UNITED NATIONS

ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC (SIAP)

Measuring Material Flows in the SDGs (e-Learning course)

11 August – 5 September 2025

Guideline

I. OVERVIEW OF THE COURSE

Sustainable consumption and production (SCP) and increased resource efficiency are priorities for many countries. These linked priorities are also reflected in the 2030 Agenda and the Sustainable Development Goals (SDGs) which call for sustainable management and efficient use of natural resources. Data on economy-wide material flow accounts (EW-MFA) are necessary to inform policies not only for the management of natural resources and waste, but also policies related to circular economy, resource use and ecosystems. This course focuses on economy-wide material flow accounts which are part of the System for Environmental-Economic Accounting-Central Framework (SEEA-CF).

II. TARGET PARTICIPANTS

The target audience are officials in national statistical offices, line ministries (especially ministries of environment) and other institutions who are working on material flow accounts. The course can also be useful to a wider audience who is interested in learning more about material flows.

III. LEARNING OUTCOMES

By the end of the course, participants will be expected to:

- Discuss the importance of economy-wide material flow accounting to monitoring the progress towards the SDGs and implementation of the 2030 Agenda for Sustainable Development
- Describe key concepts associated with material flow accounts
- Outline the MFA accounting modules, typology of flows and indicators associated with the conceptual framework
- Explain the methodologies for the SDG indicators 8.4.1/12.2/1 and 8.4.2/12.2.2 and limitations in their computation

IV. COURSE DESIGN AND CONTENT

The course is comprised of a self-paced online modules and webinars. The self-paced online module is expected to take about 2 hours to complete. The webinars will provide an overview of the

course topics and allow participants to ask questions. Furthermore, participants are encouraged to actively participate in the online forum of the course. Topics for discussion will be posted on a regular basis, and participants are invited to share their views/comments/questions.

The course will be conducted in English.

Outline

Coverage of self-paced online modules

- What are material flow accounts?
- EW-MFA conceptual framework
- Indicators 8.4.1/12.2.1 material footprint, material footprint per capita, and material footprint per unit of GDP (methodology, data reporting, case studies)
- Indicators 8.4.2/12.2.2 domestic material consumption, domestic material consumption per capita, and domestic material consumption per unit of GDP (methodology, data reporting, case studies)
- Indicator 12.5.1 national recycling rate
- Applications to the SDGs
- Case studies

V. EVALUATION

Participants must receive a 70% or higher in the test at the end of this course.

Participants may take the exam up to three times and retain their best score. Participants may not work together on the test. The course facilitator reserves the right to deny course certificates to participants suspected of cheating on the test.

VI. SOURCE MATERIAL

This course draws upon various sources, including international statistical standards and case studies from national statistical offices.