canada

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is being addressed. Canada's commitment to the "Target" is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities. For the 3 components under the Target, SUTs, air emission accounts and consumption-based carbon footprint, Canada disseminates SUTs, and partially meets air emission accounts target by producing and disseminating the account for three pollutants (information is currently disseminated for the total of the three pollutants (e.g., carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O)), from 2009-2020¹⁶. While third component-consumption-based carbon footprint is not currently produced.

Rec 2: Energy Accounts. The data gap is being addressed. Canada partially meets the Target for this recommendation. The economy compiles and disseminates the "use side" of the energy accounts, however some of the fuels listed in the workplan are not currently included in the accounts¹⁷. Canada's commitment to the Target is

¹⁵ https://www.bcb.gov.br/content/statistics/specialseriestables/ConciliacaoBC_i.xlsx

¹⁶ <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810009701>

¹⁷ <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810009601>

dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. Canada's commitment is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. Canada's commitment is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities.

Rec 5: Forward Looking Physical and Transition Risk Indicators. Unable to assess at this stage, further consultation with national stakeholders is required. The scope of the recommendation is unclear, and commitment will be reassessed once the guidance, concept note, methodology and indicators are known.

Rec 6: Climate-Impacting Government Subsidies. Unable to assess at this stage, further consultation with national stakeholders is required. The commitment is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities. Additional guidance is required to compile meaningful and comparable estimates for sound policymaking. In particular, clear and unambiguous coverage, concepts, definitions, methods and classifications that align with existing (and soon updated) internationally endorsed frameworks (such as the SNA, GFSM, COFOG, SEEA) are needed.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is being addressed. This commitment is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities. In particular, Canada will commit to estimates of climate mitigation current and capital expenditures, while it is not still in a position to provide estimates of climate adaptation expenditures.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. The commitment is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities. Canada currently disseminates distribution of household income, consumption, and saving at income quintile level¹⁸. With regards to the distribution of household income, with breakdowns by income decile, it is noted that (1) there is no clear demand for decile-level breakdown from stakeholders and (2) there are significant challenges in acquiring the data necessary to produce Household distribution – consumption and saving at the income decile level.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. The commitment is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities. Canada disseminates distribution of wealth across households at wealth quintile level for 2021, 2022, 2023¹⁹. With regards to the distribution of household wealth by wealth decile, it is noted that there is not clear demand for decile-level breakdown from stakeholders.

Rec 10: Fintech Credit. The data gap is being addressed. The commitment is dependent on future consultations with key partners and national priorities.

Rec 11: Digital Money. The data gap is being addressed. The commitment is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities.

¹⁸ <https://www150.statcan.gc.ca/n1/daily-quotidien/230704/dq230704a-cansim-eng.htm>

¹⁹ <https://www150.statcan.gc.ca/n1/daily-quotidien/230704/dq230704a-cansim-eng.htm>

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. The commitment is dependent on the clarifications/guidance on the statistical framework and concept definitions that will result from upcoming workshops, future consultations with key partners, and national priorities.

China

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is being addressed. The Ministry of Ecology and Environment is currently on track for the submission of the Fourth National Communications and Third Biennial Update Reports, including national GHG inventories for 2017 and 2018, and will actively prepare and carry out the Fourth Biennial Update Report, the First Biennial Transparency Report, and the preparation of national GHG inventories for 2020 and 2021 as the next step. In addition, the National Bureau of Statistics (NBS) has compiled and released the input-output tables for the years 2010, 2012, 2015, 2017, 2018, and 2020²⁰. Additionally, the NBS has also published output and use tables for 2012 in printed publication form, as well as SUTs for 2017, 2018, and 2020.

Rec 2: Energy Accounts. The data gap is being addressed. The annual energy balance sheets of China are disclosed through the publication of the “China Energy Statistical Yearbook”²¹. The authorities will further assess given their current resources, capacities, and priorities if the energy balances may be converted into energy accounts.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. As for the data on FDI position and flows, the activities of MNEs, imports and exports, carbon emissions of MNEs the economy aims to address the second-best target, however the economy is unable to assess the progress at this stage-coordinated work is needed with several other departments. As for the services data, the economy aims to address the Target data gap and this data gap is being addressed currently –State Administration of Foreign Exchange (SAFE) is promoting the work on data collecting, system establishment and design of data compiling method, and plans to compile and disseminate data on services by ownership from the fourth quarter of 2024.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. In terms of green bonds, various governmental departments such as the People's Bank of China, China Securities Regulatory Commission and the National Association of Financial Market Institutional Investors have started to collect green bond statistics. Research institutions, intermediaries, and data providers, such as China Chengxin Credit Rating, SynTao Green Finance and Wind, have likewise initiated statistics work on green bonds. However, discrepancies persist between these statistical results. With regards to green equity, despite the lack of unified standards in China, China Securities Regulatory Commission along with the two securities exchanges have also undertaken relevant statistics work.

Rec 5: Forward Looking Physical and Transition Risk Indicators, Rec 6: Climate-Impacting Government Subsidies, Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is not an immediate priority area for the national authorities, given the available resources. Currently, China's primary work is focused on learning and monitoring the development of the related global statistical methods.

Rec 9: Distribution of Household Wealth. The data gap is not an immediate priority area for the national authorities, given the available resources. At present, China lacks the foundation for attempting data work related to wealth distribution accounts. The NBS does not have plans to carry out work related to wealth distribution statistics.

²⁰ <https://data.stats.gov.cn>

²¹ [China Energy Statistical Yearbook 2022 \(available in hard copy\)](#)

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 11: Digital Money. The data gap is being addressed. Firstly, China has stringently prohibited activities related to crypto assets, refraining from data collection on stablecoins and payable crypto assets. Secondly, digital currency electronic payment (e-CNY) adopts a centralized management and two-tier operation framework, featuring managed anonymity for small amounts, aimed at protecting individual privacy. Meanwhile, e-CNY is still in the pilot phase, actively exploring innovative applications across various fields, complicating data collection and computation. At present, economy has collaborated with tier-two institutions to conduct data collection related to e-CNY and are continuously adjusting the collection and metrics framework based on actual circumstances.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. e-CNY wallets are categorized based on the level of KYC compliance. Users are empowered to select wallets of their preferred category, tailored to meet their requirements. The anonymous wallet with the least privileges does not necessitate identity information. However, as data classification is based on factors such as gender and income level. Consequently, it may fall short of attaining the relevant economic targets owing to the lack of necessary data. Other wallet categories collect personal identity information and pertinent data, which supports related statistics. Also, since e-CNY is still in the pilot stage, there is a need to continuously improve data collection and management.

France

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is closed.²² In accordance with the European regulation 691/2011 on European economic accounts for the environment, air emission accounts are compiled for the period 2008 to the current year -2. In the fourth quarter of 2023, the 2008 to 2021 air emissions accounts will be published on the websites of Eurostat and the Ministry of Ecological Transition. Carbon footprint of final demand has been calculated for more than 10 years, based on the symmetrical input-output tables of the national accounts. The estimates are published on the websites of the Ministry of Ecological Transition's statistical service²³ and the National Statistical Office (INSEE)²⁴ as well as in various annual publications by the Ministry of Ecological Transition²⁵. Work is in progress between the Ministry of Ecological Transition's statistical service and the National Statistical Office to: (1) improve the method for estimating France's footprint using the Figaro model developed by Eurostat, (2) simultaneously disseminate economic data compiled by the National Accounts and GHG emissions data (air emissions accounts and carbon footprint), with the aim to disseminate "augmented economic accounts" y supplementing the information provided by economic aggregates (e.g., GDP) with environmental data.

Rec 2: Energy Accounts. The data gap is closed. Energy accounts are regularly published on an institutional website²⁶.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gaps in this area have been partially addressed by the publication of the Eurosystem indicators: (1) exposure of financial institutions to physical risk and (2) carbon footprint of financial institutions, as well as some other work by the European Commission (ex: Joint Research Center). The Banque de France and Autorité de Contrôle Prudentiel et de Résolution (ACPR) are

²² <https://www.statistiques.developpement-durable.gouv.fr/emissions-de-gaz-effet-de-serre-et-polluants-atmospheriques-au-format-aea-ex-namea>

²³ <https://www.statistiques.developpement-durable.gouv.fr/lempreinte-carbone-de-la-france-de-1995-2021?rubrique=27&dossier=1286>

²⁴ <https://www.insee.fr/fr/statistiques/3281683?sommaire=3281778>

²⁵ <https://www.statistiques.developpement-durable.gouv.fr/chiffres-cles-du-climat-france-europe-et-monde-edition-decembre-2022?rubrique=26&dossier=1263>; <https://www.statistiques.developpement-durable.gouv.fr/bilan-environnemental-de-la-france-edition-2022-0>

²⁶ <https://www.statistiques.developpement-durable.gouv.fr/bilan-environnemental-de-la-france-edition-2022-0>; <https://www.statistiques.developpement-durable.gouv.fr/bilan-energetique-de-la-france-pour-2021>

exploring ways to improve assessment of the carbon footprint of financial institutions as well as their exposure to acute physical risk. The remaining data gaps with respect to some of the input data necessary for physical risk and transition risk indicators, include: (1) forward looking climate data on acute and chronic risk fit for assessing potential damages (satisfactory publicly available resources for river floods/windstorms, less so for other perils) and (2) data on emissions (some public and private sources are available in Europe, but further regulatory initiatives should improve the availability of such data)

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed. In 2023 France reported to the OECD on a voluntary basis an estimate of fossil fuel subsidies for 2016-2022. This dataset is used to estimate the sustainable development goal (SDG) indicator 12.c.1-amount-of-fossil-fuel subsidies per unit of GDP.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is being addressed²⁷. Within the European program on environmental economic accounts, the economy works only on climate change mitigation expenditures and not on adaptation. At present, only capital expenditure related to the production of energy from renewable sources is available. Notably, expenditures dedicated to energy savings and management (especially buildings' energy refurbishment) are missing (this is likely to be mostly capital expenditure). Although the demand for this data is high, they can be reported to Eurostat only on a voluntary basis.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. France is developing new tools to allocate net national income to households and distribute it across categories. Annual estimates of income, consumption and saving will be available after 2024. The timeliness of the reference period of at most 18 months depends on the availability of the micro sources, and its achievement within the timeline is uncertain.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. As a member of the ECB Expert Group "Distributional Financial Accounts", the Banque de France currently produces quarterly experimental French Distributional Wealth Accounts (DWA), with breakdowns at wealth decile level, fully reconciled with national accounts and in line with the ECB methodology. The ECB and the Banque de France are expected to publish these series by end-2023. The ECB is currently working on a joint distribution of income and wealth while INSEE is currently working to improve the information about wealth of households relying on administrative data and its distribution across households. This will complement the next version of the household finance and consumption survey (HFCS) survey. This may also affect the aggregate measure by the national accounts of household wealth.

Rec 10: Fintech Credit. The Data gap is not an immediate priority area for national authorities, given the available resources.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. There is no legal framework allowing the Banque de France to collect data on the cryptocurrency market.

Rec 12: Fintech-enabled Financial Inclusion. Unable to assess at this stage, further consultation with national stakeholders is required.

Germany

²⁷ <https://www.statistiques.developpement-durable.gouv.fr/bilan-environnemental-de-la-france-edition-2022-0>

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is closed. Federal Statistical Office of Germany (DESTATIS) publishes SUTs²⁸, Air Emission Accounts²⁹ and Consumption-based Carbon Footprints³⁰ data.

Rec 2: Energy Accounts. The data gap is closed. DESTATIS publishes Energy Accounts data³¹.

Rec 3: Carbon Footprints of FDI. The data gap is not an immediate priority area for national authorities, given the available resources. DESTATIS is responsible national organization for this recommendation. The carbon footprint of FDI is not part of the work program of the National Statistics Office (NSO) due to a limitation of available resources and limitation in available data for reliable estimation results.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. Bundesbank is responsible national organization for this recommendation. The Centralized Securities Database (CSDB) of the European System of Central Banks (ESCB) contains data on issuances of green debt securities (green bonds) from December 2020³². Granular CSDB data can only be used within the ESCB. For German green bonds, currently the majority of the environmental, social and governance (ESG) data is populated by commercial data providers. In the near future, the coverage of the ESG data in the CSDB is planned to be expanded to cover also green listed shares and green investment fund shares. Currently the classification does not necessarily follow a single framework but distinguishes between self-labelled, second party verified and certified green bonds. The ESCB, via national central banks (NCBs) receive a backflow of the data two times per month, including revisions of up to 36 months backwards. The issuer sector (ESA2010) is part of the CSDB. A breakdown of green bonds holdings by sector is also possible if the bonds data is linked to the Securities Holdings Statistics, which is also only available within the ESCB. The Bundesbank will soon publish aggregate graphs on green bonds for Germany as well as the EU-27 based on the CSDB green bond data³³. The same data was also used by the ECB to release experimental indicators on sustainable finance in January 2023³⁴. As for the listed equity, the Bundesbank has access to company-level GHG emissions from two commercial data vendors (ISS and Carbon4Finance) via a joint Eurosystem Procurement. Furthermore, the Bundesbank is looking into ways to generate the GHG emissions data directly from company reports.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. The Bundesbank has published a study on constructing forward-looking climate-related physical risk indicators³⁵. So far, the Bundesbank has not taken a closer look at the construction of forward-looking indicators on transitional risk. The achievement of the target vs. second-best target with respect to the breakdowns depends on the coverage and availability of the underlying data sources.

Rec 6: Climate-Impacting Government Subsidies. The data gap is not an immediate priority area for national authorities, given the available resources. DESTATIS is responsible national organization for this recommendation. Partially: see indicator on SDG Target 12.c ³⁶ Germany recommends that subsidies are defined according to the

²⁸ <https://www.destatis.de/DE/Themen/Wirtschaft/Volkswirtschaftliche-Gesamtrechnungen-Inlandsprodukt/Publikationen/Downloads-Input-Output-Rechnung/input-output-rechnung-2180200207005.xlsx>

²⁹ <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Umwelt/UGR/energiefluesse-emissionen/Publikationen/Downloads/anthropogene-luftemissionen-5851103207005.xlsx>

³⁰ <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Umwelt/UGR/energiefluesse-emissionen/Publikationen/Downloads/direkte-und-indirekte-energiefluesse-emissionen-xlsx-5859006.xlsx>

³¹ <https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Umwelt/UGR/energiefluesse-emissionen/Publikationen/Downloads/statistischer-bericht-ugr-energiegesamtrechnung-5850014217005.xls>

³² Above that data on social bonds and sustainable bonds would also be available for use.

³³ <https://www.bundesbank.de/en/statistics/sustainability/green-finance-dashboard--862732>

³⁴ https://www.ecb.europa.eu/stats/ecb_statistics/sustainability-indicators/data/html/ecb.climate_indicators_sustainable_finance.en.html

³⁵ [Constructing forward-looking climate-related physical risk indicators \(bis.org\)](https://www.bis.org/constructing-forward-looking-climate-related-physical-risk-indicators)

³⁶ <https://sdg-indikatoren.de/12-c-1/>

SNA and subdivided according to their intended purpose (environmentally supportive, environmental subsidies and similar transfers (ESST)) and assumed effect (environmentally destructive, Potentially Environmentally Damaging Subsidies (PEDS)). The economy is currently building up reporting on environment-related subsidies and other transfers (ESST) within the framework of the environmental economic accounts. The account should at least present the subsidies of the federal government and the States of Germany, broken down by environmental sector and recipient of the payment. Since the presentation of results depends on the availability of the federal/state budget results, the target t+18 will be achievable at maximum. For target t+12, the plan is to produce a provisional account based on the budget plan figures.

Federal Statistical Office does not plan any separate sophisticated reporting for subsidies that have a negative impact on the climate other than the SDG reporting on 12.c.1³⁷ that country is obliged to report. Since German environmental economic accountants are oriented towards the subsidy concept from the SNA, no such subsidies can currently be identified. However, the economy is checking whether some transfers in kind in connection with the emission trading schemes could be classified as such.

Other institutions use self-defined subsidy terms to suggest climate-damaging "subsidies" and identify supposedly financial savings opportunities for the public budget. For this purpose, they include (alleged) reduced taxation compared to hypothetical taxations or include different tax reductions, to which a climate impact can be attributed only indirectly. This approach is neither in line with the SNA/SEEA CF nor, in our opinion, does it lead to objectively sound results. Germany is committed to high quality data and prefer coherent interpretations in all statistical frameworks. Taxation and subsidies should therefore always be considered together with several indicators and only then provide a meaningful picture. Preliminary accrual results of environmental taxation by sector, which also implicitly includes the presentation of non-taxation, are available at t+18 (preliminary results).

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is not an immediate priority area for the national authorities, given the available resources. DESTATIS is responsible national organization for this recommendation. Germany is planning to develop accounts for climate change mitigation and climate change adaptation in a similar way to the environmental protection expenditure accounts (EPEA) starting with government expenditures, based on the new classification of environmental functions. Source analysis must show if all expenditure specially that of private households and companies can be covered. The problem will be in the EPEA - that expenditure cannot always be clearly attributed to a specific purpose. However, by international definition the classification of environmental functions (CEF) excludes expenditure on public transport, which is an essential pillar of climate protection efforts in Germany. Note, no final evaluation has been made as to whether the first or second-best target should be aimed for. The "second-best target" is selected provisionally.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is not an immediate priority area for the national authorities, given the available resources. Production of Distribution of Household Income, Consumption and Savings is constrained due to limited resources of the responsible organization (DESTATIS). As an alternate approach, Eurostat data could be used to fill the data gaps.

Rec 9: Distribution of Household Wealth. German Distributional Wealth Accounts (DWA) are compiled in accordance with the method developed by the ECB's' Expert Group on Distributional Financial Accounts. As a result, existing data gaps are being addressed in accordance with this framework. The DWA are planned to be released via the ECB's Statistical Data Warehouse and via the Bundesbank's homepage at the end of 2023.

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required. Bundesbank is responsible national organization for this recommendation.

Rec 11: Digital Money and Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. Bundesbank is responsible national organization for these two recommendations. The work on addressing the data gap recently started. The economy cannot estimate the extent to which it can meet the target or the second-best

³⁷ <https://sdg-indikatoren.de/en/12-c-1/>

target, however, the aim is to provide as many data points as possible depending on the final definitions provided by the workstream and data availability on a national level.

India

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is being addressed. India periodically submits its National Communications and Biennial Update Report (BUR) as part of the reporting obligations to UNFCCC and its Paris Agreement. These reports contain the national greenhouse gas inventory of India and other climate change related data and information, including the provision of climate finance. The next such report is anticipated to be received this year. Further, India will be transitioning to the Biennial Transparency Report (BTR), which India is mandated to deliver under Paris Agreement and relevant decisions of the Conference of Parties of the Paris Agreement. India will continue to work under the leadership of the GHG emissions and national carbon footprints task team to identify any additional gaps to meet the reporting requirements of this recommendation.

Rec 2: Energy Accounts. The data gap is being addressed. Ministry of Statistics & Programme Implementation has compiled asset accounts and physical SUTs for energy for the years 2015-16 to 2019-20. The data used for compilation were mostly sourced from a publication 'Energy Statistics'. In the latest issue of the publication titled Energy Statistics-2023, there has been revision in some of the estimates that have been used for the compilation of the Physical SUTs of Energy. Due to this reason, it is necessary to revise the physical SUTs of Energy for all the years and India plans to revise them accordingly.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. Internal deliberations with the stakeholders are underway in India.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. In February 2022, Government of India announced its plan to issue sovereign green bonds to mobilize resources for green infrastructure. The proceeds will be deployed in public sector projects that contribute towards reducing the carbon intensity of the economy. In January 2023, India issued the first tranche of its first sovereign green bond worth INR 80 billion. In February 2023, the Government of India announced the issuance of another INR 80 billion in sovereign green bonds.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. Internal deliberations with the stakeholders are underway in India.

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed. Internal deliberations with the stakeholders are underway in India.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is being addressed. Internal deliberations with the stakeholders are underway in India.

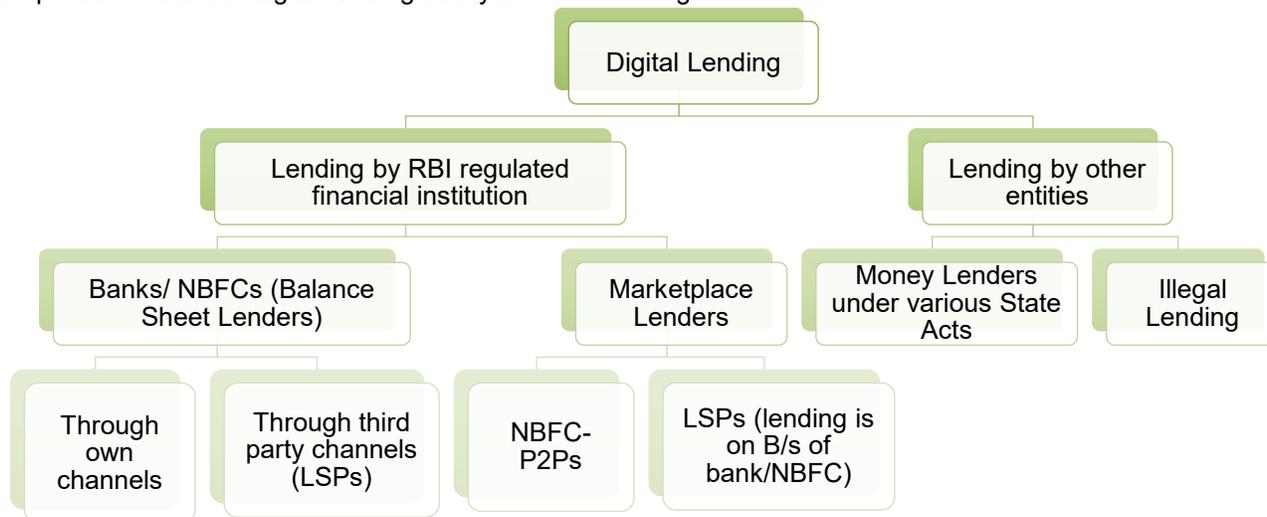
Rec 8: Distribution of Household Income, Consumption and Savings and Rec 9: Distribution of Household Wealth. The data gap is not an immediate priority area for national authorities, given the available resources. Till date, there is no full-fledged survey conducted to estimate distribution of household income, consumption, and saving considering the sensitivity of the subject - individuals are generally reluctant to provide data on income and savings and non-response is generally very high. Efforts have been made to conduct such surveys in the form of pilot survey to see the feasibility of conducting a full-fledged survey on income, consumption and savings. However, so far, the results of such pilot surveys were also not satisfactory.

Rec 10: Fintech Credit. The data gap is being addressed. In India, digital lending ecosystem has seen an exponential growth in recent years, enabled by a robust digital public infrastructure. While banks have been increasingly adopting innovative approaches in digital processes, Reserve Bank of India (RBI) registered NBFIs have been at the forefront of digital lending which takes two forms: Balance sheet lending (BSL) and market-place lending (MPL). Balance Sheet Lenders carry the credit risk in their own balance sheet and provide capital for such assets and associated credit risk. Market Place Lenders or Market Place Aggregators (MPAs) perform the role of

matching the needs of a lender and borrower without any intention to carry the loans in their balance sheet (such as P2P lending which can be carried out by RBI registered NBFIs-P2Ps³⁸). Furthermore, there are other entities, mostly Fintechs, that provide credit intermediation services between the borrowers and the RBI registered banks/NBFIs, which can also be bracketed with MPLs/ MPAs. These market players are called Lending Service Providers (LSPs).

Fintech entities are not registered with RBI in India and cannot carry out lending activities from its own balance sheets. They act as an agent of an RBI Regulated Entities (banks/NBFIs) and carry out one or more of lender's functions or part thereof in customer acquisition, underwriting support, pricing support, servicing, monitoring, recovery of specific loan or loan portfolio on behalf of Regulated Entities in conformity with extant outsourcing guidelines issued by the RBI.

A simplified structure of digital lending ecosystem in India is given below:



Digital Lending activities undertaken by RBI registered banks/ NBFCs are governed by Guidelines on Digital Lending³⁹ issued by RBI on September 02, 2022. The Guidelines define digital lending as a “remote and automated lending process, largely by use of seamless digital technologies for customer acquisition, credit assessment, loan approval, disbursement, recovery, and associated customer service”. This definition covers any digital lending activity which is undertaken by RBI Regulated Entity (banks/NBFIs/NBFI-P2Ps) whether through their own channels or facilitated by a Fintech entity (LSPs in Indian context). Since the Fintechs are not allowed to lend from their own balance sheet in India, they are not included in the above definition. This definition has been developed considering the Indian financial regulatory landscape. At present, no regular data collection is being undertaken on FinTech credit. However, any future reporting of Fintech credit shall be through supervisory channels.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. It has to be highlighted that the speculative Crypto ecosystem has many inherent flaws and risks when compared to sovereign Central Bank Digital Currency (CBDC), especially to emerging market economies, and it may not be appropriate to compare them with the same lens of digital money. While CBDC related data points can form a part of macro-economic indicator, other data points pertaining to Crypto-assets, stablecoins could be collected as part of market surveillance exercise, thus making clear distinction regarding purpose of collection of data.

³⁸ https://www.rbi.org.in/Scripts/BS_ViewMasDirections.aspx?id=11137

³⁹ <https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=12382&Mode=0>

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. Presently India publishes entity-wise Prepaid Payment Instruments (PPI) statistics⁴⁰, and bank-wise mobile and internet banking statistics⁴¹

Indonesia

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is being addressed. Economy is conducting in depth study and inter-ministerial collaboration to assess and reconcile multiple sources of data.

Rec 2: Energy Accounts. The data gap is being addressed. Economy is conducting in depth and inter-ministerial collaboration to assess and reconcile multiple sources of data.

Rec 3: Carbon Footprints of FDI. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). Unable to assess at this stage, further consultation with national stakeholders is required. Coordination between the G20 SFWG and the G20 DGI is needed to align the information available in the disclosure standards that are the target of the G20 SFWG with the data needed by DGI, considering the G20 SFWG discussion also covers the availability of climate-related data, especially on the firm-level.

Rec 5: Forward Looking Physical and Transition Risk Indicators. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed. The data is still in the calculation process.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is being addressed. The data is provided in the Climate Budget Tagging.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. Underlying distribution resulted from household survey is being exercised. Meanwhile granular administrative data access by compiling agency (Statistics Office) to administrative data provider (government body) has been empowered via Memorandum of Understanding. More collaboration is needed with other microdata providers and some OECD technical assistances.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. Granular administrative data access by compiling agency (Statistics Office) to administrative data provider (government body) has been empowered via Memorandum of Understanding. More collaboration is needed with other microdata provider and some OECD technical assistances.

Rec 10: Fintech Credit. The data gap is being addressed. Some Fintech Credit data is already published⁴². Additional work through the task team will make further improvements to the data aiming at fully closing the data gap.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. Under the Project Garuda, Bank Indonesia has issued a white paper and consultative paper concerning high-level design as well as initiated public communication regarding the development plan of Digital Rupiah. However, Bank Indonesia has not decided yet the timeline for the issuance of the Digital Rupiah. As Digital Rupiah will have the ability to capture granular data and information in real-time, the fulfilment of CBDC data needs will be among the

⁴⁰ [Reserve Bank of India - Entity-wise PPI Statistics \(rbi.org.in\)](https://www.rbi.org.in)

⁴¹ [Reserve Bank of India - Bankwise Volumes in ECS/NEFT/RTGS/Mobile Transactions \(rbi.org.in\)](https://www.rbi.org.in)

⁴² <https://ojk.go.id/id/kanal/iknb/data-dan-statistik/fintech/default.aspx>

topics to be examined further in the development of CBDC in Indonesia. Currently, Bank Indonesia prohibits the use of Crypto Assets as a means of payment so that Crypto Assets in Indonesia are not legally recognized as part of Digital Money. On the other hand, Crypto Assets are recognized as an investment tool in Indonesia. However, it is necessary to carry out further discussion and deepening regarding crypto asset data in Indonesia with the relevant authorities.

Rec 12: Fintech-enabled Financial Inclusion. Statistics data from the supply side related to phone banking, SMS/mobile banking and internet banking transactions (value and volume) are not sufficient to express country's financial inclusion penetration because one person can have more than 1 bank account. Data on digital financial services is only one part of financial inclusion indicators. The financial inclusion level of G20 members should not be limited to fintech products and services but also refer to other relevant indicators, including data set from the demand side as available in the Global Findex.

Indonesia measures financial inclusion level based on national survey conducted through the coordination of the National Financial Inclusive Council, BI and Financial Service Authority (OJK). Indonesia's financial inclusion level in 2022 shows that 85.1% adult use formal financial institution products or services.

Italy

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is closed. The National Statistical Institute (ISTAT) publishes SUTs 2010-2019 (break in series in 2015): 2010-2015⁴³, 2015-2019⁴⁴, Air Emission Accounts 2008-2021⁴⁵ and consumption-based carbon footprints 2008-2020 (2020 provisional data)⁴⁶

Rec 2: Energy Accounts. The data gap is closed. ISTAT disseminates Physical Energy Flow Accounts (PEFA) 2008-2020⁴⁷

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. Most required information is already available and published: (1) FDI positions and flows data by economy and industry (for the period 2005-2022)⁴⁸, (2) data on activities of foreign-controlled firms in the reporting economy and on the overseas activities of MNEs 2008-2020⁴⁹ ("Foreign affiliates statistics"), (3) trade of goods (movement of goods basis) by type of ownership ("Trade in goods statistics by enterprise characteristics") for 2021⁵⁰. The first data release on trade of services (change of ownership basis) by enterprise characteristics ("Services Trade by Enterprise Characteristics") by type of ownership (referred to 2022) will be produced in 2024. Carbon emissions of MNEs by ownership are yet to be produced and sound methodology is still lacking. Economy aims at reaching the target, but this will depend on methodological developments by the relevant task teams and the actual feasibility.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. However, the extent to which it will be closed will be defined once the task team defines harmonized methodological choices regarding the identification of green shares.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. Based on the task team stocktaking exercise. The target seems overly ambitious as required data to achieve "significant

⁴³ <https://www.istat.it/it/archivio/225665>

⁴⁴ <https://www.istat.it/it/archivio/278901>

⁴⁵ https://esploradati.istat.it/databrowser/#/en/dw/categories/IT1,DATAWAREHOUSE,1.0/UP_ACC_AMBIEN/UP_DCCN_CONTIEMATMREV2 or <https://ec.europa.eu/eurostat/data/database>

⁴⁶ https://indicatoriambientali.isprambiente.it/sys_ind/1318h

⁴⁷ https://esploradati.istat.it/databrowser/#/en/dw/categories/IT1,DATAWAREHOUSE,1.0/UP_ACC_AMBIEN/UP_DCCN_PEFA
<https://ec.europa.eu/eurostat/data/database>

⁴⁸ <https://data.oecd.org/fdi/fdi-flows.htm>

⁴⁹ <https://ec.europa.eu/eurostat/data/database> (dataset named fats_08; fats_out_r2)

⁵⁰ https://ec.europa.eu/eurostat/databrowser/view/ext_tec07/default/table?lang=en

geographical and sectoral breakdowns of forward-looking risks" are currently unavailable (e.g., reliable forward-looking scenarios with required geographical breakdown).

Rec 6: Climate-Impacting Government Subsidies and Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is being addressed.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. Ongoing joint project of the Bank of Italy and the ISTAT aims to estimate joint distribution of income, consumption, and savings by combining the information from different surveys through statistical matching methods. Furthermore, annual experimental estimates of the distribution of income for the years 2015-2020 have been produced and disseminated through the Eurostat website. Further work is planned to update them as soon as the microdata on which they are based become available and on improving some aspects of the methodology. Work is currently being done to produce experimental estimates of the distribution of consumption for 2019. Further work is planned to extend the estimates for all years for which income distribution estimates are available.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. Ongoing joint project of the Bank of Italy and the ISTAT aims to refine the distribution wealth accounts methodology developed within the ESCB by using additional administrative data sources on real estate ownership and debt, as well as bank supervisory statistics.

Rec 10: Fintech Credit. The data gap is being addressed. The Bank of Italy will implement a data collection exercise beginning December 2023. It is expected that the data will become available during 2024 and will largely cover the requirements defined by the template agreed upon within the task team for this recommendation.

Rec 11: Digital Money. The data gap is being addressed. The economy aims to address the target; however, the final decision depends on a conclusion from data collection exercise within the task team.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. The economy aims to address the target; however, it will depend on relevant aspects (phenomena, perimeter, etc.) of the data collection framework to be defined by the task team.

Japan

Rec 1: GHG Emission Accounts and National Carbon Footprints. Data gap is being addressed. In Japan, GHG inventory used to be the only available database. However, Japan released air emission accounts in 2022 (for carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) for 1991-2020), although they are available only in Japanese at the moment. Participating ministries of the task team are still to reach an agreement on how to proceed with the work plan (e.g., implementation timelines, the type of sources and data to be identified, how to develop statistical infrastructures in which statistical compilers have access to necessary administrative data, where available).

Rec 2: Energy Accounts. The data gap is closed. Japan releases an annual database for annual SEEA-CF based energy accounts that covers natural, energy inputs, energy products, residuals, derived from the methodologies basically consistent with the SEEA-CF.⁵¹

Rec 3: Carbon Footprints of FDI. The data gap is being addressed, given the various level of progress among the targets. Japan has made progress on the first and fourth targets identified in the work plan. On the first target, Japan published FDI positions and flows data by region consistent with BD4 and BPM6 and by industry consistent with BD4: Outward / Inward Direct Investment, breakdown by Region and Industry (Flow, Stock)⁵². Regarding the

⁵¹ https://www.enecho.meti.go.jp/statistics/total_energy/

⁵² http://www.mof.go.jp/english/policy/international_policy/reference/balance_of_payments/ebpfidii.htm;
http://www.mof.go.jp/policy/international_policy/reference/iip/dip2022.xlsx;

carbon emissions of MNEs by ownership (the fourth target), Japan's Mandatory GHG Accounting and Reporting System under the Act on Promotion of Global Warming Countermeasures requires GHG emitters above a certain volume (including MNEs) to report their emissions within Japan. From 2023 emitters may additionally report overseas emissions, which will be disclosed alongside the required disclosure for domestic emissions. On the other hand, the progress on the second and third target is difficult to assess. The lack of clarity on the kind of data needed is hindering the usage of existing available sources and data, regarding the activities of foreign-controlled firms and the overseas activities of MNEs, as well as for imports and exports by enterprise characteristics differentiating exports and imports of goods (movement of goods basis) and services (change of ownership basis) by ownership.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. In 2022 the Japan Exchange Group launched a database for sustainable bonds that covers green bonds, social bonds, sustainability-linked-bonds, based on recommendations made by Expert Panel on Sustainable Finance of the Japan Financial Services Agency⁵³. In addition, the Ministry of the Environment of Japan runs a database for green bonds, green loans, sustainability-linked bonds, and sustainability-linked loans since 2018. The database covers public offering bonds as well as private placement bonds, and it includes policy information, such as domestic guidelines for such financial products and subsidies.

Rec 5: Forward Looking Physical and Transition Risk Indicators. Unable to assess at this stage, further consultation with national stakeholders is required. The participating ministries of the task team have not reached an agreement on how to proceed with the work plan (e.g., implementation timelines, the type of sources and data to be identified, how to develop statistical infrastructures in which statistical compilers have access to necessary administrative data where available.).

Rec 6: Climate-Impacting Government Subsidies. Unable to assess at this stage, further consultation with national stakeholders is required. Cross-ministerial definition on "climate-impacting subsidies" is not fully agreed among participating national stakeholders. Also, statistical capacities and statistical infrastructures of the task team need to be improved in order to allow compilation and access to necessary available administrative data.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required. Cross-ministerial definition on climate-related expenditures is not fully agreed among participating national stakeholders. Also, statistical capacities and statistical infrastructures of the task team need to be improved in order to allow compilation and access to necessary available administrative data.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. Japan is considering the methodology of the estimation based on the discussion in the OECD Expert Group on Disparities in a National Accounts framework.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. Japan is considering the methodology of the estimation based on the discussion in the OECD Expert Group on the Distribution of Household Wealth.

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. The selection of the target will be subject to further discussion given that the common data collection framework is currently under discussion within the recommendation 11 task team. It is expected that finalization of widely agreeable and reliable collection framework will require further discussion among member jurisdictions. CBDC experiments are ongoing in Japan, however currently there is no plan to issue CBDC. Japan enjoys a relatively

http://www.mof.go.jp/english/policy/international_policy/reference/balance_of_payments/ebpfdi.htm;
http://www.mof.go.jp/english/policy/international_policy/reference/iip/index.htm

⁵³ <https://greenfinanceportal.env.go.jp/en/>

longer crypto regulatory experience and supervisory framework - Japan enforced a registration system for Crypto Asset Exchange Service Providers in April 2017. Furthermore, a regulatory framework (including registry obligation) for a stablecoin issuer and service providers is established recently in June 2023).

Rec 12: Fintech-enabled Financial Inclusion. Unable to assess at this stage, further consultation with national stakeholders is required. The participating ministries of the task team have not reached an agreement on how to proceed with the work plan (e.g., implementation timelines, the type of sources and data to be identified, how to develop statistical infrastructures in which statistical compilers have access to necessary administrative data where available.)

Republic of Korea

Rec 1: GHG Emission Accounts and National Carbon Footprints. Unable to assess at this stage, further consultation with national stakeholders is required. Currently the national GHG inventory and air emission accounts for 2005-2015 are available in Korea, however, inter-ministerial collaboration with further research and consultation is required to disseminate data (such as ISIC classes) and develop air emission accounts.

Rec 2: Energy Accounts. Unable to assess at this stage, further consultation with national stakeholders is required. Korea Energy Economics Institute is publishing energy balance which requires further inter-ministerial collaboration and data to produce SUTs of energy accordingly.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. The economy is working on data production, although it expects it will take few years to complete the necessary checks and verifications and produce reliable data.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). Unable to assess at this stage, further consultation with national stakeholders is required. Although K-Taxonomy was developed and now is available in the market, it is a voluntary guideline, not a legally mandatory classification system at the moment. Therefore, the economy needs further considerations and consultations on the definition of “green finance” and methods of calculation, especially for listed shares.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. Government’s guideline on green bond has been established following Korean-Taxonomy. Data of listed green bonds in the exchange (KRX) are now available. Further considerations and consultations are needed on the definition and guideline of “green finance” and methods of calculation, especially for listed shares or loans.

Rec 6: Climate-Impacting Government Subsidies and Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. Korea recently collected income, consumption, and savings by household group for 2018-21.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. Korea is currently working on preparation of wealth distribution statistics, which is related to income, consumption, and savings.

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required. Fintech industry in Korea experiences rapid growth, collecting fintech credit data is necessity for the economy. However, decisions regarding the selection of specific subjects for fintech credit data collection and investigation methods are not yet established. Korea will participate in the discussion on fintech credit data collection after international standards are established, taking into account the current shortage of the research situation.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. The economy cannot meet the target or the second-best target at this stage, however, the aim is to provide as

many data points as possible depending on the final definitions provided by the Task team and data availability on a national level.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. The BOK publishes the data on Electronic Banking on its website ⁵⁴. The BOK periodically disseminates statistics on the number of customers of internet and mobile banking, value and volume of internet and mobile banking transactions and has also disseminated statistics on electronic payment services such as electronic pre-paid payment instruments.

Mexico

Rec 1: GHG Emission Accounts and National Carbon Footprints. Data gap is being addressed. Mexico has an inventory of greenhouse gas emissions with IPCC classification (prepared and published by the Ministry of the Environment). However, the compilation of accounts with the ISIC classification must be agreed upon by international bodies. Currently, Mexico has the development of accounts for air pollutant emissions, in accordance with the SCAE-CF, and for pollutants other than GHGs ("criteria pollutants"), with the North American Industrial Classification System.

Rec 2: Energy Accounts. The data gap is being addressed. The Ministry of Energy has available a table of energy supply and use; however, the data has to be improved in accordance with the requirements of this recommendation.

Rec 3: Carbon Footprints of FDI. Unable to assess at this stage, further consultation with national stakeholders is required. Mexico has different stakeholders that discuss the information from the carbon footprint unit on the economy of foreign investment, especially with the Central Bank and the Ministry of Economy and the Ministry of Environment.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. A work plan has been developed with specific objectives aligned with the goals set by the G20 DGI-3, for the fourth quarter of 2024. As part of this work plan, the review of the taxonomies published by the federal government and by some private institutions, which involve the use of the term "green" in financial and economic issues will be conducted. This assessment will allow the elaboration of a first version of the definition of "green" financial Instruments by the end of Q3 2023. The economy will also define data sources and establish self-commitments. Based on the Handbook for Security Statistics (HSS), and in line with the set of reporting templates for the implementation of recommendation 4, by the end of 2023, Mexico will develop methodologies to collect and generate the information and during 2024 will work on the operational implementation of these methodologies.

Rec 5: Forward Looking Physical and Transition Risk Indicators. Unable to assess at this stage, further consultation with national stakeholders is required. Mexico currently has a SEEA-CF, and the pilot study that implements the ecosystem accounts with different stakeholders to discuss and create the infrastructure to develop the statistical and geographic information according to this requirement, with a geographic and sectoral breakdown, looking at the international framework.

Rec 6: Climate-Impacting Government Subsidies. Unable to assess at this stage, further consultation with national stakeholders is required. This information is the responsibility of the Ministry of Finance, the greening of public finances has recently begun to be deepened and the challenge is to classify spending (especially subsidies) in relation to climate impact.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required. Given the sources of information currently available, it is not possible to differentiate between public sector expenditures on climate change adaptation and mitigation. However, Mexico is able to evaluate jointly with stakeholders the possibility of taking advantage of the information derived

⁵⁴ [Economic Statistics System \(bok.or.kr\)](http://www.bok.or.kr) and [Annual Report on the Payment and Settlement Systems\(목록\) | Annual | Periodicals | Research Papers | Bank of Korea \(bok.or.kr\)](http://www.bok.or.kr)

from environmental accounts and ecosystem accounts, in addition to public programs such as the National Climate Change Strategy (Ministry of the Environment), the Sustainable Taxonomy initiative, among others, with the purpose of identifying actions in terms of expenses that could be linked to the aspects of mitigation and adaptation jointly.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. Mexico participates into EG DNA and has shared with the OECD biennial experimental statistics on the distribution of household income, consumption, and savings by quintiles according to the totals of the National Accounts, the primary source of income and by type of home. Data are with total adherence to international templates and methodologies however not published nationally. The macroeconomic statistics of the Household Institutional Sector are being updated as part of the project aiming to change the base year from 2013 to 2018. This will lead to the update of the results shared with the OECD in the first quarter of 2024. Work is underway to study nowcast models that help develop annual estimates Work is also underway to improve the estimates of the distributions due to biases in the microdata.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. Mexico recently joined the EG DHW, so the available and recurring sources of surveys and administrative data are currently being studied to be used in estimating the distribution of wealth in households by wealth quintile and to develop a methodology for the Mexican case with complete adherence to international templates and recommendations. A work program is underway to address this gap based on the exploitation of the statistical resource of the National Survey on Household Finances 2019. The lack of data from administrative records in this area impedes the development and full implementation of the suggested international methodology to address this data gap. INEGI is holding meetings with the tax authorities to establish collaboration agreements, highlighting the importance to close information data gaps, as a necessary element for an effective strategy preventing compromising the compilation of household wealth estimates.

Rec 10: Fintech Credit. The data gap is being addressed. Mexico is currently developing a data reporting requirement for all regulated fintech companies that channel credit through digital platforms.

Rec 11: Digital Money. The data gap is being addressed. In accordance with Mexican regulation, regulated Fintech companies that deal with virtual assets must be authorized by the Bank of Mexico. This enables data collect from Fintech companies. However, data collection exercise for non-regulated fintech firms will be on a voluntary basis, given that they are not subject of this regulation.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. The economy expects difficulties in obtaining internet and mobile banking transactions and e-wallets from non-regulated institutions, while for regulated Fintech firms, this will be possible.

Russia

Rec 1: GHG Emission Accounts and National Carbon Footprints. Unable to assess at this stage, further consultation with national stakeholders is required. Federal State Statistics Service (ROSSTAT) and the Federal Service for Supervision of Natural Resources are responsible institutions for this data gap. For the purpose of compilation of input-output tables, the Bank of Russia will develop by the end of 2023 data on indicators of external trade in goods and services (according to the balance of payments methodology) by type of economic activity.

Rec 2: Energy Accounts. Unable to assess at this stage, further consultation with national stakeholders is required. ROSSTAT is the national agency responsible for this recommendation.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. At the end of the first half of 2023 the Bank of Russia released its first publication of data on sustainable development

debt issues, which includes data on domestic green debt securities. The publication is presented in the form of data tables containing breakdowns by issuer/holder sector, maturity, interest rate, and other information⁵⁵.

Rec 5: Forward Looking Physical and Transition Risk Indicators. Unable to assess at this stage, further consultation with national stakeholders is required. Currently, the Bank of Russia is at the initial stage of development of climate change related forward-looking physical and transition risk assessment. In 2023 economy will conduct initial consultations and make preliminarily list of such indicators and data providers.

Rec 6: Climate-Impacting Government Subsidies. Unable to assess at this stage, further consultation with national stakeholders is required. After the adaptation of methodological guidelines on the formation of the environmental subsidies and similar subsidies account, ROSSTAT plans to release official data on this issue at the end of third quarter 2023.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required. Competence of the Ministry of Economic Development.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is not an immediate priority area for the national authorities, given the available resources. ROSSTAT is the national agency responsible for this recommendation.

Rec 9: Distribution of Household Wealth. The data gap is not an immediate priority area for the national authorities, given the available resources. ROSSTAT is the agency in charge of this recommendation. The Bank of Russia will contribute to reviewing the reporting templates and methodology concerning this recommendation.

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required. The Bank of Russia noted that there is insufficient elaboration of this topic in terms of methodology and the development of specific templates. This issue is planned to be included in the agenda in new manuals on the SNA and on the BOP and IIP, but the drafts so far contain only general formulations. Provision of self-commitments for this recommendation will be possible after the completion of the relevant methodologies and receipt of additional information.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. Russia is planning to take part in the stocktaking exercise of the task team, to determine availability of data on Digital Money (data sources and practical challenges), and it will review reporting templates and methodology prepared based on workshop outcomes.

Rec 12: Fintech-enabled Financial Inclusion. Unable to assess at this stage, further consultation with national stakeholders is required. The Bank of Russia agrees that robust data on access, usage, quality and utility of financial services, such as cashless payments, mobile and internet banking, alternative financing platforms, as well as new FinTech products is key to monitoring the impact of financial innovation on financial inclusion of individuals and entities, especially of the most vulnerable and underserved. The Bank of Russia developed financial inclusion indicators (available in Russian) under the recommendations of international organizations and other existing indicators of financial inclusion. Digital financial indicators include both supply-side data (measured annually) and demand-side data (once in 3 years). Financial inclusion indicators are revised annually based on the availability of public recent data on financial services (including digital ones), as well as new international recommendations on financial inclusion indicators. The Bank of Russia will take part in the stocktaking exercise to determine availability of FinTech and Financial Inclusion data, as well as review reporting templates and methodology prepared based on workshop outcomes. At the same time, economy will revise its financial inclusion indicators accordingly if needed, with an aim for the second-best target. The economy noted that data collection should be balanced by the costs it places on financial services providers and other related parties.

Saudi Arabia

⁵⁵ http://www.cbr.ru/eng/statistics/macro_itm/sec_st/issue_sector

Rec 1: GHG Emission Accounts and National Carbon Footprints. Unable to assess at this stage, further consultation with national stakeholders is required. The economy is currently developing reliable reporting procedures that will be used for both current and future data collection. Further interactions with pertinent parties are required to take stock of the available historical data and to determine whether the gap can be accurately assessed.

Rec 2: Energy Accounts. The data gap is being addressed. Some data on energy inputs used in power generation and data on energy products could be sourced. Methods for residual estimate are still to be developed. However, further assessment is needed to determine if the data fits the purpose.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. Regulations and mechanisms are currently being established to gather robust data on carbon footprints, but more work in that regard is needed.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. The National Debt Management Center is working to structure the Kingdom's Green Financing Framework in collaboration with relevant stakeholders. The methodical guidance of the task team is still being drafted and developed.

Rec 5: Forward Looking Physical and Transition Risk Indicators. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 6: Climate-Impacting Government Subsidies. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required. The economy is currently working on addressing the data gap for estimating climate mitigation and adaptation expenditures. Further consultation with national stakeholders is needed to ensure accurate data collection.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. The Saudi General Authority for Statistics has completed the financial accounts for all institutional sectors (non-financial sector, financial sector, government sector, household sector and non-profit institutions sector serving households) for 2018, 2019, 2020 and 2021. Work is in progress to publish Financial Accounts for the year 2022 at the end of 2023.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. As a step toward closing the data gap, the Kingdom of Saudi Arabia is working on developing a wealth survey, which intends to assess wealth among households. With the aim of closing the data gap, the economy is developing studies, analyzing global experiences, and consulting national stakeholders.

Rec 10: Fintech Credit. The data gap is being addressed. The Saudi Arabia Central Bank (SAMA) has taken several steps towards strengthening data collection. It has developed specialized Prudential Returns tailored to capture FinTech credit data, which streamed into the data warehouse. These returns provide information on loan portfolios, risk exposure, and performance indicators. The aim is to gather more comprehensive and standardized data that can be used for analyzing and monitoring the development of the sector. The SAMA has been continuously improving the data collection process to enhance the efficiency and effectiveness of data collection and improve the overall management of the sector. The SAMA supports reporting of data on Fintech credit as part of FSB's annual monitoring exercise on the nonbanking financial institutions (NBFIs) (aligned with Preliminary Credit Fintech Template), with the consideration of the conceptual framework for comparable national aggregates on non-bank Fintech credit to derive meaningful global aggregates for monitoring its financial stability risks.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. The extent to which data gaps in digital Money exist requires further dialogue with national stakeholders.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. The data of e-wallets, and mobile and internet banking transactions have been collected based on the Financial Access Survey IMF guidance. The economy is working on improvements of the coverage and quality of the data.

South Africa

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is being addressed. The choice of second-best target is a result of insufficient human and financial resources (3 staff members) at Environmental-Economic Accounting Directorate at Statistics South Africa, spread across various activities and outputs in the implementation of South Africa's National Natural Capital Accounting (NCA) Strategy. The compilation of the first Air Emissions Account for South Africa started in the 2023/2024 financial year and is assessed as a long-term project, expected to be released towards Q4 of 2025/2026. The compilation of selected carbon and GHG emission accounts (Air Emission Accounts) is a 'high road' activity in the indicative implementation plan of South Africa's National NCA Strategy - Goal 3, Strategic Objective 3.1, Output 3.1.3 and high-level indicative activity 3.1.3.3 in the National NCA Strategy (page 65)⁵⁶. 'High road' activities are only possible with additional human and financial resources. Environmental Impact: 'The measurement of climate change and its impact on the economy and society is a growing area of concern. Statistics South Africa, in collaboration with key entities have presented a national strategy on NCA to Cabinet in 2022. The key risk remains the fiscal challenge to implement the strategy as the organization has limited resources to coordinate the development of various environmental accounts. Statistics South Africa will continue to engage the National Treasury to secure additional funding to address the measurement challenge in South Africa.'

Rec 2: Energy Accounts. The data gap is being addressed. National Energy Balances/ Energy Accounts for South Africa are compiled and published on annual basis (with a current time lag of 2 years)⁵⁷. Historical Energy Balances are available from 1992 – 2020.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. South Africa already compiles and disseminates annual and quarterly FDI positions and flows data broadly consistent with BPM6. With respect to industry detail, South Africa only compiles foreign liability stocks by kind of economic activity.⁵⁸, however, industry detail with respect to FDI flows is not compiled. South Africa will continue to participate in the carbon footprints for FDI task team to further develop reporting templates, and data and classification requirements for this recommendation.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. The economy is in the process of establishing a database for green bond issuance according to the breakdowns in the templates of the DGI-2 recommendation 7.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. Work is currently underway to identify possible data gaps in relation to physical and transition risk indicators which could help improve understanding of firm-level and financial sector exposures to climate-related risks in South Africa. In addition, work is also being done in relation to climate scenario analysis and the possible data elements that could feed such assessments. Both initiatives are still in early stages, but progress is being made.

Rec 6: Climate-Impacting Government Subsidies. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required. Currently South Africa is collecting climate finance information

⁵⁶ <https://www.statssa.gov.za/publications/04-01-00/04-01-002021.pdf>

⁵⁷ https://www.energy.gov.za/files/media/Energy_Balances.html

⁵⁸ The industries are classified according to the Standard Industrial Classification of all Economic Activities (SIC), fifth edition. It is based on the third revision of the International Standard Industrial Classification of all Economic Activities (ISIC), with suitable adaptations for local conditions.

on bilateral and multilateral financial expenditure on climate change adaptation and mitigation. This information is published in the Biennial Update Reports submitted to the UNFCCC. South Africa has also developed a climate tagging process for public climate finance and has produced its first analysis on the financial flows. The National Treasury has also developed a taxonomy that will help to track private climate finance.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. Currently the official household statistics in South Africa has a 7-year data gap. Data is sourced from a 5-yearly survey and the last Income, Consumption and Savings data was published in 2015. After the implementation of the latest Income and Expenditure Survey of 2022/23 (to run until end 2023) and the survey results will be published in 2024, data will be analyzed, and the required dissemination layout will be explored. South Africa may be able to close the data gap after these actions were completed.

Rec 9: Distribution of Household Wealth. Unable to assess at this stage, further consultation with national stakeholders is required. Work is currently underway to assess available household wealth indicators from the national surveys of Income and Expenditure, the Living Conditions, and the General Household at the statistical agency. Along with the national accounts wealth estimates available from the central bank's Integrated Economic Accounts, the next step will be to identify any existing data gaps and develop action plans to address them.

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required. The availability of Fintech related data is somewhat problematic, with not much or only limited data available. However, regulations were put in place, effective from October 2022: Declaration of a Crypto Asset as a Financial Product under the Financial Advisory and Intermediary Services (FAIS) Act, 2002 (Act No. 37 of 2002). Declaring crypto assets as a financial product under the FAIS Act was aimed at protecting customers in the crypto asset environment. By linking it to financial regulations, the authorities gained a foothold to monitor and measure Financial Services Providers that render financial services in relation to crypto assets. However, the measurement of activity might be delayed, and meaningful results might not be available by Q4 2024 given that service providers are obliged to register between June and November 2023. The template for the pilot exercise on Fintech credit was circulated to Fintech Unit in the South African Reserve Bank (SARB) and to Financial Services Conduct Authority (FSAC) to obtain feedback, but unfortunately were not able to provide any information due to a lack of data availability.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. The availability of Fintech related data is somewhat problematic, with not much or only limited data available. However, regulations were put in place, effective from October 2022: (1) Declaration of a Crypto Asset as a Financial Product (Declaration) under the FAIS Act, 2002. The SARB is actively experimenting with various digital payment features in the financial markets aimed at keeping abreast with factors that might have policy implications in future (project Khoka 2). This included participation in international experimenting with CBDC for cross-border payments (project Dunbar). However, the SARB is adopting a conservative wait and see approach.

Rec 12: Fintech-enabled Financial Inclusion. Unable to assess at this stage, further consultation with national stakeholders is required. The availability of statistics on fintech-enabled financial services targeting small, medium enterprises (SMEs) remains a significant challenge for South Africa. However, recently promulgated Fintech-related legislation should pave the way for easier access to the data in the future. The economy is currently revising periodic surveys to include some of the required data items; however, the implementation is expected to take some time.

Türkiye

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is being addressed. There is currently no study on development and dissemination of SUTs and consumption-based carbon footprints. Air emission accounts (based on SEEA-CF concepts and classifications) can be compiled using UNFCCC national GHG inventories, in combination with energy accounts/statistics as well as additional information (e.g., international transport data, emission factors, international merchandise trade statistics etc.). The level of disaggregation and

degree of alignment with the SEEA-CF concepts will depend on the availability of source data and country circumstances.

Rec 2: Energy Accounts. The data gap is closed, and data are published⁵⁹.

Rec 3: Carbon Footprints of FDI. Unable to assess at this stage, further consultation with national stakeholders is required. There is no study on this subject.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. In Türkiye, the Capital Markets Board (CMB) is in charge of the regulation and supervision of the issuance of debt instruments and equities. In 2022, the CMB published the "Guidelines on Green Debt Instruments, Sustainable Debt Instruments, Green Lease Certificates and Sustainable Lease Certificates". Within the framework of this Guidelines, the preparation work is being conducted by the CMB to identify, label, follow-up, and to produce and share data at the national level. Preparatory work developing nationally accepted climate/green taxonomy has been initiated by the Ministry of Environment, Urbanization and Climate Change in cooperation with all relevant parties. Given that the preparation and implementation of this taxonomy is difficult in the short and medium term, an intermediate taxonomy/criteria guideline for the banking sector has been drafted by the Banks Association of Türkiye (BAT) and the Participation Banks Association of Türkiye, with the initiative of the Banking Regulation and Supervision Agency (BRSA) and it is planned to be published as the BRSA Communiqué. This interim taxonomy is prepared for the calculation of the green asset ratio for the banking sector, and it is expected to meet financial sector need in terms of data production regarding both green loans and green securities until the national taxonomy is published. After the necessary infrastructure for green debt instruments has been established by the CMB and the aforementioned green taxonomy studies have been completed, it will be possible to generate and share data on climate-related loans and securities (issuance and investment) practices of the banking sector.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. The creation of indicators that will allow the measurement and monitoring of climate-related physical and transition risks is becoming more and more important for the financial sector. For this purpose, a Climate Risks Sub-Working Group is planned to be formed by the BAT and the Participation Banks Association of Türkiye (PBAT) with the participation of the BRSA. It is foreseen that the Working Group will evaluate the exposure levels to both physical risks and transition risks by sectors and sub-sectors based on expert opinions and rank them on a certain scale, based on NACE codes for Turkey. Within the scope of the studies, it is possible to include the geographical dimension in the evaluations. It is expected that the risk levels to be determined by the Working Group will enable the development of risk indicators at the bank and sector level and facilitate risk analysis practices such as heat maps and stress tests/scenario analyses. In addition, in cooperation with all related parties, alternatives are evaluated to ensure that detailed geographical location data of customers / loans (i.e., facilities, collaterals, project zones), carbon emission data, ESG rating data and historical natural disaster data can be produced and shared in a healthy way. Depending on the developments to be achieved in the upcoming period, the banking reporting system and the BRSA data infrastructure will be reviewed and developed in order to produce and share such data.

Rec 6: Climate-Impacting Government Subsidies and Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 8: Distribution of Household Income, Consumption and Savings and Rec 9: Distribution of Household Wealth. The data gap is being addressed.

Rec 10: Fintech Credit. The data gap is being addressed. As a participant of Fintech Credit Data workstream, Central Bank of the Republic of Türkiye follows the developments regarding fintech credit and coordinates the studies related to fintech credit reporting with regulatory and supervisory stakeholder institutions.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. National stakeholders need to further develop existing legal framework for data collection on relevant financial data.

⁵⁹ <https://data.tuik.gov.tr/Bulten/Index?p=Energy-Accounts-2021-49751>

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. A joint effort of regulatory organizations is put together to collect and publish the related statistics. There is already a publicly available statistics which are provided by Banking Association, but the data does not cover the whole banking sector. Thus, a process is initiated to produce more inclusive and compatible statistics. There has been ongoing discussion about data scheme with stakeholders. After this stage, pilot data will be collected from banks.

United Kingdom

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is closed, with air emissions being published by the Office of National Statistics (ONS)⁶⁰ and Carbon footprints being published by the UK Government⁶¹. Air emissions accounts meet high quality standards in line with the United Kingdom (UK) Code of Practice for Statistics and have therefore been assessed to be a national statistic.

Rec 2: Energy Accounts. The data gap is closed. The UK produces PEFA at current year –3 (second-best target) instead of the –2 suggested by DGI-3.⁶² Given that it meets high quality standards in line with the UK Code of Practice for Statistics, PEFA is currently assessed to be a national statistic in UK.

Rec 3: Carbon Footprints of FDI. Unable to assess at this stage, further consultation with national stakeholders is required. Elements of the target are already being met by ONS whilst others will need further work subject to available resources. More consultation is required with other UK government departments.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. The Bank of England (BOE) has started work on issuance information looking to collect green finance for debt securities. Original collection no longer meets requirement if the proposed changes to the templates (including sustainability and sustainability-linked in addition to green) go ahead. There are options to address this, but these will be long term. The Bank has introduced a short to medium-term solution that will enable the collection of all three forms of debt in aggregate. Collection of the breakdown will remain a longer-term aspiration. For holdings, there is a greater dependency on collaborative work across the G20. The ONS is also considering options to include in its Financial Services Survey, but this is not currently in the revised questionnaire. Any change to the questionnaire would be subject to testing with businesses to check their ability to provide data.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. The UK has statutory requirements to report on climate adaptation risks on 5 yearly bases for government bodies and key infrastructure. As part of the 4th climate risk assessment – the UK is developing a set of physical risk indicators (1st target).

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed. The UK plans to conduct some exploratory work in this domain over the coming months before assessment on target can be finalized. The final definition to be used has not yet been agreed, and international guidance and clarification on language and definitions will be welcomed, as will alignment with definitions developed in this domain as part of the ongoing SNA review. As well as improving coherence internationally, better alignment will help prioritize resources more effectively.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required. More information and clarity needed on both definitions and feasibility via upcoming workshops and stakeholder engagement.

⁶⁰ <https://www.ons.gov.uk/economy/environmentalaccounts/datasets/ukenvironmentalaccountsatmosphericemissionsgreenhousegasemissionsbyeconomicsectorandgasunitedkingdom>

⁶¹ <https://www.gov.uk/government/statistics/uks-carbon-footprint>

⁶² <https://www.ons.gov.uk/economy/environmentalaccounts/datasets/physicalenergyflowaccountspefa>

Rec 8: Distribution of Household Income, Consumption and Savings and Rec 9: Distribution of Household Wealth. Unable to assess at this stage, further consultation with national stakeholders is required. Due to uncertainty around resources on both the micro and macro side, the UK is planning to work towards addressing the second-best target. The importance of the work is recognized and plans for a 2026 delivery will be discussed in the coming months.

Rec 10: Fintech Credit. The data gap is being addressed. The second-best target is suggested as the UK's planned work only partially addresses the recommendation once complete. The UK is currently testing a revised Financial Services Survey questionnaire with businesses (this does not cover all sectors hence the partial compliance once complete). Part of this testing will be to see if the businesses can provide data on FinTech.

Rec 11: Digital Money. The data gap is not an immediate priority area for the national authorities, given the available resources. The UK is currently conducting ad hoc work to look into measurement of different types of crypto assets, but this work is not yet a high priority.

Rec 12: Fintech-enabled Financial Inclusion. Unable to assess at this stage, further consultation with national stakeholders is required. The UK is still investigating the availability of the data.

United States

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is being addressed. In April 2023, the U.S. Bureau of Economic Analysis (BEA) published a proof-of-concept air emissions account covering the years 2012-2017 on the BEA website⁶³. This research lays the foundation for further work in this area and is part of the U.S.'s 2023 National Strategy to Develop Statistics for Environmental-Economic Decisions, which outlines a plan for the development and production of these accounts by 2032 (with intermediate products like pilot/prototype accounts being produced much earlier) if permanent funding permits. For more information on U.S. plans to develop these accounts and their timelines, conditional on funding in future fiscal years (see p.55)⁶⁴.

Rec 2: Energy Accounts. The data gap is being addressed. SEEA-based Energy Accounts are part of the U.S.'s 2023 National Strategy to Develop Statistics for Environmental-Economic Decisions, which outlines a plan for the development and production of these accounts by 2032 (with intermediate products like pilot/prototype accounts being produced much earlier) if permanent funding permits. For more information on U.S. plans to develop these accounts and their timelines, conditional on funding in future fiscal years (see p.55)⁶⁵.

Rec 3: Carbon Footprints of FDI. Unable to assess at this stage, further consultation with national stakeholders is required. The United States has closed this data gap for nearly all target items⁶⁶. The BEA currently publishes annual FDI positions and flows data by economy consistent with BD4 and BPM6 and by industry consistent with BD4, data on the activities of foreign-controlled firms in the reporting economy and on the overseas activities of MNEs, and imports and exports by enterprise characteristics differentiating exports and imports of goods (movement of goods basis) and services (change of ownership basis) by ownership. These statistics are published regularly on BEA's website⁶⁷. The United States does not currently publish estimates of carbon emissions of MNEs by ownership, and for that item, the United States is unable to assess at this time, further consultation with national stakeholders is required.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. This target requires a security level database, criteria for selecting "green" securities, and a common reporting template.

⁶³ <https://www.bea.gov/research/papers/2023/proof-concept-us-air-emissions-physical-flows-account>

⁶⁴ <https://www.whitehouse.gov/wp-content/uploads/2023/01/Natural-Capital-Accounting-Strategy-final.pdf>

⁶⁵ <https://www.whitehouse.gov/wp-content/uploads/2023/01/Natural-Capital-Accounting-Strategy-final.pdf>

⁶⁶ The United States has closed this data gap for the second-best target. BEA disseminates annual statistics on FDI positions and flows consistent with BPM6, including industry detail.

⁶⁷ <https://www.bea.gov/data/economic-accounts/international>

The U.S. currently only has such a database for cross-border securities although it is our ambition to construct a security-level database for domestic holdings. Currently there is no estimated delivery date for such a database. The gap can likely be closed for cross-border securities contingent on the chosen “green” criteria and the specifics of the reporting template. For domestic holdings, this gap is not an immediate priority.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. The Financial Stability Oversight Council (FSOC) has a dedicated staff-level climate committee—the Climate-Related Financial Risk Committee (CFRC). As explained in more detail in the staff-level progress report that was just published⁶⁸, the CFRC is in the process of developing an initial set of climate-related financial risk indicators for both physical and transition risk. The staff-level committee is also progressing on addressing climate-related data gaps, for example identifying priority climate-related data sets for FSOC members, identifying data gaps, and improving data sharing across US regulatory agencies via an interagency platform.

Rec 6: Climate-Impacting Government Subsidies. Data gap is not an immediate priority area for national authorities, given the available resources. The U.S. remains concerned that concepts and guidelines for this data gap have not been sufficiently outlined. Determining which subsidies are climate-sustaining vs. climate-harming is out of scope for statistical agencies, and more work is required to set the scope for purpose, impact, and secondary impact of government subsidies. Researchers at the BEA have only begun very preliminary work on exploring the feasibility of filling this data gap and have yet to determine whether prevailing methods are suitable for U.S. data sources. This stems from pilot work BEA researchers have recently developed on environmental goods and services, which has broken down environmental protection expenditures in the U.S. by private and public sector. Environmental-economic accounting efforts are currently underway in the U.S. on a research and development basis, as permanent funding has not yet been allocated for transitioning these types of accounts into official statistical products.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Data gap is not an immediate priority area for national authorities, given the available resources. The U.S. remains concerned that concepts and guidelines for this data gap have not been sufficiently outlined. Researchers at the BEA have only begun very preliminary work on exploring the feasibility of filling this data gap and have yet to determine whether prevailing methods are suitable for U.S. data sources. This stems from pilot work BEA researchers have recently developed on environmental goods and services, which has broken down environmental protection expenditures in the U.S. by private and public sector. Environmental-economic accounting efforts are currently underway in the U.S. on a research and development basis, as permanent funding has not yet been allocated for transitioning these types of accounts into official statistical products.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is being addressed. The BEA has published prototype statistics on the distribution of household income since March 2020. The latest release in December 2022 provided statistics covering the years 2000-2021. In December 2022, the U.S. Bureau of Labor Statistics (BLS) published prototype statistics on the distribution of personal consumption expenditures covering the years 2017-2020. The U.S. is working to improve the methodology and timeliness of these statistics.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. The Federal Reserve Board (FRB) publishes quarterly statistics on the distribution of household wealth on the Federal Reserve website with a timeliness of approximately twelve weeks⁶⁹. These data show the level, composition, and share of U.S. household wealth held by five percentile groups of wealth: the top 0.1 percent, the remaining 0.9 percent of the top 1, the next 9 percent (i.e., 90th to 99th percentile), the next 40 percent (50th to 90th percentile), and the bottom half (below the 50th percentile). Additionally, the data set contains the level and share of aggregate household wealth by income, age, generation, education, and race.

⁶⁸ <https://home.treasury.gov/system/files/261/FSOC-2023-Staff-Report-on-Climate.pdf>

⁶⁹ <https://www.federalreserve.gov/releases/z1/dataviz/dfa/>

Rec 10: Fintech Credit. The data gap is being addressed. The U.S. is actively engaged with the FSB's workgroup on fintech credit and anticipate reporting data on a best-effort basis as part of the annual FSB NBF1 monitoring exercise.

Rec 11: Digital Money. Unable to assess at this stage, further consultation is required. The U.S. ability to meet the target will depend critically on the specifics of the common statistical reporting framework, currently under discussion. Given the developing regulatory environment and associated low feasibility of initiating new data collections in the near term, it is likely that the U.S. will not be able to prioritize closing this gap with the available resources, particularly if information on the sector and/or country of holder is required.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. Government agencies collect some statistics that could be leveraged for this recommendation; however, further consultation with national stakeholders is needed to determine relevant indicators for policy making. Participation in the planned recommendation 12 workshop will help inform the U.S. position.

European Union

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is closed.⁷⁰ The EU has implemented the SEEA air emission accounts through its legislated environmental accounts and the EU's consumption-based CO2 emissions.

Rec 2: Energy Accounts. The data gap is closed.⁷¹ The European Union has implemented SEEA energy accounts through its environmental accounts' legislation.

Rec 3: Carbon Footprints of FDI. The data gap is not an immediate priority area for national authorities, given the available resources. There is no major work ongoing for this recommendation at EU level.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. The EU is already disseminating detailed data on issuances and holdings of sustainable debt securities. The ECB disseminates these data in the ECB Data Portal on a monthly basis for securities issuances and on a quarterly basis for securities holdings. The data are broken down by sustainability category (i.e., green, social, sustainability, and sustainability-linked) and several other breakdowns. The ECB plans to extend this dissemination with a breakdown by assurance level (i.e., second party opinion) by the end of 2023.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. First-best target is being aimed for (the actual outcome will depend on confidentiality aspects). With respect to second best-target the European System of Central Banks published first analytical indicators in January 2023. Further enhancements are underway with forward looking indicators expected to be available in 2024.

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed. Only voluntary collection of data at present at Eurostat (limited number of countries - see link⁷²). Eurostat has proposed compulsory collection, but discussions continue on legislation.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is not an immediate priority area for the national authorities, given the available resources. Eurostat publishes a wide range of data on mitigation and adaptation, but not current and capital expenditures (environmental protection expenditures are only a subset). It re-publishes data from the European Environment Agency on adaptation.

⁷⁰ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Greenhouse_gas_emission_statistics_-_emission_inventories

⁷¹ <https://ec.europa.eu/eurostat/web/environment/information-data/energy-accounts>

⁷² <https://ec.europa.eu/eurostat/web/environment/information-data/environmental-taxes-subsidies>

Rec 8: Distribution of Household Income, Consumption and Savings. Data gap is being addressed. Second best target already largely met. Eurostat currently publishes data for all EU Member States for 2015 and most Member States for 2020.⁷³

Rec 9: Distribution of Household Wealth. The data gap is being addressed. The ECB aims to publish quarterly Distributional Wealth Accounts, consistent with Sector Accounts results, by the end of 2023, with results for the euro area (as well as most euro area countries).

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required. Some relevant data might be available following the entry into force of the Regulation on Markets in Crypto-assets.⁷⁴ Further prospective source of information is Study on the payment attitudes of consumers in the euro area (SPACE).⁷⁵

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. Relevant statistical work covering payment services and large-value and retail payment systems are Amending Regulation ECB/2020/59, Guideline ECB/2021/13 and Recommendation ECB/2013/44. Data in the ECB Data Portal⁷⁶. Further prospective source of information is SPACE⁷⁷

Non-G20 FSB Member Economies

Hong Kong

Rec 1: GHG Emission Accounts and National Carbon Footprints. Unable to assess at this stage, further consultation with national stakeholders is required. Environment and Ecology Bureau of Hong Kong publishes annual GHG emissions in Hong Kong by sector and carbon intensity⁷⁸.

Rec 2: Energy Accounts. Unable to assess at this stage, further consultation with national stakeholders is required. Hong Kong has no coal mine and oil refinery industry. Electrical and Mechanical Services Department of Hong Kong publishes annual energy end-use data and consumption indicators⁷⁹.

Rec 3: Carbon Footprints of FDI. The data gap being addressed. Annual FDI positions and flows by selected major economy consistent with BD4 and BPM6 have been available since 1998. Annual FDI positions and flows by major economic activity of Hong Kong enterprises groups have been available since 2004.⁸⁰

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. Statistics on green and sustainable debt (including bond and loan) issuance amount in Hong Kong are reported in the Hong Kong Monetary Authority (HKMA) publication (page 4-5 of quarterly bulletin⁸¹).

⁷³ <https://ec.europa.eu/eurostat/web/experimental-statistics/income-consumption-and-wealth>

⁷⁴ <https://eur-lex.europa.eu/eli/reg/2023/1114/oj>

⁷⁵ https://www.ecb.europa.eu/stats/ecb_surveys/space/html/index.en.html

⁷⁶ <https://data.ecb.europa.eu/data/data-categories#payment-services-large-value-payment-systems-and-retail-payment-systems>

⁷⁷ https://www.ecb.europa.eu/stats/ecb_surveys/space/html/index.en.html

⁷⁸ <https://cnsd.gov.hk/en/climate-ready/ghg-emissions-and-trends/>

⁷⁹ https://www.emsd.gov.hk/en/energy_efficiency/energy_end_use_data_and_consumption_indicators/hong_kong_energy_end_use_data/data/index.html

⁸⁰ <https://www.censtatd.gov.hk/en/scode260.html#section3>

⁸¹ <https://www.hkma.gov.hk/media/eng/publication-and-research/quarterly-bulletin/qb202303/fa1.pdf>

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. The choice of target vs. second best target is not applicable to Hong Kong. The HKMA has launched the green and sustainable finance (GSF) Data Portal⁸², which centralizes relevant existing government and global climate data sources, to facilitate financial institutions' climate risk management and business development. For instance, on physical risk indicators, Hong Kong Observatory publishes climate projections on its website⁸³.

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed. The choice of target vs. second best target is not applicable to Hong Kong. The HKMA has launched the GSF Data Portal⁸⁴, which centralizes relevant existing government and global climate data sources, to facilitate financial institutions' climate risk management and business development. For instance, data and indicators related to the government's New Energy Transport Fund⁸⁵ and support on green tech⁸⁶ are available on the Environment and Ecology Bureau's websites. Figures of some examples of potentially relevant funding/ subsidy schemes administered by the Environment and Ecology Bureau and Environmental Protection Department of the Environment and Ecology Bureau are disclosed in their annual Controlling Officer's reports (COR) (page 225 of the COR for EPD⁸⁷:item 803, 807, 809-812, 815, 818, 827, 850 and page 427 of the COR for⁸⁸: item 052, 819, 840).

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is being addressed. The choice of target vs. second best target is not applicable to Hong Kong. In the Hong Kong's Climate Action Plan 2050 government announced its plans to allocate about HKD 240 billion in the next 15 to 20 years to implement mitigation and adaptation measures to combat climate change. The relevant government departments will ascertain the details and estimated expenditure of individual projects in due course.⁸⁹ GSF Data Portal⁹⁰ centralizes relevant existing government and global climate data sources, and it was launched to facilitate financial institutions' climate risk management and business development.

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is not an immediate priority area for the national authorities, given the available resources. Distribution of household income and consumption based on household surveys are available. However, national accounts household income total is not available and hence benchmarking with national accounts total cannot be carried out. Meanwhile, the coverage of household consumption from household survey is very different from that of national accounts total and alignment of their coverage cannot be made in the near future considering factors including resources required and respondent burden.

Rec 9: Distribution of Household Wealth. The data gap is not an immediate priority area for the national authorities, given the available resources. National accounts balance sheet is not available in Hong Kong. Wealth of households is sensitive issue and households are not willing to disclose the information. Even if households are willing to report the information, it may not be reliable as they generally don't have the correct idea about valuation of their assets.

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required.

⁸² <https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/green-and-sustainable-finance/gsf-data-source-repository/>

⁸³ https://www.hko.gov.hk/en/climate_change/future_climate.htm

⁸⁴ <https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/green-and-sustainable-finance/gsf-data-source-repository/>

⁸⁵ <https://www.eeb.gov.hk/en/new-energy-transport-fund.html>

⁸⁶ <https://cnsd.gov.hk/en/innovation-and-technology/>

⁸⁷ <https://www.budget.gov.hk/2023/eng/pdf/head044.pdf>

⁸⁸ <https://www.budget.gov.hk/2023/eng/pdf/head137.pdf>

⁸⁹ https://cnsd.gov.hk/wp-content/uploads/pdf/CAP2050_booklet_en.pdf

⁹⁰ <https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/green-and-sustainable-finance/gsf-data-source-repository/>

Rec 11: Digital Money and Rec 12: Fintech-enabled Financial Inclusion. Unable to assess at this stage, further consultation with national stakeholders is required. Economy is in the process of assessing what is required and how to proceed.

Singapore

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is not material for the economy. SUTs for the available periods between 2010 to (current year - 4) are available.

Rec 2: Energy Accounts. The data gap is being addressed.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 5: Forward Looking Physical and Transition Risk Indicators. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 6: Climate-impacting Government Subsidies. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 8: Distribution of Household Income, Consumption and Savings. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 9: Distribution of Household Wealth. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 10: Fintech Credit. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 11: Digital Money. Unable to assess at this stage, further consultation with national stakeholders is required.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is not material for the economy.

Spain

Rec 1: GHG Emission Accounts and National Carbon Footprints. The data gap is closed. Spain compiles and disseminates annual SUTs⁹⁶ since 1995 and annual air emissions accounts⁹⁷ since 2008.

Rec 2: Energy Accounts. The data gap is closed. Physical energy flow accounts are published⁹⁸.

Rec 3: Carbon Footprints of FDI. The data gap is being addressed. Development and dissemination of annual FDI positions and flows data by economy consistent with BD4 and BPM6 and by industry consistent with BD4; data on the activities of foreign-controlled firms in the reporting economy and on the overseas activities of MNEs and imports and exports by enterprise characteristics differentiating exports and imports of goods (movement of goods basis) and services (change of ownership basis) by ownership are achievable for Spain. However, timeline for the

⁹⁶ https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736177059&menu=resultados&idp=1254735576581

⁹⁷ https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176941&menu=ultiDatos&idp=1254735976603

⁹⁸ https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736177046&menu=ultiDatos&idp=1254735976603

dissemination of estimates of carbon emissions by MNEs by ownership appears to be too ambitious, and more discussion at the international level (as in the planned workshops) is necessary before a date can be set.

Rec 4: Climate Finance (Green Debt and Equity Securities Financing). The data gap is being addressed. The efforts to comply with this recommendation will be coordinated in Europe by the ECB. In this context, preliminary results of experimental indicators on sustainable finance, specifically related to issuances and holdings of sustainable debt securities in the euro area, were published on the ECB website in January 2023⁹⁹.

Rec 5: Forward Looking Physical and Transition Risk Indicators. The data gap is being addressed. The data gaps in this area will be addressed in a coordinated manner, in conjunction with other European countries, through the development and publication of indicators carried out within the Euro-system framework. In addition, there is still much uncertainty about how to measure forward-looking transition risks. More than indicators these risks should be the result of some modelling assumptions related to developments in elements such as relative prices, taxes on energy consumption, consumer preferences and so on. It would be relevant to establish a methodology that assesses the coherence of forward-looking indicators for physical and transition risks, given their interdependence. To some extent there is a trade-off between them: a delay in decarbonization exacerbates physical risks, whereas tackling emissions aggressively entails significant transition risks. Spain participated in a Euro-system group dedicated to generating transition and physical risk indicators, although focused on financial institutions' exposures to non-financial corporations.¹⁰⁰

Rec 6: Climate-Impacting Government Subsidies. The data gap is being addressed. The economy expects to close this gap once the new EU regulation on European Environmental Accounts is adopted. The proposal is under negotiation, so it is not possible for the time being to set the final requirements (breakdowns) and the calendar to send data to the EU Commission (Eurostat). In the meantime, Spain had a national pilot project to provide data on Climate-Impacting Government Subsidies with great success.

Rec 7: Climate Change Mitigation and Adaptation Expenditures. The data gap is being addressed. Spain currently compiles Climate Change Mitigation and Adaptation Expenditures, jointly. The economy distinguishes between current and capital expenditures, but it is not able for the time being to comply with the target. Spain is working on the breakdown of mitigation and adaptation expenditures and has left open possibility to address the target data gap in the future.¹⁰¹

Rec 8: Distribution of Household Income, Consumption and Savings. The data gap is not an immediate priority area for the national authorities, given the available resources. In 2024 Spain will perform the works for the benchmark of national accounts and has noted limited resources that can devote to this exercise. Once this work is completed, Spain will consider addressing the target data gap.

Rec 9: Distribution of Household Wealth. The data gap is being addressed. As a member of the ECB Expert Group "Distributional Financial Accounts", the Banco de España has been collaborating with the ECB and the representatives of other countries to produce quarterly experimental Spanish Distributional Wealth Accounts (DWA), with breakdowns at wealth decile level, fully reconciled with national accounts. It is expected that before the end of 2023 the ECB and the Banco de España will publish Spanish wealth distribution accounts. Given this progress the data gap could be closed by end 2023. Nevertheless, since the reporting template for REC 9 is still being designed, if it were different from the ECB Expert Group on DWA, it would be necessary to analyze the changes that would have to be made in the production and dissemination procedures to adapt to the new template.

Rec 10: Fintech Credit. The data gap is being addressed. The lack of a precise definition of Fintech entities and of a regulation governing their activities and reporting makes it difficult to fulfil this recommendation. Currently, the Bank of Spain is developing an experimental statistical dataset containing individual financial statements from

⁹⁹ https://www.ecb.europa.eu/stats/ecb_statistics/sustainability-indicators/data/html/ecb.climate_indicators_sustainable_finance.en.html

¹⁰⁰ https://www.ecb.europa.eu/stats/ecb_statistics/sustainability-indicators/html/index.en.html

¹⁰¹ https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736177048&menu=ultiDatos&idp=1254735976603

Fintech firms. This granular information is now publicly available for research projects through the data laboratory at the Bank of Spain¹⁰². Additionally, work is being carried out in two directions: (1) contacts have been made with Fintech industry associations and a small questionnaire has been circulated to get a deeper knowledge of this sector; and (2) contacts have been made with the financial authority in charge of the official register of crowdfunding platforms in order to get information on their activity. Both lines aim to fill the lack of information of financing channeled by Fintech firms which is not registered in their balance sheets (that is, when acting as financial auxiliaries) and the potential demand for information that may arise in the templates requested for this recommendation.

Rec 11: Digital Money. The data gap is not material for the economy. According to the information obtained from ad hoc surveys, holdings of positions in digital currencies are not considered significant for the Spanish economy. Ongoing developments in this field, particularly with the initiation of the ECB euro digital project, have the potential to alter this assessment and digital currencies may gain momentum.

Rec 12: Fintech-enabled Financial Inclusion. The data gap is being addressed. Since the initial workshop has not been held yet and indicators have not been agreed it is difficult to assess our commitment with this recommendation at this stage. Depending on the scope established by the methodology, a modification of the regulation in data collection may be necessary to meet the final objectives.

Switzerland

Unable to assess at this stage, further consultation with national stakeholders is required.

¹⁰² <https://www.bde.es/wbe/en/para-ciudadano/servicios/belab/>

Annex 3. List of Planned DGI-3 Workshops

Activities (Workshops)	2023				2024				2025				2026				2027		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3												
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Recommendations 1, 2 and 3: Greenhouse Gas Emissions Accounts, Energy Accounts and Carbon Footprints																			
Workshop 1 - Results of Stocktaking (virtual)	■																		
Workshop 2 - Technical Support - Air Emissions and Energy Accounts (virtual)			■																
Workshop 3 - Technical Support - Trade Statistics (virtual)				■															
Workshop 4 - Technical Support - Trade Statistics (virtual)					■														
Workshop 5 - Technical Support - Air Emissions and Energy Accounts (virtual)						■													
Workshop 6 - Technical Support - Air Emissions and Energy Accounts (virtual)							■												
Workshop 7 - Technical Support & Review Footprint Estimates (virtual)										■									
Workshop 8 - Technical Support & Review Footprint Estimates (virtual)											■								
Recommendation 4: Climate Finance																			
Workshop 1 - Initial discussion on reporting templates (virtual)	■																		
Workshop 2 - Finalisation of reporting templates (in-person)			■																
Workshop 3 - Methodological framework (virtual)						■													
Workshop 4 - Technical support with intermediate targets (in-person)									■										
Workshop 5 - Technical support with final targets (in-person)																		■	
Recommendation 5: Forward Looking Physical and Transition Risk Indicators																			
Workshop 1 - Feedback on concept note (virtual)			■																
Workshop 2 - Experimental estimates & methodological framework (in-person)							■												
Workshop 3 - Finalize methodology, share compilation experiences (in-person)															■				
Recommendations 6 and 7: Climate Change Related expenditures																			
Workshop 1 - Discuss survey results (virtual)	■																		
Workshop 2 - Review draft methodological framework (virtual)		■																	
Workshop 3 - Refine methodological framework & guidance (in-person)						■													
Workshop 4 - Technical support (in-person)										■									
Recommendations 8 and 9: Income, Consumption, Savings and Wealth Distributions																			
Workshop 1 - Institutional sector and distributional accounts (in-person)					■														
Workshop 2 - Institutional sector and distributional accounts (in-person)						■													
Recommendation 11: Digital Money																			
Workshop 1 - Outline scope and objectives of recommendation (in person)			■																
Workshop 2 - Discuss draft methodology & reporting templates (in person)				■															
Workshop 3 - Finalize methodological framework & reporting templates (in person)										■									
Recommendation 12: Financial Inclusion																			
Workshop 1 - Determine concepts, definitions, indicators and report forms (in person/virtual)				■															
Recommendation 13: Access to Private and Administrative Data																			
Workshop 1 - Present survey results and share experiences with data sharing tools and initiatives (virtual)	■																		
Recommendation 14: Data Access and Data Sharing, including the Possible Development of an International Microdata Standard																			
Workshop 1 - Discuss developing a data reuse modalities (virtual)	■																		
Workshop 2 - Develop proposal for microdata sharing standards (virtual)			■																
Workshop 3 - Outline way forward (virtual)				■															

Annex 4. Updates on the implementation of the DGI-2 Recommendations—as of September 30, 2023

The G20 and participating economies continue to monitor progress on the data gaps identified under the DGI-2. The following section outlines the DGI-2 data gaps that have been addressed over the last year for several of the G20 and participating economies¹⁰³.

Box 3. The Road to Progress: Improving Fiscal Statistics in India (Continued)

The journey to producing accurate and timely data with the aim to enhance the ability of policymakers and market participants in understanding the economic and financial stability risks, as well as developing effective responses, has not been easy in the context of COVID-19. The last DGI-2 progress report, published on June 9, 2022, presenting the results of the DGI-2 recommendations as of end-December 2021, showed that significant progress had been achieved in closing the identified policy-relevant data gaps. However, not all participating economies had fully met the targets for all recommendations and as a result work has been continuing beyond the end of 2021.

One such example is the good progress India has been making in achieving the **DGI-2 Rec.II.15 on government finance statistics (GFS)**. Work that has been driven by the recognition of the importance of timely, comprehensive, and comparable fiscal data.

Since January 2023, the Indian Ministry of Finance (MOF) and the Controller General Accounts (CGA) of India have been collaborating closely with IMF's South Asia Regional Training and Technical Assistance Center (SARTTAC), in New Delhi, to both broaden the coverage of the Indian fiscal reporting and to bring it in line with the latest international statistical standards.

Initially, SARTTAC worked with the MOF and CGA to formulate a challenging but realistic plan which would allow progress against **DGI-2 Rec.II.15 (GFS) and II.16 public sector debt statistics (PSDS)** to be made in stages. The figure below shows the graphical presentation of the planned workflow. The first stage being the compilation of quarterly GFS data for the central government sector. This is to be followed by work with state governments to consolidate their fiscal activities and thereby to compile general government GFS for India, which would fully satisfy DGI-2 Rec.II.15. Similar and parallel staged work is ongoing to deliver improved and broader PSDS, as envisaged under DGI-2 Rec.II.16.

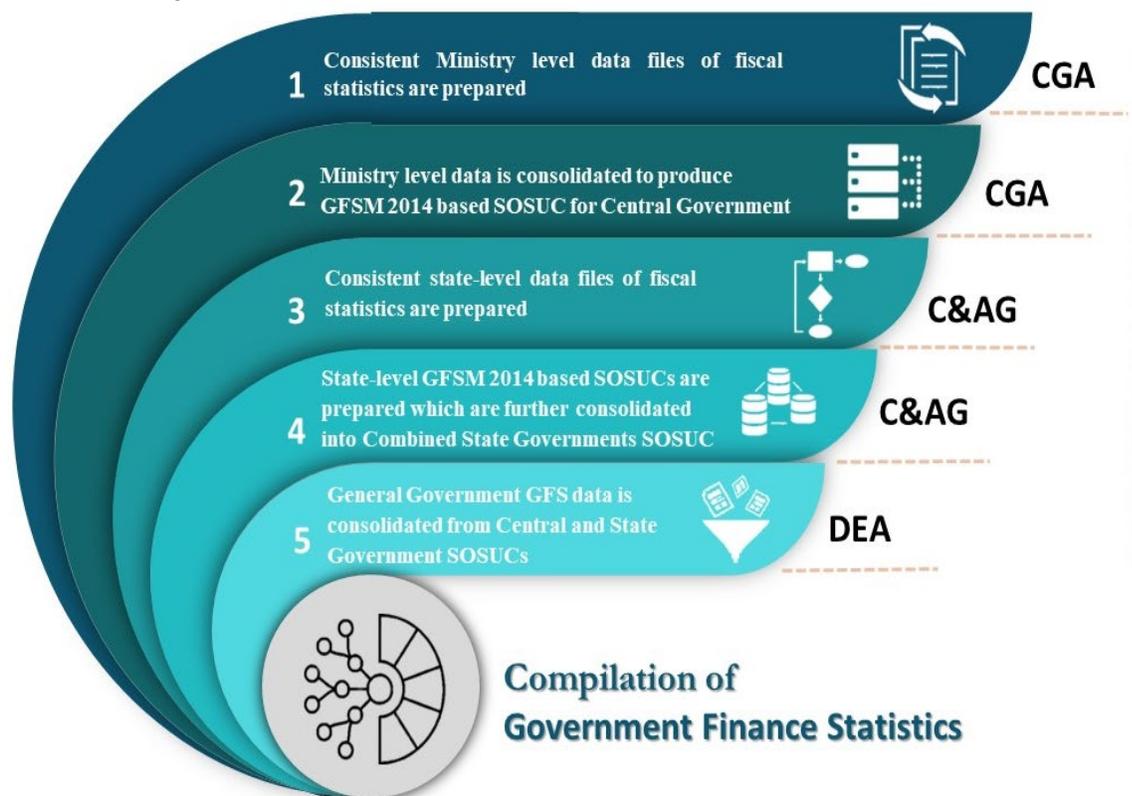
In India, comprehensive data are available for the compilation of central government GFS, but the national definitions do not always align with the GFS definitions and so the underlying data have been carefully reviewed and mapped to the GFS taxonomy with the training and technical assistance provided by SARTTAC. Finally, the quarterly central government GFS data, compatible with the latest international standards, has been compiled for the last three years.

The new quarterly central government GFS data will advance India's achievement of DGI-2 Rec.II.15, bringing them to an amber rating under the reporting approach of the DGI-2 reporting framework. Further work on incorporating state governments and financial balance sheet data will enable India to progress to green (e.g., having fully achieved the recommendation) and more importantly will provide essential and internationally comparable new information to fiscal policymakers and analysts.

¹⁰³ [G20 Data Gaps Initiative \(DGI-2\): Progress Achieved, Lessons Learned, and the Way Forward - Financial Stability Board \(fsb.org\)](#)

Box 3. The Road to Progress: Improving Fiscal Statistics in India (Concluded)

Workflow conceptualized to achieve the DGI-2 rec.II.15 and rec.II.16



CGA: Controller General Accounts.

C&AG: Controller and Account General.

DEA: Department of Economic Affairs.

Source: SARTTAC with inputs from the Indian authorities.

Brazil

Rec.II.7: Securities Statistics. All self-commitments have been achieved. Table 1.1 was sent to BIS in June 2019; Table 1.2 in January 2022; Table 2.1 in October 2022; and Table 3.1 in January 2023.

Rec.II.8: Institutional Sector Accounts. Non-financial accounts transactions and financial accounts and balance sheets annual data are published at the Brazilian Institute of Geography and Statistics website (www.ibge.gov.br/en/statistics/economic/national-accounts/17173-system-of-national-accounts-brazil.html?=&t=oque-e). Dissemination of quarterly financial accounts balance sheets with one-quarter lag started in June 2022.

Rec.II.11: International Banking Statistics (IBS). Implementation of Stage 2 of IBS enhancements has been concluded, enhanced breakdowns in locational banking statistics (LBS) are being reported from Q1 2022 data during Q2/2022 reporting cycle has been reported to BIS in August 2022. However, sector breakdown of domestic currency positions vis-à-vis residents of Brazil are not reported in LBS. Stage 2 sector breakdown and domestic claims are not reported in consolidated banking statistics (CBS).

Rec.II.14: Cross-border Exposures of Non-bank Corporates. Dissemination of SRF 4SR started in June 2021. Provision of IBS and securities data separately identifying the NFC sector started in June 2019 (securities) and August 2022 (IBS).

Canada

Rec.II.7: Securities Statistics. More advanced ambitions data on debt securities issuances as well as From-Whom-To-Whom statistics in line with Handbook on Securities Statistics are already published. Canada continues to work on producing more details on debt securities holdings at market value.

Rec.II.8: Institutional Sector Accounts. Canada currently meets the target reporting requirements for the dissemination of financial accounts and balance sheets as well as the reporting requirements for the dissemination of stocks of non-financial assets. Canada will continue to address the remaining gaps in presentation including the ongoing effort to delineate derivatives as a separate top-level item within the accounts and non-financial accounts transactions, though gaps over the medium term will continue to exist in areas such as the sector value-added.

Rec.II.14: Cross-border Exposures of Non-bank Corporates. Canada has consulted with the IMF on the 4 standard reporting forms and currently submits the Other financial Corporations Survey under the SDDS Plus mantle. Work is ongoing to align existing from-whom-to-whom detail produced within Canada's current balance sheet account with the requirements of the 4 standard reporting forms with the goal of a future submission.

China

Rec.II.8: Institutional Sector Accounts. The PBOC is preparing as well as releasing Flow of Funds Accounts (financial transaction part). The National Bureau of Statistics of China actively compiles and releases annual Flow of Funds Account (non-financial part). The PBOC released the Flow of Funds Account for the first half of 2020 through its website and other channels in March 2021. It is improving the existing accounting system of funds flow with a view to gradually increasing the reporting frequency to quarterly basis.

Japan

Rec.II.14: Cross-border Exposures of Non-bank Corporates. Japan has started reporting the NFC data to the BIS from Q4 2019 in CBS. In addition, Japan is continuously exploring feasible ways to report the NFC data in LBS.

Mexico

Rec.II.8: Institutional Sector Accounts. In September 2020 along with the quarterly accounts by institutional sector the quarterly whom-to-whom sectoral tables were published which allowed tables T0625 and T0725 to be sent to the OECD for the first time on December 9, 2021, thus concluding Mexico's commitments concerning rec.II.8, which has been fully implemented.

Saudi Arabia

Rec.II.8: Institutional Sector Accounts. Work is underway, as a preliminary stage, to provide annual data for the financial and non-financial account.

Rec.II.10: International Investment Position (IIP). Work is underway to finalize the preparation of IIP data by sectors in line with the requirements of the DGI. As for the preparation of the IIP by currency, the challenge still exists in achieving the requirement, which is also considered a challenge in some of the G20 economies.

Rec.II.11: International Banking Statistics (IBS). The Saudi Central Bank (SAMA) started working with the BIS for reporting CBS in near future.

Rec.II.13: Coordinated Debt Investments Survey (CDIS). Work is currently under way to implement a comprehensive quarterly and annual survey of Foreign Direct Investment by country and economic activity.

Rec.II.15: Government Finance Statistics (GFS). The Central Government Data has been reported quarterly, but for the General Government Data work is in progress.

Rec.II.16: Public Sector Debt Statistics (PSDS). Government debt is reported with no issue. Data disseminated currently is a good proxy of the general government. The way forward is to include data for the main public corporations.

South Africa

Rec.II.8: Institutional Sector Accounts. South Africa have made significant progress with the implementation of this recommendation. South Africa's full suite of Integrated Economic Accounts have been developed and is being disseminated to OECD, however many sub-sector gaps remain and is in process of being addressed. Also currently comparing new flow of funds from the Integrated Economic Accounts (IEA) National Financial Account with legacy FOF. A New IEA and Methodology Unit has been created to drive further expansion and refinement of rec.II.8 requirements with the aim to move the statistical output from experimental to semi-official.

Rec.II.16: Public Sector Debt Statistics (PSDS). South Africa compiled and disseminated experimental public debt statistics to the World Bank quarterly public sector debt database at <https://www.worldbank.org/en/programs/debt-statistics/gpsd#national-currency>.

Rec.II.17: Residential Property Prices (RPP). South Africa have made significant process in terms of residential property prices index (RPPI) through issuing the Discussion Document D0160 issued during November 2022, embargoed April 13, 2023, which provides experimental statistics on residential property price indices from January 2017 up to November 2022. Publications on RPPI may be found on https://www.statssa.gov.za/?page_id=1854&PPN=D0160&SCH=73577.

Rec.II.18: Commercial Property Prices (CPPI). South Africa will have an assessment of the compiled CPPI by the IMF in September 2023, whereafter there will be a decision on the way forward.

Türkiye

Rec.II.10: International Investment Position (IIP). Currency composition tables for IIP for the years 2016-22 were compiled and reported to the IMF.

Rec.II.11: International Banking Statistics (IBS). Domestic positions vis-à-vis residents in LBS are not reported. Regarding CBS, domestic positions in domestic currency are not reported yet but it is planned to be reported with the CBS-revisions in 2023.

United Kingdom

The Office for National Statistics (ONS) has ambitious plans to transform the UK's economic statistics. Working in partnership with the Bank of England, a key element of the ONS transformation work is the development of the UK financial accounts to meet evolving user needs and international initiatives such as the G20 DGI-2 and SDDS Plus. ONS aims to improve the coverage, quality and granularity of the UK financial statistics. ONS statistical transformation will continue and in time will deliver on outstanding DGI-2 Recommendations.

Rec.II.2: Financial Soundness Indicators (FSIs). In line with IMF requirements, the Bank of England is currently reviewing and updating its existing processes to bring the UK in line with the 2019 FSIs guidance. This includes increasing the efficiency, and timeliness, of producing the quarterly data ahead of their dissemination. The Bank now provides the IMF with timely quarterly exports of the core indicators. Alongside this work, the Bank has been reviewing the existing data submissions to ensure these continue to be accurate. The reconciliation exercise to ensure consistent and accurate data (between our existing and new methods) has led to delays to recent updates to the IMF.

Rec.II.5: Non-Bank Financial Intermediation. The United Kingdom has started compiling and submitting the Securities Financing Transactions (SFT) data to the FSB during July 2023.

Rec. II.7: Securities Statistics. The Bank of England and ONS are collaborating on the development of a securities issuance and holdings database which will support the improvement of the UK's security statistics under rec. II.7. The first delivery phase went live in February 2021 with the second phase following in June 2022. Further work is ongoing to bring consistency between the relevant data sources and to integrate the issuance and holdings databases into a single platform. The expectation is that this consolidation will complete in 2025.

Rec. II.8: Institutional Sector Accounts. The UK regularly publishes experimental statistics for the SNA 2008 financial sub-sectors S.125-S.127 via its Financial Services Survey 266 balance sheet survey. The UK has recently improved the quality of the data for S.128 in the National Accounts using Solvency II data and for S.129 using the new Pension Funds Survey. The UK adhered to SDDS+ in August 2022 and the SDDS+ 5-year transition period provides a framework for improving the UK's financial instrument data (particularly Debt Securities) and financial sub-sectors.

Rec.II.14: Cross-border Exposures of Non-bank Corporates. The UK is currently updating the Financial Services Surveys' forms and sample framework. These improvements are elements of a long-term package of deliverables designed to enable the UK to improve its compliance with rec.II.14, particularly for the S.125-S.127 sub-sectors. The UK is also updating the sample and scope of the data sources used to populate S.124.

Rec.II.10: International Investment Position (IIP). The UK continues to progress work on research into suitable data sources and methods for providing the currency composition of the IIP required by rec.II.10.

United States

Rec.II.11: International Banking Statistics (IBS). Exploring to report data on local claims/liabilities in locational banking statistics (LBS); test data received.

Non-G20 FSB Member Economies

Singapore

Rec.II.5: Non-Bank Financial Intermediation. Singapore has started compiling and submitting the Securities Financing Transactions (SFT) data to the FSB in 2023.

Switzerland

Rec. II.8: Institutional Sector Accounts. This report corrects the status of the explanatory notes (The DGI-2 Closing Report-published June 9, 2022) for rec.II.8 Sectoral accounts, to note that Switzerland opted to report on a self-commitment basis and have not signed up to report on all the recommendations and sub-recommendations for rec.II.8. The notes under sectoral accounts template have been deleted from the report. In addition, this report corrects the traffic light for rec.II.8 (page 25) of "Annex 3—Monitoring traffic light dashboard: status of progress in the voluntary implementation of selected DGI-2 recommendations by non-G20 FSB economies at end-2021" by deleting all colors from the traffic light and regard the status as N/A.