



Economic and Social Council

Distr.: General
15 December 2023

Original: English

Statistical Commission

Fifty-fifth session

27 February - 1 March 2024

Item 3(h) of the provisional agenda*

Items for discussion and decision: environmental-economic accounting

Report of the Committee of Experts on Environmental-Economic Accounting

Note by the Secretary-General

In accordance with Economic and Social Council decision 2023/325 and past practices, the Secretary-General has the honour to transmit the report of the Committee of Experts on Environmental-Economic Accounting, which is submitted to the Commission for discussion and decision.

* E/CN.3/2024/1.

I. Introduction

1. At its fifty-fourth session, held from 28 February to 3 March 2023, the Statistical Commission adopted decision 54/110 (see E/2023/24-E/CN.3/2023/37, chap. I, sect. B), in which it:

(a) Welcomed the report of the Committee of Experts on Environmental-Economic Accounting, and expressed its appreciation for the continued work in advancing the System of Environmental-Economic Accounting implementation and its mainstreaming;

(b) Welcomed the adoption of the Kunming-Montreal Global Biodiversity Framework and its monitoring framework, welcomed the acknowledgement by the Conference of the Parties to the Convention on Biological Diversity of the value of aligning national monitoring with the System of Environmental-Economic Accounting in order to mainstream biodiversity, called upon national statistical offices to engage with their biodiversity focal points, and called upon the Committee to actively engage in the Convention on Biological Diversity process and facilitate further collaboration between the statistical and the biodiversity communities to strengthen national monitoring systems and for monitoring and reporting on the Kunming-Montreal Global Biodiversity Framework;

(c) Welcomed the establishment of the new Group of 20 Data Gaps Initiative and the involvement of the Committee in the work to close climate change data gaps using System of Environmental-Economic Accounting accounts for Group of 20 countries and beyond;

(d) Welcomed the Committee's progress towards the development of global databases, in particular through the launch of global data collection for energy and air emission accounts, and noted the importance of these databases for climate change and circular economy initiatives;

(e) Welcomed the collaboration of the Committee with United Nations Economic Commission for Europe and the Organisation for Economic Co-operation and Development in advancing a statistical framework for measuring the circular economy;

(f) Welcomed the progress made in advancing the research agenda and developing methodologies to support implementation of the System of Environmental-Economic Accounting Ecosystem Accounting, in particular the work of the forest ecosystems and ocean accounts groups, and supported the Committee's collaboration with the earth observations community with the aim of providing robust and cost-effective earth observations solutions for ecosystem accounting;

(g) Supported the close collaboration between the Committee, the Advisory Expert Group on National Accounts, and the Intersecretariat Working Group on National Accounts on the update of the 2008 System of National Accounts, noting the importance of taking into account the System of Environmental-Economic Accounting to reflect environmental issues within the updated 2008 System of National Accounts;

(h) Requested the Committee to continue to advance the research agenda on the System of Environmental-Economic Accounting Ecosystem Accounting, taking into consideration the discussions on valuation within the context of the update of the 2008 System of National Accounts;

(i) Supported the engagement of the Committee of Experts on Environmental-Economic Accounting with the Committee of Experts on International Statistical Classifications in the revisions of the International Standard Industry Classification, the Central Product Classification, the Classification of Environmental Functions and the Standard International Energy Product Classification, as well as the upcoming revision of the Classification of the Functions of Government, noting the importance of ensuring that the updated classifications take into account environmental considerations, are fit for purpose for System of Environmental-Economic Accounting compilation and are sufficiently forward-looking in scope;

(j) Welcomed the increase in country implementation of the System of Environmental-Economic Accounting, and encouraged the continued development of guides and tools to support implementation, as well as the use of partnerships and regional collaboration to accelerate implementation;

(k) Requested that the System of Environmental-Economic Accounting manuals and e-learning courses be made available in all official languages of the United Nations as soon as possible;

(l) Welcomed the progress of the working group on business accounting, and supported the group's collaboration with the Task Force on Nature-related Financial Disclosures, the Global Reporting Initiative and the Capitals Coalition to better align private sector methodologies and standards with the System of Environmental-Economic Accounting, noting the benefits to both the public and private sectors in this regard;

(m) Noted the update provided on the statistical framework for measuring the sustainability of tourism, encouraged the finalization of the document, and welcomed its future submission to the Commission.

2. The work of the Committee is organized according to four broad areas of work, with members of the Bureau leading the related parts of the programme of work, as agreed in the Committee's terms of reference. The areas of work are: area A. coordination and communication, led by the Australian Bureau of Statistics; area B. methodological development for normative standards and other research, divided into two sub-areas (area B1. SEEA Central Framework, led by Statistics Netherlands, and area B2. SEEA Ecosystem Accounting, led by South Africa); area C. development of databases, led by the Organization for Economic Co-operation and Development (OECD); and area D. implementation and statistical capacity-building, jointly led by the Statistical Institute for Asia and the Pacific and the Kenya National Bureau of Statistics. Statistics Canada currently chairs the Committee, taking over from Statistics Netherlands. The Committee works in close collaboration with the London Group on Environmental Accounting, chaired by the German Federal Statistical Office, to advance the practical and methodological development of the SEEA Central Framework and SEEA Ecosystem Accounting.

3. The present report discusses the progress made during the past year and future areas of work. Action to be taken by the Statistical Commission is presented in section VIII.

II. Area A. coordination and communication (led by the Australian Bureau of Statistics)

4. The working group on coordination and communication focuses on fostering collaboration between initiatives related to environmental-economic accounting and implementing practical strategies to promote the use of the SEEA for emerging policy issues. These efforts demand collaboration between national statistical offices, line ministries and the international community. This past year, the working group shifted in leadership from Statistics Canada to the Australian Bureau of Statistics. In addition, the working group has re-focused its programme of work to finalize a landscape assessment and begin developing a webinar series.

5. The working group recently finalized a landscape assessment of different groups working in the environmental accounting space and their relationships. There are several task teams and expert groups working in the environmental accounting space, each with different objectives and working on different aspects of environmental statistics and accounts. The goal of the landscape assessment is to provide an internal overview of the environmental accounting space to the broader Committee, so that it can inform future collaboration and coordination with relevant initiatives and groups. This will also help to identify emerging priority issues for the Committee. The landscape assessment will be kept up to date and re-evaluated on an annual basis.

6. The working group will also begin a webinar series in 2024, highlighting various priority and/or emerging policy areas. The main goals of the webinar series are to showcase the benefits of the SEEA, demonstrate how the SEEA can answer policy questions, explore areas where the SEEA has not been used but could play a role and to bring people together from various disciplines. The working group will finalize the topics and dates of the webinars in early 2024.

7. In addition, the working group has focused on mainstreaming the SEEA in five main thematic areas: biodiversity, measuring the sustainability of tourism, climate change, circular economy and business accounting. These are areas where the accounts can provide valuable insights to current international priorities related to environmental challenges.

Biodiversity

8. The Fifteenth Conference of the Parties to the Convention on Biological Diversity adopted the Kunming-Montreal Global Biodiversity Framework and its monitoring framework in Montreal, Canada in December 2022. Since the adoption of the Global Biodiversity Framework, the Ad Hoc Technical Expert Group on Indicators, established under the auspices of the Convention on Biological Diversity, has progressed in developing the metadata for the indicators of the monitoring framework. These efforts include aligning them with the statistical

frameworks developed under the Commission, including the Sustainable Development Goals, the SEEA and the Framework for the Development of Environment Statistics. One member of the Committee as well as the Statistics Division of the Department of Economic and Social Affairs of the Secretariat, were nominated to be members of the Ad Hoc Technical Expert Group on Indicators. In particular, the Committee, through its members in the Ad Hoc Technical Expert Group on Indicators, will promote the use of common standards related to data and methods, in particular on the monitoring of goals and targets where the SEEA is recognized as the underlying methodological basis for the compilation of headline indicators. These include indicator A2: extent of natural ecosystems; indicator B1: services provided by ecosystems; and indicator 9.1: benefits from the sustainable use of wild species. This effort will include close consultation with the Technical Committee on the SEEA Ecosystem Accounting as well as collaboration with other national statistical offices, line ministries and the science community, as mentioned below section III, area B2. It is anticipated that the overall methodology for the headline indicators of the monitoring framework will be agreed to by the Ad Hoc Technical Expert Group on Indicators by April 2024. The metadata will be finalized by the Sixteenth Conference of the Parties in late 2024.

9. To support adoption of the monitoring framework and the work of Parties, the European Union with the support of the Secretariat of the Convention on Biological Diversity and the United Nations Environment Programme (UNEP)-World Conservation Monitoring Centre, continues to develop the Global Knowledge Support Service for Biodiversity.¹ This initiative will build on existing tools, technologies and networks to support national efforts for the implementation, monitoring, reporting and review of progress towards the goals and targets of the Global Biodiversity Framework. The Committee, through the Department, plans to contribute to this initiative in order to support Parties in their use of statistical tools and products for monitoring and reporting.

10. In addition, the Department is developing a project proposal to support the development of the indicators of the monitoring framework based on the SEEA Ecosystem Accounting. The project will also focus on building capacity in several countries and supporting the testing, implementation and reporting of the SEEA Ecosystem Accounting based indicators in these countries.

Measuring the sustainability of tourism

11. The Committee has continued to collaborate with the United Nations World Tourism Organization on the development of the Statistical Framework for Measuring the Sustainability of Tourism (SF-MST) which aims to provide an integrated and internationally agreed statistical framework to measure the impacts and dependencies of tourism on the economy, society and the environment. The framework supports country production of reliable, internationally comparable data on the performance of countries and subnational regions regarding the sustainability of tourism. This year, the Expert Group on Measuring the Sustainability of Tourism finalized the SF-MST. As part of this process, and in order to ensure a consistent approach, the Committee and the Technical Committee on the SEEA Central Framework have reviewed and endorsed the chapter of the SF-MST that deals with the environmental sustainability of tourism, in which the linking of relevant environmental economic accounts to the Tourism Satellite Account constitutes an important element. Following several rounds of consultations, the SF-MST underwent a global consultation in late 2023 to seek final views from the statistical community (including the Committee) and the tourism policy community.²

Climate change

12. Area A continues to prioritize mainstreaming the SEEA into climate change initiatives. Area A and the broader Committee have continued to contribute to the third phase of the G20 Data Gaps Initiative (DGI-3). The workplan of the DGI-3 was welcomed by the G20 Finance Ministers and Central Bank Governors during their October 2022 meeting and in the G20 Bali Leaders' Declaration in November 2022. Half of the 14 recommendations of the DGI-3 workplan are addressing data gaps on climate change statistics. The SEEA provides the methodological basis for many of these recommendations, in particular recommendations on greenhouse gas emission accounts and national carbon footprints (recommendation 1); energy accounts (recommendation 2); climate-impacting government subsidies (recommendation 6) and climate change

¹ See <https://gkssb.chm-cbd.net/>.

² More information is available in the UNWTO report under the agenda item on Tourism Statistics.

mitigation and adaptation expenditures (recommendation 7). The G20 leaders have asked the International Monetary Fund (IMF), the Financial Stability Board and the Inter-Agency Group on Economic and Financial Statistics, along with the G20 and participating economies, to begin closing the data gaps outlined in the workplan.

13. Over the past year, substantial progress has been made in the implementation of the DGI-3 workplan. Given the range of topics covered by the DGI-3, task teams have been established to organize and implement the workplan, and members of the Committee are participating in all relevant task teams. The task teams have conducted several virtual meetings/workshops for G20 and participating economies to facilitate progress on the implementation of each recommendation, including a workshop on recommendations 1-3 and a separate workshop on recommendations 6-7. These workshops have addressed existing methodological frameworks, data gaps, results of stocktaking surveys as well as ways to overcome challenges and advance the implementation of recommendations. The global and Eurostat questionnaires on energy and air emission accounts will be used as the data templates to fill in the data gaps for recommendations 1 and 2. Further, efforts are under way to support countries in filling in the data templates using global data sets. In the coming year, the Committee, particularly the Technical Committee on the SEEA Central Framework (area B1) and working group on the development of databases (area C), will continue to assist the G20 and participating economies in progressing towards closing these gaps.

14. The working group on coordination and communication continues to coordinate with the Economic Commission for Europe (ECE) to engage in activities aimed at improving the usefulness of official statistics for climate policy and analysis, including advancing the use of the SEEA for climate change indicators. In particular, the working group has contributed to the annual ECE expert forum for producers and users of climate change-related statistics and the ECE task force on the role of national statistical offices in achieving national climate objectives. The task force is developing guidance on the role of NSOs in the reporting under the Paris Agreement, meeting information needs of national policymaking in the areas of climate change adaptation and mitigation, and informing the public about climate-related issues. The guidance document is expected to be finalized and presented for endorsement to the Conference of European Statisticians in 2024. The working group's activities in the coming years will also include engaging with international groups such as the secretariat of the United Nations Framework Convention on Climate Change, the Intergovernmental Panel on Climate Change and the Expert Group on Environmental Statistics to facilitate communication and collaboration.

Circular economy

15. Area A is actively engaging in two complementary efforts on circular economy through the participation of some of its members: 1) the ECE task force on measuring circular economy, established by the Bureau of the Conference of European Statisticians and 2) the OECD expert group on a new generation of information for a resource efficient and circular economy (RECE-XG).

16. The ECE task force jointly with the OECD expert group has drafted the UNECE/OECD Guidelines for Measuring Circular Economy (Part A) which were endorsed by the Conference of European Statisticians in June 2023. Part A clarifies the headline definition of a circular economy, defines a conceptual monitoring framework and the statistical boundaries of a circular economy, proposes a set of harmonised indicators to monitor progress and guides their measurement. The conceptual monitoring framework and further measurement considerations are largely based on the SEEA. The next step of work is drafting Part B, which will provide guidance on data sources to produce the core indicators, the required institutional collaboration, guidance on using indicators and more case examples. The task force's findings have shown that the SEEA is suitable for measuring many of the drivers for circular economy such as recycling and reuse of materials; goals at the macro level and mesolevel (e.g. economic activity sectors, industries, cities, etc) such as waste reduction; as well as direct and indirect effects on issues such as climate change and biodiversity loss.

17. The work of the OECD RECE-XG aims to improve the information base for resource efficiency and circular economy policies. It is carried out in close cooperation with the ECE task force, with some elements being prepared jointly. The RECE-XG has focused on the development of a common working definition of a circular economy and of a harmonized conceptual framework and indicator set for monitoring progress and

supporting policy development and evaluation. The results of this OECD work are being integrated into a joint ECE-OECD report on measuring the circular economy.

Business accounting

18. In order to streamline its programme of work, the Committee decided to integrate the activities of the Working Group on the SEEA and Business Accounting (Area E) into the activities of Area A, while fully recognizing the importance of remaining engaged and visible in this area and maintaining the momentum achieved by Area E in terms of aligning the SEEA and business accounting frameworks and standards on the environment and ecosystems.

19. In March 2023, the Committee participated in the global consultation of the Global Reporting Initiative's Biodiversity Topic Standard. The standard aims to represent internationally agreed best practice and recent developments in the field of biodiversity to provide guidance in private sector reporting and management of biodiversity-related impacts. The draft Biodiversity Topic Standard already contained several references and areas of alignment to the SEEA Ecosystem Accounting. The Committee's feedback provided additional areas where alignment with the SEEA Ecosystem Accounting could be strengthened, thereby harnessing synergies between private and public sector accounting for biodiversity.

20. The Department has continued to serve as a knowledge partner of the Task Force on Nature-related Financial Disclosures over the past year. The Task Force on Nature-related Financial Disclosures released its recommendations in September 2023, and the final recommendations include the use of concepts and definitions used by the SEEA. This alignment should facilitate the use of official SEEA accounts for private sector decision making and reporting, as well as the use of private sector data by national statistical offices in the production of SEEA accounts.

Communication

21. The SEEA website³ and quarterly "SEEA News & Notes" newsletter⁴ continue to function as the Committee's main vehicles to engage with and inform stakeholders and the general public. The website and newsletter serve as an important mechanism for countries to share their national experiences and publications, and for the Committee to highlight international initiatives and events relevant to the community, such as the 2023 Africa Natural Capital Accounting Policy Forum and the side event to the 2023 United Nations Water Conference, Water Accounting for the Sustainable Development Goals. The newsletter audience saw a steady growth of approximately 200 new subscribers added during the year. In addition, the Department continues to expand the SEEA website's knowledge base and added approximately 65 publications on the SEEA over the past year.

22. Over the last year, the Committee also participated in discussions with other groups such as the Network of Economic Statisticians and the Friends of the Chair on Social and Demographic Statistics. These discussions focused on how to improve the integration of measures of the economy, society and the environment, support achievement of the Sustainable Development Goals and address issues raised in the report of the Secretary-General entitled "Our Common Agenda".

III. Area B. Methodological development for normative standards and other research

23. An important component of the work of the Committee, as well as the London Group on Environmental Accounting, is the advancement of the research agenda of the SEEA Central Framework and SEEA Ecosystem Accounting. The present section describes the progress of methodological development and implementation for both.

A. Area B1. SEEA Central Framework (led by Statistics Netherlands)

Update of the SEEA Central Framework

³ See <https://seea.un.org/>.

⁴ See <https://seea.un.org/content/seea-news-and-notes-archive>.

24. At its eighteenth meeting in 2023, the Committee discussed a possible update of the SEEA Central Framework, citing the update of the 2008 System of National Accounts and the need to stay coherent with the updated System of National Accounts as a motivating factor; as well as the upcoming updates of other statistical standards and classifications; the adoption of the SEEA Ecosystem Accounting; and the progress on the research agenda of the SEEA Central Framework. The Committee also emphasized the need to ensure that the SEEA Central Framework serves as a statistical framework that responds to the data needs of policies on the environment-economy nexus, in particular climate change, circular economy, biodiversity and sustainable finance, among others. Citing these reasons, the Committee agreed to an update of the SEEA Central Framework and, noting concerns on the availability of resources and the capacity of national statistical offices and international organizations to undertake this work, recommended that the update of the SEEA Central Framework have a focused scope. The Committee further requested the Technical Committee of the SEEA Central Framework to develop criteria for a prioritization of issues and evaluate the costs and benefits of the issues.

25. The Technical Committee is currently developing an initial list of issues, based mainly on the research agenda of the SEEA Central Framework as well as from the inputs from the discussions of the London Group on Environmental Accounting and the update of the 2008 System of National Accounts. Broadly speaking, the issues can be grouped into different thematic groups, such as: improvement of the classifications in the SEEA Central Framework (e.g. use of new classifications and alignment with recently revised classifications); improvements to the SEEA Central Framework (e.g. improving the links to emerging policy needs); better alignment between the SEEA Central Framework and SEEA Ecosystem Accounting; and new topics in the research agenda that have come up through the implementation of the SEEA Central Framework in the recent years. It should be noted that a number of issues for the update of the SEEA Central Framework relate to chapter 4 on monetary flow accounts and to ensuring consistency with the 2025 System of National Accounts and alignment with the SEEA Ecosystem Accounting. Applications of the SEEA Central Framework will also be examined, though an update of the SEEA Applications and Extensions would be addressed through a separate process which is under discussion.

26. The Technical Committee and broader Committee will circulate the list of priority issues for global consultation in the first half of 2024. The Committee will then finalize the list of issues for submission to the Commission in 2025. Identifying sources of funding and in-kind resources would also be a focus of the Committee during this period. The Committee plans to involve not only national statistical offices in the update process, but the broader user community as well, in order to ensure that the updated SEEA Central Framework meets users' data needs. Once the list of issues is finalized, issue papers will be drafted, and global consultations will be organized in order to finalize the discussion on the various issues. The timeline for the update process of the SEEA Central Framework is being coordinated with the upcoming revision processes of related standards such as the Classification of the Functions of Government, Government Finance Statistics Manual and Monetary Finance Statistics Manual. It is envisaged that the updated SEEA Central Framework could be finalized by 2027, with submission to the Commission in 2028. The Statistical Commission is invited to endorse the update of the SEEA Central Framework.

Involvement in updates of classifications and other frameworks

27. Over the past year, the Technical Committee on the SEEA Central Framework has continued to provide substantial input to the ongoing update processes for the International Standard Industry Classification, Central Product Classification and Standard International Energy Product Classification to ensure that these classifications are fit for purpose for compiling the SEEA. For the International Standard Industry Classification update, the Technical Committee on the SEEA Central Framework concentrated on making environment related activities visible by making them explicit in the explanatory notes of existing classes and by creating some separate classes. For the Central Product Classification update, the Technical Committee of the SEEA Central Framework identified several topics that are particularly relevant for the SEEA, including waste products, specific environmental products and services, energy products, and the alignment of the Standard International Energy Product Classification with the Central Product Classification and Classification of Environmental Purposes, in particular concerning climate change and biodiversity. Finally, the group is actively participating in the updates of Standard International Energy Product Classification and the upcoming revision of the

Classification of the Functions of Government to ensure that both classifications can be used effectively by SEEA compilers.

28. Eurostat and a dedicated European taskforce have been working over the past years on the revision of the Classification of Environmental Activities, which serves as a fundamental building block for the compilation of environmental activities accounts in the SEEA. A fully developed version of the structure of a new integrated classification bringing together the Classification of Environmental Protection Activities and the Classification of Resource Management Activities, now named the Classification of Environmental Purposes, was drafted along with explanatory notes. The Classification of Environmental Purposes was presented at the Technical Committee of the SEEA Central Framework and the Committee of Experts on International Statistical Classifications and underwent global consultation, administered by the Statistics Division of the Department of Economic and Social Affairs of the Secretariat as Secretariat to the Committee of Experts on Environmental-Economic Accounting. Based on the results of the global consultation and the revised classification, the Technical Committee and the broader Committee endorsed the Classification of Environmental Purposes, which was also endorsed by the Committee of Experts on International Statistical Classifications at its October 2023 meeting, and noted the importance of the continuous update of this classification especially with regards to the upcoming revision of the Classification of the Functions of Government and the update process of other macro-economic standards such as the SEEA Central Framework in order to ensure alignment and consistency. The Classification of Environmental Purposes is submitted to the Commission for adoption as an international statistical standard by the Committee of Experts on International Statistical Classifications.

29. In addition, the Technical Committee on the SEEA Central Framework has continued to play a key role in the update of the 2008 System of National Accounts and has reviewed draft chapters of the 2025 System of National Accounts that are related to the SEEA, as well a glossary of terms and definitions. Furthermore, members of the Committee are participating in the OECD informal Expert Group on Natural Capital, which has been formed to address the practical implementation challenges of the 2025 System of National Accounts in relation to reporting of natural capital and its inclusion in net measures of production and income.

B. Area B2. SEEA Ecosystem Accounting (led by South Africa)

30. Following the adoption of the SEEA Ecosystem Accounting in March 2021 and its implementation strategy in March 2022, uptake of the SEEA Ecosystem Accounting by the statistical community and beyond has continued. The implementation and further development of guidance materials have been overseen by the Technical Committee on the SEEA Ecosystem Accounting. The Technical Committee consists of experts in ecosystem accounting from various member states, international and regional organizations, individual experts and chairs of the Technical Committee's working groups. The Technical Committee meets regularly in bi-monthly meetings to discuss the progress and developments in the implementation of the SEEA Ecosystem Accounting and to develop implementation guidelines.

31. Since the adoption of the SEEA Ecosystem Accounting, the scope of work of the Technical Committee has shifted from the revision of SEEA Experimental Ecosystem Accounting towards supporting the implementation of the new framework. Hence, the Technical Committee adopted new terms of reference and a revised membership structure. The new terms of reference aim to strengthen the focus on supporting implementation of the SEEA Ecosystem Accounting; additional members will strengthen country and regional representation in the Technical Committee.

32. The Technical Committee adopted its work programme for 2023-2025, which is centred around six main components: (1) development of practical guidance notes for countries; (2) supporting the development of headline indicators for the Kunming-Montreal Global Biodiversity Framework that are based on the SEEA Ecosystem Accounting; (3) overseeing the working groups on forest ecosystems and ocean accounting; (4) contributions to the broader SEEA and System of National Accounts processes; (5) engagements with related initiatives; and (6) the community of practice on ecosystem accounting. The first two components are priorities for the Technical Committee.

33. With respect to the development of practical guidance notes, the Technical Committee has prioritized notes related to operationalizing the International Union for Conservation of Nature (IUCN) Global Ecosystem

Typology, approaches and methods for compiling ecosystem extent accounts, and methods for measuring ecosystem services (including global climate regulation services).

34. Another main priority for the Technical Committee is supporting the development of the metadata of the headline indicators of the Kunming-Montreal Global Biodiversity Framework related to the SEEA, as further elaborated above in section II on biodiversity. The Technical Committee is engaging with the Ad-hoc Technical Expert Group through the Department and providing input into the development of metadata for the SEEA-related indicators included in the monitoring framework. Task teams have been established under the Technical Committee to take this work forward.

35. The Technical Committee is engaging with all relevant initiatives working towards advancing the implementation and development of tools for ecosystem accounting, in particular to measure ecosystem extent and services accounts. In the future, the Technical Committee would also like to establish mechanisms of cooperation with private sector accounting initiatives.

36. To advance implementation and further methodological development, the Technical Committee has established two working groups on forest ecosystems and ocean accounting to contribute to the advancement of the ecosystem accounts, in relation to forest ecosystems and oceans respectively. The working groups identify best practices, methods, models, data and tools, looking at both biophysical and monetary aspects, as well as examining policy entry points.

37. The working group on forest ecosystems, established in 2021, is co-chaired by Rey Juan Carlos University, Spain and Griffith University, Australia and has around 23 members from several countries, organizations and academic institutions. The working group established four task teams on: (1) ecosystem extent accounts; (2) ecosystem condition accounts; (3) global climate regulation as an ecosystem service from forest ecosystems; and (4) policy links and users of forest ecosystem accounts. The fourth task team on policy links and users of forest ecosystem accounts developed and published a paper entitled “Using the system of environmental-economic accounts ecosystem accounting for policy: A case study on forest ecosystems”. The task team also made substantial progress on a note outlining the definitions of forest ecosystems. In addition, the task team on ecosystem extent is looking at how to treat issues of defining different forest ecosystem types and mapping extent and changes in extent of forest ecosystems in relation to the IUCN Global Ecosystem Typology. The task team on ecosystem condition is performing a stock take on forest-related condition accounts to learn from previous experiences and to understand the characteristics used to compile condition accounts. Finally, the task team on the global climate regulation ecosystem service is developing a note on improving estimates of carbon stocks using ecosystem accounts for climate change policy and testing the methodology in Senegal.

38. The working group on ocean accounting is chaired by the Australian Bureau of Statistics and has around 27 members from the environmental accounting, scientific and environmental economics communities from countries, international organizations, non-governmental organizations and academia. This working group, with the support of the Global Ocean Accounts Partnership, has developed a research agenda and agreed to tackle substantive topics in seven background papers to be developed over 2023-24: (1) a global stocktake of SEEA implementation concerning the ocean; (2) data structures; (3) accounting for coastal and marine ecosystem services; (4) monetary valuation of ecosystems for the ocean domain; (5) high-impact, actionable indicators from ocean accounts; (6) accounting for biodiversity for marine and coastal ecosystems; and (7) other thematic ocean accounts.

39. The working group on SEEA Ecosystem Accounting indicators was established by the Technical Committee in June 2020 with the main objective to support the revision process and in particular the drafting of Chapter 12 of the SEEA Ecosystem Accounting. This task was successfully carried out, and since the adoption of the Kunming-Montreal Global Biodiversity Framework and the establishment of the Ad-hoc Technical Expert Group for its monitoring framework and indicators (with which the Division will engage), there is no longer a need for a dedicated working group on indicators. Thus, this working group was dissolved and the task of supporting the development of indicators passed to the Technical Committee itself.

40. Similarly, the subgroup on accounting for biodiversity was established in 2020 with the objective to support the revision process, in particular the drafting of Chapter 13, building on a range of conceptual advances

and practical experiences in accounting for and measuring biodiversity. The task was completed with the revised SEEA Ecosystem Accounting, and thus the subgroup has been dissolved. However, the contribution of the SEEA Ecosystem Accounting to accounting for biodiversity, including to the implementation and monitoring of the Global Biodiversity Framework, remains a focus of the Technical Committee as a whole.

41. To support the implementation of the SEEA Ecosystem Accounting, the Department has been working with the IUCN and the Committee of Experts on International Statistical Classifications to include the IUCN Global Ecosystem Typology in the family of international classifications. The IUCN Global Ecosystem Typology is the reference classification for ecosystem types in the SEEA Ecosystem Accounting, and as such underpins the full suite of ecosystem accounts. It is being submitted to the Commission for adoption as an international statistical standard by the Committee of Experts on International Statistical Classifications.

C. London Group on Environmental Accounting (led by the Federal Statistical Office of Germany)

42. The London Group on Environmental Accounting is a city group consisting of experts from national statistical offices and international organizations. The London Group meets annually and provides a forum to discuss and work towards the conceptual and methodological development of environmental-economic accounts. The 29th meeting of the London Group, hosted by Statistics South Africa, was held in Pretoria, South Africa between 11 and 15 September 2023.

43. The upcoming update of the SEEA Central Framework was one of the central topics of the meeting. The London Group has reiterated its support to the Technical Committee on the SEEA Central Framework in advancing methodological issues. To this end, the London Group will contribute to the discussion on the issues identified for the update of the SEEA Central Framework and develop position papers.

44. In coordination with the Technical Committee on the SEEA Central Framework, the London Group has agreed to prepare position papers for the 2024 meeting covering (1) the integration of climate mitigation and adaptation expenditures as new SEEA accounts; (2) the treatment of emission certificates in environmental-economic accounting; (3) compatibility of classifications and accounting rules for environmental taxes between monetary and physical accounts in the SEEA and the System of National Accounts; and (4) the treatment of man-made flows within the environment. The London Group also discussed more practical applications and techniques during its last meeting, including for example, input-output models and seasonal adjustment to quarterly air emission accounts. For quarterly air emission accounts, the London Group agreed that existing technical methods for seasonal adjustments could also be applied to quarterly air emission accounts. In addition, the London Group's discussion on input-output models indicated important analytical uses for SEEA accounts, though the group agreed that there were no new developments relevant for the SEEA Central Framework update.

45. In addition, the group will work on an issue paper on general recommendations for setting baselines and using modelling with SEEA accounts. Based on these general recommendations, position papers for valuation of ecosystem services and on potentially environmental damaging subsidies (including tax abatements) will be developed by 2025. The London Group Bureau has decided to include two new topics to be explored in 2024: spatially disaggregated accounts and the inclusion of agriculture in energy accounts.

46. In order to foster efficient collaboration during the year beyond annual meetings, an electronic discussion forum will be set up. The 2024 meeting will be hosted by the Bureau of Economic Analysis (BEA) in Washington DC, United States of America and the 2025 meeting by Statistics Estonia.

IV. Area C. Development of databases (led by OECD)

47. The working group on the development of databases is composed of members from international organisations responsible for developing international compilations for the five priority accounts (air emissions, energy, material flows, land and water), as well as for other emerging international SEEA compilations. The priority accounts were identified at the Committee's eleventh meeting, in 2016.

Global databases

48. The objective of the working group on the development of databases is to establish a set of global SEEA databases to provide users with SEEA-compliant datasets for integrated policy development and analysis,

including for the Sustainable Development Goals. This is done by coordinating support for the development of SEEA databases at the international level, by facilitating the exchange of related data among international organizations and by providing direct access to existing SEEA databases through the websites of international organizations and, ultimately, through the Statistics Division's SEEA website.

49. Over the past year, the working group on the development of global databases continued to make progress on priority actions, as outlined in its road map. Work to expand the global coverage of compilation of air emissions accounts and physical energy flow accounts was advanced during 2023 with the launch of the first round of a joint global data collection for air emission and physical energy flow accounts in 2023 by the Department and OECD, complementing existing data collection for European Union countries by Eurostat. To that end, the joint questionnaires, aligned with the Eurostat questionnaires, have been developed and finalized after testing with countries in 2022. The joint questionnaires are mapped to the global Statistical Data and Metadata Exchange data structure definitions for the SEEA. The Department and OECD are currently validating the data and expect to disseminate the data in 2024.

50. In addition, several international organizations have formed a partnership to develop quarterly greenhouse gas emissions statistics based on the SEEA. Eurostat, IMF and OECD continue to make regional aggregates available on a quarterly basis. Moreover, during 2023, the OECD completed work to develop global nationally aggregated estimates on CO₂ emissions from maritime transport, complementing existing related estimates for air transport, as part of the broader work programme contributing to improved compilation, granularity, and timeliness of air emission accounts.

51. Along with the working group on coordination and communication, the working group on the development of global databases continues to coordinate with and contribute to the DGI-3. Over the past year, members of the working group have conducted workshops on recommendations on greenhouse gas emission accounts (recommendation 1) and energy accounts (recommendation 2). To minimize the reporting burden for countries and avoid any duplication of efforts across international organizations, results from the joint global data collection on air emissions and physical energy flow accounts will be used to monitor progress regarding these DGI-3 recommendations.

52. UNEP continues to undertake work on material flow accounts. The Global Manual on Economy Wide Material Flow Accounting, originally prepared in 2021 by UNEP and the International Resource Panel, jointly with Eurostat and in cooperation with the OECD, has been revised and re-published in 2023.⁵ By December 2023, updated global material flow accounts estimates will be available in the Global Material Flows Database,⁶ which is used as input for monitoring the Sustainable Development Goals, with time series up to 2023 for all Member States. Pre-filled material flow accounts questionnaires will be sent to countries in early 2024 for verification and replacement with national data, as applicable.

53. In addition, UNEP, in collaboration with the Commonwealth Scientific and Industrial Research Organization, is developing an online global footprint tool. The global footprint tool will include a database of material, energy, carbon, water and land footprint estimates by country, and will allow national statistical offices and other relevant organizations to calculate their national environmental footprints using the multi-regional Global Resource Input-Output Assessment database. The tool will be available by the end of 2023.

54. OECD and FAO have developed a concept note guiding the work on developing a global database of land cover accounts. Key future milestones include a discussion with countries and stakeholders of the draft land cover questionnaire, a written consultation with data producers and users to ensure best value added of the land accounts for analytical and policy work, and a virtual workshop in 2024 to finalize the questionnaire. Once the questionnaire is finalized, the working group will consider undertaking pilot data collection. The working group will report its progress to the Committee in 2024.

⁵ See <https://wedocs.unep.org/bitstream/handle/20.500.11822/36253/UNRE.pdf>.

⁶ See <https://www.resourcepanel.org/global-material-flows-database>.

55. Work on SEEA water accounts has focussed on ensuring the availability of core data for the accounts from the joint OECD/Eurostat and UNEP/UNSD questionnaires on inland waters. Simplified SEEA water accounts have been compiled, but the resulting tables remain partial, and options for obtaining more complete data need to be explored. In 2024, the OECD will undertake a feasibility study to review existing national and international data sources for their potential to fill remaining data gaps.

ARIES for SEEA

56. The Basque Centre for Climate Change, Donostia International Physics Centre, Department and U.S. Geological Survey have continued to collaborate on the Sector Hub of ARIES for the SEEA, in support of the United Nations Global Platform. The Sector Hub, which is managed by the Basque Centre for Climate Change, is a collaborative and action-oriented knowledge, technology and innovation hub, which will bring together the use of artificial intelligence and big data and provide a much-needed platform to further the interoperability of data and models in the domain of environmental-economic accounting and sustainability.

57. Some of the main activities undertaken in 2023 include: in-person and virtual participation in capacity building workshops in Africa, Asia and Latin America; technical support on land cover and ecosystem accounts compilation to several countries, including Botswana, Senegal and South Africa; model testing with national statistical offices; coupling of the ARIES platform to the openEO platform of the European Space Agency⁷; and the development of global baseline estimates of vegetation/soil carbon stocks for terrestrial ecosystems, which will be used for the upcoming World Bank report, the Changing Wealth of Nations. The number of users of the application has increased from about 3300 to 4800 users. An advisory committee for the Sector Hub is being finalized, comprising selected senior officials from national statistical offices and other government agencies, space agencies and academia, to advise on the Sector Hub's strategic direction, vision and programme of work.

V. Area D. Implementation and statistical capacity-building (led by Kenya National Bureau of Statistics and the Statistical Institute for Asia and the Pacific)

58. The working group on implementation and statistical capacity-building has identified several areas of focus for its work programme and developed a list of priorities for the period July 2023 to June 2024. These are centred around three main activities: (1) coordinating of capacity building and implementation activities; (2) revitalizing the SEEA focal points network; and (3) supporting the Global Assessment of Environmental Economic Accounting and Supporting Statistics.

59. Over the past year, in addition to ensuring the coordination of capacity building and implementation activities at the global level, the group reviewed and updated the SEEA implementation guide. The guide was initially developed in 2014 and mostly focused on the implementation of SEEA Central Framework. Since 2014, several new developments have taken place, most notably the adoption of SEEA Ecosystem Accounting and the advancement in the use of global data and earth observation in support of SEEA accounts compilation.

60. The updated implementation guide, entitled "Towards the Institutionalization of the SEEA: An Implementation Guide", contains five core sections: (1) strategic planning; (2) building mechanisms for implementation; (3) compiling the accounts; (4) disseminating the accounts; and (5) institutionalizing the SEEA. Each section outlines the main aspects related to the implementation of both SEEA Central Framework and SEEA Ecosystem Accounting and includes at least one country example to illustrate relevant aspects of the SEEA implementation. The updated implementation guide was endorsed by the Committee at its 18th meeting in July 2023 and is available online in a user friendly and interactive format.⁸

61. The working group, having members from countries, the regional commissions and other international organizations, has the objective of coordinating capacity development activities at the global and regional levels, as well as ensuring that lessons learned from the various experiences with SEEA implementation in countries are

⁷ See <https://eo4society.esa.int/projects/openeo/>.

⁸ See <https://seea.un.org/content/towards-institutionalization-seea-implementation-guide>.

shared widely. This involves maintaining and updating a list of active projects on SEEA implementation in countries to avoid duplication and ensure efficient use of resources.

62. The Global Assessment on Environmental-Economic Accounting and Supporting Statistics serves to gain a better understanding of national SEEA implementation, including institutional and funding arrangements, countries' priorities and future plans for implementing accounts, technical assistance received and provided, and the use of the accounts. It helps assess the support required by countries for implementing the SEEA. The Global Assessment also supports the monitoring of Sustainable Development Goals through two indicators: (a) 15.9.1, on the integration of ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts; and (b) 12.b.1, on the implementation of standard accounting tools to monitor the economic and environmental aspects of tourism's sustainability. The benchmark Global Assessment was sent to countries in September 2023 and the results are submitted to the Commission as a background document.

63. Acknowledging the importance of the flow of information on capacity building and implementation activities at both regional and global levels, the working group aims to expand its membership with new international and regional organizations that are increasingly interested in the implementation of the SEEA, as well as a few countries that could serve as ambassadors for SEEA implementation in their regions.

64. The working group and broader Committee's contact with countries is maintained through the SEEA focal points, established in 2020, who serve as the first point of contact in countries for all matters related to the SEEA, including compilation updates, responding to the global assessment, data validation, coordination of SEEA work, etc. The SEEA focal points network was established by requesting nominations from all Members States. The Department received approximately 192 nominations from 123 countries.

65. The network has served well as a point of contact for all SEEA related matters. The working group aims to review the terms of reference for the focal points, review and update the current membership of the group, and as needed, further engage with the focal points to support them in fulfilling their responsibilities as laid out in the terms of reference.

66. There are many SEEA implementation activities and projects underway. The Department has just concluded a three-year project funded by the twelfth tranche of the United Nations Development Account. The project supported countries on SEEA implementation and its use for evidence-based policymaking in Asia and Africa, namely Bhutan, Kenya, Mozambique, the Philippines and Senegal. The Department has provided support to the project countries in building institutional frameworks in support of SEEA implementation, compiling pilot accounts and promoting the accounts in support of policymaking and the Sustainable Development Goals. The Department also organized several regional training workshops as part of the project, including the Regional Training Workshop on an Accounting Approach to Climate Change Statistics and Indicators in Chiba, Japan in April 2023, the Regional Training Workshop on the SEEA Ecosystem Accounting for Asia and the Pacific in Manila, Philippines in June 2023, and the Regional Training Workshop on an Accounting Approach to Climate Change Policy in Africa in Nairobi, Kenya in September 2023.

67. The SEEA Ecosystem Accounting e-learning course developed by the Department and the United Nations Statistical Institute for Asia and the Pacific last year, has now been translated into French and Spanish. A facilitated e-learning programme was conducted in October to November 2023 where 348 participants from 73 countries participated. In addition, this year, the Department made the e-learning course "SEEA for Policy Makers" available in Portuguese, in addition to the English, French and Spanish versions which were already available.

68. The Global Program on Sustainability⁹, is the World Bank's umbrella technical assistance facility on the economics of natural capital, ecosystem services and sustainability, with the objective to strengthen and promote use of data and analysis (economic and financial) on natural capital and ecosystem services to inform global dialogues, government and financial market decisions. The Global Program on Sustainability is providing technical assistance grants for compiling natural capital accounts in several countries including Ghana, Ethiopia,

⁹ See <https://www.worldbank.org/en/programs/global-program-on-sustainability>.

Türkiye and Nigeria. At the global level, the Global Program on Sustainability regularly compiles and publishes a comprehensive assessment of wealth accounts for over 140 countries (including natural, produced and human capital). The fifth issue of the series, entitled “The Changing Wealth of Nations”, is currently under production and aims to expand the scope as well as conceptual and methodological depth of wealth accounting and analysis.

69. The OECD and ECE organized its eight joint annual Seminar on the Implementation of the SEEA in March 2023 which discussed, amongst other issues, the role of the SEEA in measuring the transition towards a circular economy, progress made by countries in implementing ecosystem accounts, integration of accounts for analytical purposes, and related new developments in international standards and classifications such as the System of National Accounts.

70. The Economic and Social Commission for Asia and the Pacific (ESCAP) assists countries in the region in the production and use of integrated statistics and accounts in response to priority policy concerns, such as sustainable development of the oceans. During 2023, support on ocean accounts was extended to two countries: (1) Palau to monitor seagrass beds in Airai state as an important fish habitat and coral ecosystems in Koror state for sustainable tourism income, as well as a national pilot on mangrove accounts and (2) Samoa, to extend initial pilot accounts with a focus on mangroves. In collaboration with the Global Ocean Accounts Partnership, ESCAP also supported the Maldives’ initiative on natural capital accounting in Laamu atoll. For other SEEA accounts, ESCAP supported Fiji to develop high-impact, integrated statistics and accounts with the focus on forests including accounts from both the SEEA Central Framework and SEEA Ecosystem Accounting. Several e-learning courses were organized by the Statistical Institute for Asia and the Pacific during the course of the year, including on the SEEA water accounts and using the SEEA for climate change indicators.

71. The IMF recently launched a new environment and climate change statistics capacity development programme, which will provide IMF member countries with the tools, resources, and technical capacity to develop a range of macro-relevant environment and climate change statistics based on the SEEA. The programme works in close coordination with other international organizations, in particular the UN agencies and the World Bank. It currently supports the implementation of climate change related statistics based on the SEEA in Bangladesh, Colombia, Ghana, Indonesia, Mozambique, Peru, South Africa and Viet Nam. Two training courses were organized this year as part of this programme. The first one was an online course for African countries organized in collaboration with the IMF African Training Institute based in Mauritius. The second was a two-week course organized in collaboration with the IMF Middle East Center for Economics and Finance, the Arab Monetary Fund and the International Energy Agency. The course took place in Abu Dhabi from 4-15 December. Officials from central banks, ministries of finance and national statistical offices participated in both courses.

72. The Natural Capital Accounting Community of Practice for Africa¹⁰ continued to host regular webinars, providing opportunities for countries of the region and international organizations to share experiences. The community of practice convened and facilitated the second Africa Natural Capital Accounting Policy Forum, which took place in Nairobi, Kenya on 6 and 7 September 2023 under the theme, using natural capital accounting and analysis to inform policies for development, climate change and nature protection. The forum, which was held alongside the Africa Climate Summit, provided participants with a focused platform to discuss the use of natural capital accounting and the challenges and opportunities in using natural capital data, tools and analysis to inform and support policies in African countries. Over 120 representatives from 30 countries attended the forum.

VIII. Points for discussion

73. **The Statistical Commission is invited to express its views on:**

(a) The proposed update of the SEEA Central Framework (see section III);

¹⁰ See <https://seea.un.org/content/africa-community-practice>.

- (b) The Committee's role and engagement in the Kunming-Montreal global biodiversity framework and the engagement of national statistical offices in the development and implementation of the monitoring framework (see sect. II);**
 - (c) The progress made in global data collection and databases for both the SEEA Central Framework and SEEA Ecosystem Accounting (see sect. IV);**
 - (d) The involvement of the Committee in the Data Gaps Initiative, particularly on climate change recommendations 1, 2, 6 and 7 (see sect. II);**
 - (e) The progress made in upscaling implementation of the SEEA Ecosystem Accounting, advancing the research agenda, and developing methods and guidance for compilation (see sect. III);**
 - (f) The use of partnerships, regional collaboration and the SEEA focal points network to make advances in global implementation of the SEEA (see sect. V); and**
 - (g) The work programme of the London Group (see sect. III).**
-