



System of
Environmental
Economic
Accounting

OVERVIEW OF UNCEEA COUNTRIES' ACTIVITIES RELATED TO COMPILATION OF SEEA

This document is a compilation of the responses to a questionnaire which was sent to countries in the UNCEEA. Countries were asked to provide details about the accounts they compile for informational purposes.

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Will be updated as responses are received.

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	<p>Please briefly list the accounts you compile (and the regularity of compilation) and any future plans for the development of SEEA accounts.</p>
<p>Australia</p>	<p>Current Program</p> <ul style="list-style-type: none"> • Water Accounts, annually since 2008-09 • Energy Accounts, annually since 2008-09 • Experimental Land Accounts: Great Barrier Reef Region 2011, Victoria 2012, Queensland 2014, South Australia 2015 • Experimental Waste Accounts, 2009-10 and 2010-11 • Experimental Ecosystem Accounts for the Great Barrier Reef Region 2015 • Environmental Expenditure Accounts 2014 <p>Planned Developments</p> <ul style="list-style-type: none"> • Experimental Ecosystem Accounts for the Great Barrier Reef Region 2017 • SEEA Agriculture Accounts for Great Barrier Reef Region 2017
<p>Brazil</p>	<ol style="list-style-type: none"> 1. Water Accounts: We are working in the water accounts in physical terms. The IBGE develops this activity in cooperation with the National Water Agency (ANA) on a successful model of inter-institutional articulation. Although we are working in the accounts of assets and flows of water, we did not yet published the results. We hope to publish the first results as soon as possible, although we have not yet fixed a date. We expect to publish the water account results in annual intervals basis. 2. Land cover/land use change: Another account we have also started to work is the land cover and land use change account. We have collected the data for land use and land cover change assets in biannual intervals according to the Central Framework recommendations and we expect further development in this field.
<p>Bhutan</p>	<ol style="list-style-type: none"> 1. Electricity Account (Supply and Use Table) 2. Fossil Fuel Account (Supply and Use Table) 3. Mineral Account is planned 4. Water Account is planned
<p>Canada</p>	<p><u>SEEA CENTRAL FRAMEWORK:</u></p> <p>Current:</p> <ul style="list-style-type: none"> • Annual Physical Asset Accounts (National and Provincial) • Annual Monetary Asset Accounts (National and Provincial) • Quarterly Monetary Asset Accounts (National) • Annual Energy Use Account (National) • Annual GHG Emissions Account (National) • Biennial Water Use Account (National) • Annual input-output multipliers (Energy use and GHG emissions, National) • Annual demand-based measures (Energy use and GHG emissions, National) • Biennial demand based measures (Water use) <p>Future:</p> <ul style="list-style-type: none"> • Annual Provincial Energy Use Accounts

<p>Canada Cont.</p>	<ul style="list-style-type: none"> • Annual Provincial GHG Emissions Accounts • Annual Criteria Air Contaminant Emissions Account (National) <p><u>SEEA EXPERIMENTAL ECOSYSTEM ACCOUNTS</u></p> <p>Current: Thematic accounts</p> <ul style="list-style-type: none"> • Water asset account: Stocks of renewable water, monthly, selected drainage areas, 1974-2013. Will be published biennially, starting this year. • Land asset account: Stocks of land by land cover/use categories, selected areas, 1971-2011. Will be published biennially, starting this year. <p>Future plans: Ecosystem accounts (start dates TBD)</p> <ul style="list-style-type: none"> • Ecosystem asset accounts: Stock of ecosystem assets, 1991 onward, quinquennial. • Ecosystem service flows: Flows of ecosystem services, 1991 onward, quinquennial. • Freshwater ecosystem water quality account: Selected parameters, 2011, biennial.
<p>Colombia</p>	<p>In Colombia, the economic measurement associated to the environmental accounts, is led by the group of Indicators and Environmental Accounts, which is part of the Directorate of Synthesis of National Accounts of the National Administrative Statistics Department, (- DANE- by its initials in Spanish). This group has been commissioned to develop the methodological advances of the following components:</p> <ul style="list-style-type: none"> • Energy: this account is the measurement of physical assets related to mining and energy resources. Also includes the construction of physical and monetary flows of energy products used as inputs inside the economy. Finally the physical measurement for residual flows of combustion emissions and related emissions released by industrial processes, for the time series between the years 2005 up to 2014. • Forest: this module is the physical measuring associated to the forest and timber assets. The measurement of physical and monetary flows for timber and forest goods that are used as inputs inside the economy, for the time series between the years 2005 up to 2014. • Water: this component generates the physical measurement associated to water resources. As it develops the physical flows of inputs and physical and monetary flows of water resources which are caught by different systems to supply the economy. Finally, measuring physical flows of emissions of wastewater, for the year 2012. • Solid Waste: to measure the solid waste environmental and economic account, the efforts are driven to collect information that allows determining the physical and monetary flows of waste generated by industry of waste treatment and disposal of those, where landfills and recycling points are the units of production, plus those generated by other industries and households, for the year 2014. <p>Environmental protection expenditure and environmental taxes: develops the economic measuring associated to expenditure on environment recovery and environmental taxes collected by the national government in the framework of environmental protection programs, for the time series between the years 2005 up to 2014.</p>

Denmark	<p>Yearly accounts (published in 2016):</p> <ul style="list-style-type: none"> • Physical and monetary energy • Air emissions • Physical and monetary water • Physical and monetary waste water • Physical and monetary waste • Full physical supply and use tables and input-output tables • EW-material flow accounts • Environmental goods and services (EGSS) • Government environmental expenditures and revenues • Environmental related taxes • Environmental motivated subsidies <p>In addition the following yearly accounts are expected to be published from 2017</p> <ul style="list-style-type: none"> • Physical and monetary oil and gas resources • Land area and land cover incl. land values • Forest • Fish
Finland	<ul style="list-style-type: none"> • Material Flow Accounts – annually • Environmental taxes – annually • Air emission accounts – annually • Environmental expenditures by industry, • Environmental expenditures by public sector, • Environmental goods and services sector, • Energy accounts – according to EU regulation
Germany	<p>Current calculation:</p> <p>Monetary:</p> <ul style="list-style-type: none"> • Environmental taxes (annually) • Environmental protection expenditure account (EPEA, annually) • Forest accounts (subcontracted to national forest agency, annually) • Agricultural accounts (done by national agricultural agency, annually) <p>Physical:</p> <ul style="list-style-type: none"> • Material flow accounts (MFA, annually) • Material flow accounts in raw material equivalents (RME, annually) • Energy flow accounts (PEFA, annually) • Air emission accounts (AEA, annually) • Water accounts (3-yearly) • Forest accounts (subcontracted to national forest agency, annually) • Agricultural accounts (done by national agricultural agency, annually) <p>Future plans:</p> <p>Monetary:</p> <ul style="list-style-type: none"> • Resource Management Expenditure Accounts (ReMEA) • Environmental subsidies
Italy	<p>Current: Air emission accounts (annual), Environmental taxes (annual), Material flow accounts (annual), Environmental protection expenditure accounts (annual)</p> <p>Future plans: Energy accounts, environmental goods and services accounts</p>

<p>India</p>	<p>At present India is not compiling any of the accounts as per SEEA framework. India has a highly de-centralised statistical system and as such data for the accounts are to be produced by the respective Ministries. Therefore towards compilation of Environmental Economic Accounting in various sectors, an Inter-Ministerial Group (IMG) has been constituted under the Chairmanship of Director General, Central Statistics Office. In the last meeting of the IMG, it was decided that Ministries and related organisations will continue their efforts to develop the Environmental-Economic Accounting Tables pertaining to their respective sectors. Ministries may develop a phase wise programme wherein accounts for sectors/components for which regular data are now available may be attempted now and compilation of trial asset accounts may be explored.</p> <p>The existing data collection systems in the Ministries are to be oriented to meet the data requirements for SEEA-CF. Data requirements are huge and they are required on regular basis for compilation of Environmental accounts. The present data system is not in a position to support this requirement and therefore, it needs a massive re-orientation in terms of efforts for collection, compilation and dissemination. A suitable institutional mechanism to fill up the data gaps in other sectors/components would be developed by the concerned Ministries in due course. While Ministries will make efforts to explore the possibility of compiling the accounts and eventually develop action plan to fill up the data gaps, it would be difficult to draw a time frame for all the accounts under SEEA-CF keeping in view of the existing data gaps.</p> <p>It was also decided that CSO may devise appropriate training programme for officers of various concerned Ministries involved in the compilation of the accounts. Towards this a one week training programme to officers on Environmental Economic Accounting was organised in March 2016. More batches are proposed to be trained during this year.</p>
<p>Malaysia</p>	<p>The proposed priority accounts was tabled on 9 July 2014 in the Main User Committee (MUC) meeting, which is the platform in establishing highly prioritized statistics in Malaysia and involved key stakeholders. During the meeting, the committee has agreed with the compilation of SEEA Energy as well as SEEA Water. A series of meetings and discussions were held during the years 2013 - 2016 with the technical working group to discuss the process of compilation, methodologies used for estimation, to rectify the problem and to obtain solutions.</p> <p>DOSM has just compiling the Physical Supply & Use Table (PSUT) Energy Account and we plan to present it to our stakeholders in MUC Meeting in September 2016. This account is planned to be compiled in biennial basis.</p> <p>Moving forward, the development of SEEA has been included in the Department of Statistics Malaysia (DOSM) Transformation Plan (2015-2020), as the key activities as follows:</p> <ul style="list-style-type: none"> i. PSUT – Energy Account (2016, 2018, 2020) ii. PSUT – Water Account (2017) iii. Environmental Protection Expenditure Account (2020)

<p>Mexico</p>	<ul style="list-style-type: none"> • SEEA-Mexico: depletion of forest resources, hydrocarbons, groundwater; air pollution (emissions of criteria gases), soil pollution by solid waste, wastewater discharges untreated, soil degradation; and Environmental Protection Expenditures. • SEEA-Water. • Material flow account. • http://www.inegi.org.mx/est/contenidos/proyectos/cn/ee/default.aspx <p>All these accounts are disseminated recurrently each year, in less than 12 months after the end of the accounting year. In addition, their publication is committed to the "Calendar of Dissemination of Statistical and Geographical Information and of National Interest of INEGI" (http://www.inegi.org.mx/saladeprensa/doc/cal_2016.pdf).</p> <p>Currently it is developing the implementation of the EEA-EEA, SEEA-AFF, SEEA-Energy, Environmental Goods and Services Sector and Green Jobs.</p>
<p>Mongolia</p>	<ul style="list-style-type: none"> • In 2014, NRSO have compiled the Material Flow Accounts (MFA) first time and experimentally by 2005-2013. The some data used for the compilation of the MFA are unavailable at the national level, so the international data were used. • In 2015, NRSO have made initial stage to compile the Energy Physical Supply and Use Table (PSUT) by 2010-2013. The data used for the compilation of the Energy PSUT are unavailable at the national level, so the energy balance complied by International Energy Agency were used. • In April of 2016, we have conducted Environmental Protection Expenditure Survey for business entities. The survey data is now under construction. The Environmental Protection Expenditure Accounts will be compiled in 4 th quarters of 2016 as planned.
<p>Netherlands</p>	<p>Physical flow accounts</p> <ul style="list-style-type: none"> • Water flow account: every two years • Energy flow accounts: every year • Material flow accounts: EW MFA: every year; Full PSUT every two years (depending on demand / finances by ministry of economic affairs) • Air emission accounts: every year • Waste accounts: every two years • Water emission accounts: every two years <p>Asset accounts</p> <ul style="list-style-type: none"> • Energy subsoil resources: every year (physical and monetary) <p>Monetary activity accounts</p> <ul style="list-style-type: none"> • Environmental taxes: every year • EPEA: every year • EGSS: every year • ReMEA: testing going on • Environmental transfers: testing going on <p>Ecosystem accounting</p> <ul style="list-style-type: none"> • Testing on national scale will start in 2016. <p>SEEA AGRI</p> <ul style="list-style-type: none"> • Testing in 2016

Norway

We have in the context of this questionnaire interpreted "SEEA accounts" as accounts compiled in accordance to SEEA/National Accounts definitions. (We have not been able to go through every table in SEEA CF with the aim of listing up if Statistics Norway is able to compile all the data necessary to complete all the tables in SEEA CF)

In general will future plans in Statistics Norway regarding the development of SEEA accounts follow the strategy and development plans in Eurostat on these issues.

Chapter III Physical flow accounts

Ch. 3.4 Physical flow accounts for energy

Physical flow accounts for energy are compiled on a regular basis according to EU regulations for environmental accounts.

Ch. 3.5 Physical flow accounts for water

No specific SEEA-activity for physical flow accounts for water, but obligatory water statistics according to EU-regulations and reporting are undertaken.

Ch. 3.6 Physical flow accounts for materials.

Ch. 3.6.3 and ch. 3.6.6: Physical flow accounts for MFA and emissions to air are compiled on a regular basis according to EU regulations for environmental accounts

Ch. 3.6.5: No specific SEEA-activity regarding solid waste accounts, but waste accounts is compiled together with the waste statistics

Ch. 3.6.4: No specific SEEA-activity regarding emissions to water, but statistics for emissions to water is compiled on a regular basis

Chapter IV Environmental activity accounts and related flows

Ch. 4.3 Environmental activity accounts and statistics

Ch. 4.3.2: Environmental protection expenditure accounts for mining, quarrying and the manufacturing industries are compiled on a regular basis according to EU regulations for SBS. From 2017 on, these accounts will cover the whole economy and will be compiled on a regular basis according to EU regulations for environmental accounts.

Ch. 4.3.3: Accounts for environmental goods and services sector (output and export) will from 2017 be compiled on a regular basis according to EU regulations for environmental accounts.

Ch. 4.3.4: EPEA and EGSS will be harmonised

Ch. 4.3.5: Accounts for resource management expenditures: No specific SEEA activity is undertaken, but REMEA is a prioritised issue on the Eurostat future development plan for SEEA.

Ch. 4.4 Accounting for other transactions related to the environment

Ch. 4.4.2: Environmental payments by government are partly covered by EPEA. But no specific SEEA activity regarding environmental subsidies and related activities is otherwise compiled on a regular basis. Subsidies and related transfers are a prioritised issue on the Eurostat future development plan for SEEA.

Ch. 4.4.2 and ch. 4.4.5: Environmental payments to government (taxes) and permits to use environmental assets (tradable emission permits) are compiled on a regular basis according to EU regulations for environmental accounts.

Ch. 4.4.4 and ch. 4.4.6: No specific SEEA-activity is undertaken regarding environmental transfers by non-government institutional units and Transactions concerning fixed assets used in economic activities related to the environment.

Chapter V asset accounts

Asset accounts have been compiled as part of regular estimation of the National wealth calculations for Norway.

Ch. 5.5 Asset accounts for mineral and energy resources

Asset accounts for oil resources and natural gas resources are compiled in accordance with the SEEA-definitions. No regular compilation and dissemination of data according to this work. Work within this area is now following the development in the OECD-TF for SEEA.

Ch. 5.6 Asset accounts for land

Asset accounts for land will now be compiled on a regular basis in relation to the compilation and dissemination of the national accounts.

Ch. 5.7 Asset accounts for soil resources

No specific SEEA-activity is undertaken regarding asset accounts for soil resources

Ch. 5.8 Asset accounts for timber resources

No specific SEEA-activity regarding asset accounts for timber resources, but statistics for timber and forest resources is compiled and reported on a regular basis according to EU-regulations within this area. Asset accounts for timber resources are part of the National wealth calculations for Norway (NACE 02). Forest and timber accounts (incl. asset accounts) are an area which is included in the Eurostat future development plan for SEEA and Norway is participating in the ongoing development within this area.

Ch. 5.9 Asset accounts for aquatic resources

There are ongoing work within the research department in Statistics Norway regarding the development of asset accounts for aquatic resources. Asset accounts for aquatic resources (NACE 03) are part of the National wealth calculations for Norway (NACE 02). However, work is also undertaken in order to value the aquatic resources in Norway, but so far no studies is undertaken for total aquatic resources or total for Norway.

Ch. 5.10 Asset accounts for other biological resources

Various ongoing initiatives in research department in Statistics Norway with other organisations related to SEEA EEA.

Ch. 5.11 Asset accounts for water resources

No specific SEEA-activity regarding asset accounts for water is undertaken on a regular basis.

<p>Philippines</p>	<p>1991 to 2000s</p> <ul style="list-style-type: none"> • Asset Accounts: Forest, Land/Soil, Fishery, Mineral and Water Resources • Emission accounts of selected economic activities: <ul style="list-style-type: none"> ○ Agriculture, fishery and forestry: poultry, upland palay farming, hog industry, poultry industry, intensive shrimp aquaculture and logging in dipterocarp and pine forest. ○ Industry: small scale mining and electricity generation ○ Manufacturing: Paint Industry; Textile industry; leather tanning; Tuna Canning Industry; Sugar Milling Industry; Cement Industry; Petroleum Industry ○ Services: land transport service • Expenditure accounts: <ul style="list-style-type: none"> ○ Government service environmental protection expenditure ○ Private sector environmental protection expenditure <p>2015-16</p> <ol style="list-style-type: none"> 1. Mineral Asset Accounts. 2. Land Accounts: <ol style="list-style-type: none"> a. Physical Accounts for Land Cover: Forest b. Physical and Monetary Accounts for Land Cover: Cropland <p>Accounts to be compiled in the future:</p> <ol style="list-style-type: none"> 1. Energy Asset Accounts 2. Mangrove ecosystem Accounts 3. Water Accounts 4. Agriculture Accounts
<p>Samoa</p>	<p>Samoa has only compiled an Experimental Water Account for the past three fiscal years from 2011-12, 2012-13 and 2013-14. The physical use and supply tables for these financial years are still in draft form pending comments and provision of improved data from stakeholders. The three FY tables were produced at one time with the assistance from ESCAP and a consultant from Australia, Mr Michael Vardon.</p> <p>Samoa Bureau is in the process of collecting data for compilation of supply and use tables for 2014-15. There is also interest in trying to draft an experimental energy account.</p> <p>The Experimental Water Account was the first one for Samoa and there is plan for improvement and a regular compilation of the accounts but will be very much relying on the improved capacity of the staff.</p>
<p>South Africa</p>	<ul style="list-style-type: none"> • Energy Accounts, published on an annual basis. • Mineral Accounts, published on an annual basis. • Fishery Accounts, published on an annual basis. • Experimental Ecosystem Accounts, published periodically. • Experimental Water Accounts, still in research stage.

<p>Sweden</p>	<p>SEEA CENTRAL FRAMEWORK:</p> <p>Current (annual):</p> <ul style="list-style-type: none"> • Physical energy use accounts • Air emissions – annual • Air emissions – quarterly • Full physical supply and use tables and input-output tables – environmentally extended GHG emissions • EW-material flow accounts • Chemical indicators • Environmental goods and services (EGSS) • Industry environmental protection expenditures • Environmental related taxes • Environmental motivated subsidies • Forest account <p>Future:</p> <ul style="list-style-type: none"> • Physical energy accounts – supply and use • Environmental protection expenditure accounts • Land use accounts • Environmentally damaging subsidies <p>Other</p> <ul style="list-style-type: none"> • Research project Policy-Relevant Indicators for National Consumption and Environment (PRINCE) <p>SEEA EXPERIMENTAL ECOSYSTEM ACCOUNTS</p> <p>Current: Thematic accounts</p> <ul style="list-style-type: none"> • Land account and pilot applications • Bio economy <p>Future:</p> <ul style="list-style-type: none"> • River basin water accounts (happen with the cycle of the water framework directive (EU))
<p>Uganda</p>	<ul style="list-style-type: none"> • Started work on Water and Tourism satellite accounts compilation. • We are at the inception with some data collection taking place.

United Kingdom

The following SEEA accounts are published annually in the UK:

- Air emissions
- Energy
- Material Flows
- Environmental taxes
- Environmental goods and services sector

The UK are developing/planning to develop natural capital accounts in line with SEEA as follows:

- Top-down comprehensive wealth account
- Land cover/Land use
- Freshwater ecosystems
- Carbon
- Peatland
- Farmland
- Woodland
- Wetlands
- Semi-natural grassland
- Coastal margins
- Mountain, Moorlands and Heath

In addition, the UK is developing Environmental Protection Expenditure accounts compliant with SEEA following the receipt of a Eurostat grant. We have also recently applied for a Eurostat grant to develop Urban accounts.