Introduction to methodology for SDG Indicator 17.7.1

Webinar on selected SDG Indicators for the Arab Region

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SDG Target 17.7 and Indicator 17.7.1

1) Introduction of SDG Target 17.7 and Indicator 17.7.1
2) Definitions
3) Methodology for 17.7.1

SDG Target 17.7 and Indicator 17.7.1

Goal 17: Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

Target 17.7

"Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed".

Indicator 17.7.1

"Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies". Tier III Indicator.

UNEP is the custodian agency for this indicator

Introduction

- The importance of Environmentally Sound Technology was first emphasized during Rio Earth Summit in 1992
- Since then it has become a major component of international environmental cooperation.
- ESTs play a central role in the Addis Ababa Action Agenda – which is an implementing mechanism for the global Sustainable Development Goals (2030 Agenda for Sustainable Development)

Purpose

The purpose of this indicator is to develop a methodology for tracking the total amount of approved funding to promote the development, transfer, dissemination and diffusion of environmentally sound technologies.

To achieve this indicator a two pronged approach is suggested, and these are,

1. Use globally available data to create a proxy of funding flowing to developing countries for environmentally sound technologies, or of trade in environmentally sound technologies
2. Collect national data on investment in environmentally sound technologies.

Why is this indicator important for SDG 17?

- ESTs play an important role to improve efficiency of resources (materials and energy), reduce pollution and waste from different sectors.
- This Indicator will formulate a good understanding of the intersecting elements within the larger frame of development and it also implies the adoption and use of alternative, environmentally sound development strategies and related technologies.

Definitions

- ***Environmentally Sound Technologies (ESTs)*** – technologies that have the potential for significantly improved environmental performance relative to other technologies.

- **Multi criteria analysis (MCA)** - provides a structured framework for comparing a number of technologies across multiple criteria to gauge whether or not they can be considered 'environmentally sound', where appropriate.

Definitions

- ESTs are not just individual technologies. They can also be defined as total systems that include know-how, procedures, goods and services, and equipment, as well as organizational and managerial procedures for promoting environmental sustainability.
- Attempts to provide an assessment of investment into ESTs on either global or national level must incorporate ways to track funding flow into both hard and soft technologies.

Limitations

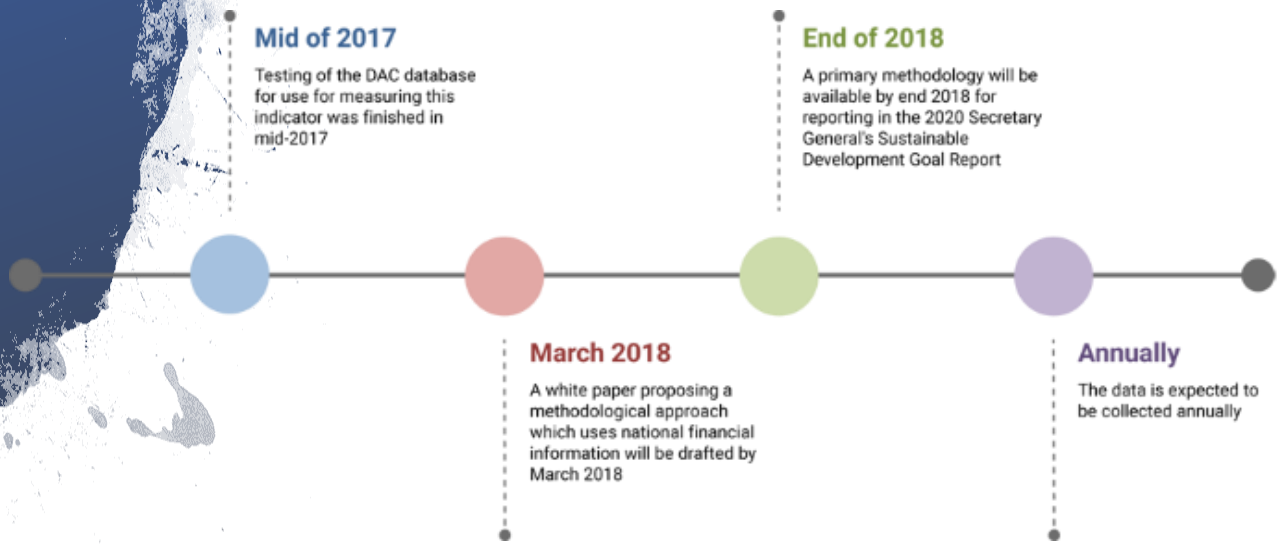
- There are various definitions of ESTs that are currently in existence and are in use.
- Available data needed for the indicator is located in different baseline years.
- Numerous national statistical systems lack the capacity to compile information due to a challenge in consistent definitions and approaches.

Methodology - Approach

To achieve this indicator a two pronged approach is suggested, and these are,

Level 1 - Use globally available data to create a proxy of funding flowing to developing countries for environmentally sound technologies, or of trade in environmentally sound technologies

Level 2 - Collect national data on investment in environmentally sound technologies.



Methodology – Level 1

International Proxy

- An international proxy is critical in order to provide a complete picture of the EST market globally, including the influence of the global market on access to ESTs by developing countries.
- The indicator will be split into two sub-indicators: **global** and **domestic**.
- The international proxy that provides the closest indicator of investment flows is that of trade (using HS codes).
- Trade is the closest proxy to have any informational value at the country level.

Data

- Data sources are
  - ➢ Level 1 – ComTrade database
  - ➢ Level 2 – NSOs and other members of the NSS
- *Data will be made available for all member states that reply to the questionnaire.*
- Reporting on this indicator will be conducted *biannually.*
- First data collection is expected to be carried out in the second half of **2021** and biannually thereafter.
- First reporting cycle will be in **February 2022** (unless the exercise is over before 10 December 2021, so it can be reported by the end of 2021).

EST Core Set

Research has shown that the following sectors are deemed to be ESTs;

- Air pollution control (APC)
- Wastewater management (WWM),
- Solid and Hazardous waste management (SHWM),
- Renewable Energy (RE),
- Environmentally Preferable Products (EPPs)
- Water Supply & Sanitation (relating to indicators for #6 and #11)
- Energy Storage & Distribution (relating to indicators for #7 and #13)
- Land & Water Protection & Remediation (relating to indicators for #14 and #15)

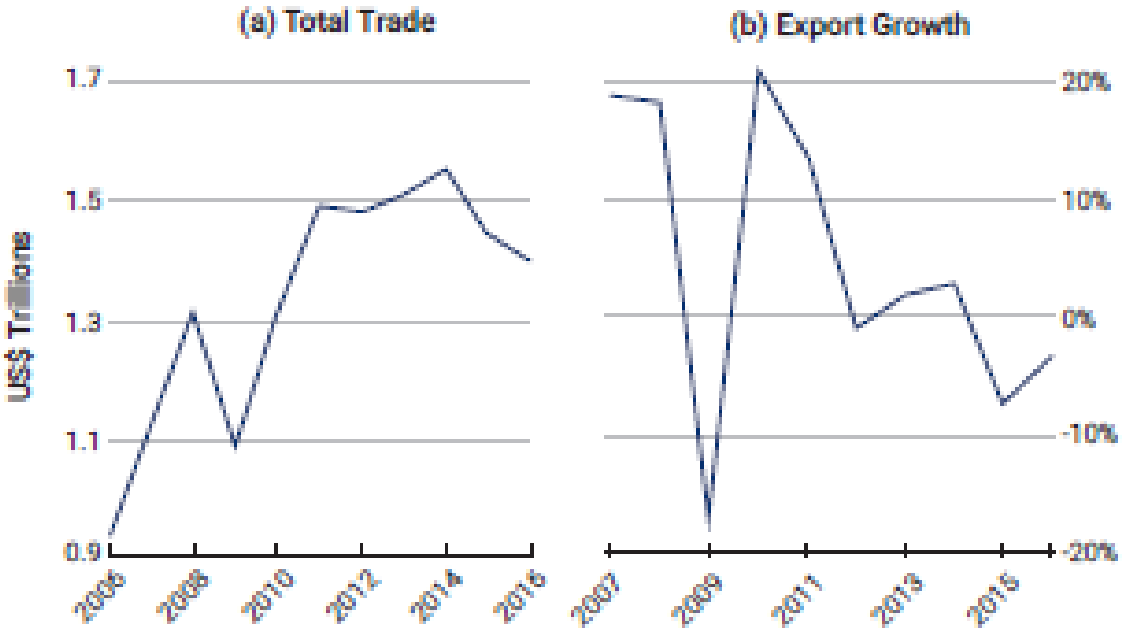
Methodology – Level 1

International Proxy - Steps

- The most detailed level HS data is used - 08 digits for exports and 10 digits for imports.
- The next step is assessing for each detailed HS its ECT (Environmental and Clean Technology) component, since not the entire HS is used for ECT purposes.
- It is important to use and explain and document the assumptions made in this phase, as it is difficult to always know the use of the goods (e.g. chlorine could treat wastewater but serves for multiples other non-EST activities).
- Indeed the 04-digit level HS would rarely be solely EST and even so at the 06 level. Trade proxies will therefore assess the EST at the most detail level, and sum EST components into HS 04 in order to get the percentage of EST at that level.
- The next step is to link this HS 04 level to a sector/activity. That last concordance should be the same (or really similar) for all counties.
- The sum of EST components will be calculated in monetary terms, in US dollars.

Example

Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies.



- **Recently there has been an uptake of trade in Environmentally Sound Technologies (ESTs) globally.** Global trade of ESTs has increased in the last decade, from $0.9 trillion in 2006 to around $1.4 trillion in 2016. Developing countries as a group doubled the volumes of exports in ESTs since 2006, while in monetary terms, exports remain unchanged at $0.06 trillion.

Methodology - Analysis

- The data will be aggregated at the sub-regional, regional and global levels.

Sub-Regional → Regional → Global

Example - Questionnaire

The following questionnaire was sent out to a selection of 13 countries in 2018, and a total of 6 returned it including Canada, China, Germany, Ireland, Estonia and Sweden. It was however clear from the responses that little information about ESTs was specifically available, and that identification and tracking of ESTs without strong guidance would be considered challenging.

Questionnaire	
Name:	*Please specify your first name and last name*
Country:	*Please indicate the country for which you are filling the data*
Title, Institution:	*Please specify your Title and Institution*
Email address:	*Please mention your email address*
Contact number:	*Please mention your contact number*
1. In your technical opinion, is the approach on page 1 feasible?	☐Yes ☐No ☐I do not know *Comments (if any):* Click here to enter text.
2. Does your country have a definition of Environmentally Sound Technologies (ESTs) used either for SDGs or for any other purpose?	☐Yes ☐No ☐Not sure *If you indicated **YES**, please mention the definition in use and also mention th source for this definition below.* Click here to enter text. *Is this a national definition, or taken from elsewhere (i.e. regional, o international organisation or body)? Please mention.* Click here to enter text.
	If you indicated **NO**, are there any related definitions being used, please mentio the definition and its source: Click here to enter text.
In the next section, please give us an indication of availability of data in your country to track both a) Total investment in ESTs and b) Financial support to developing countries (reporting either as a receiver or provider).	
Indicator- 1: Total investment in ESTs **Note**: Please consider the Table 1 (below), the variables and breakdowns shown and the time periods in the table. Please answer the following questions (i.e. 3.1-3.6) about which cells in the table would be possible to complete with the information available in your country.	
3.1 For which periodicity, would your country have the data available for this indicator 'Total investment in ESTs'?	☐Annual ☐2 years ☐ 5 years ☐ 10 years ☐ Data not available *Please mention comments (if any):* Click here to enter text.
3.2 From which year, is/will the data be available to report against this indicator in your country?	*Please mention comments (if any):* Click here to enter text.
3.3 *Level of disaggregation*:	☐Yes ☐Maybe ☐No

(Sample)

Methodology – Level 2

National data

- Given the highly contextual nature of ESTs, it is therefore something that is better defined at the national level, taking into account the national context and mainstream technologies nationally.
- Assessment is done with the performance and operational data (in relevance to the environmental objective) and whether or not the technology has any negative environmental impact (cross-media effects).
- A core set of environmentally sound technologies has been identified through analysis of existing work on the subject, to provide a non-prescriptive starting point to gather country specific EST information for the purpose of SDG reporting.
- This level will be assessed in terms of monetary value, expressed in US dollar.

Methodology – Level 2 Approach

- Identification of ESTs at the national/ sub-national level should be a simple process based on a set of criteria and the use of simple analysis tools.
- The environmental objective can be assessed with the performance and operational data and if the technology has any negative environmental impact.
- **Environmental considerations**

a. Performance of the technology and operational data

b. Cross media effects

- **Local considerations - To ensure suitability of the technology**

a. Economics impacts

b. Market considerations

c. Suitability for the local natural conditions

Methodology - Analysis

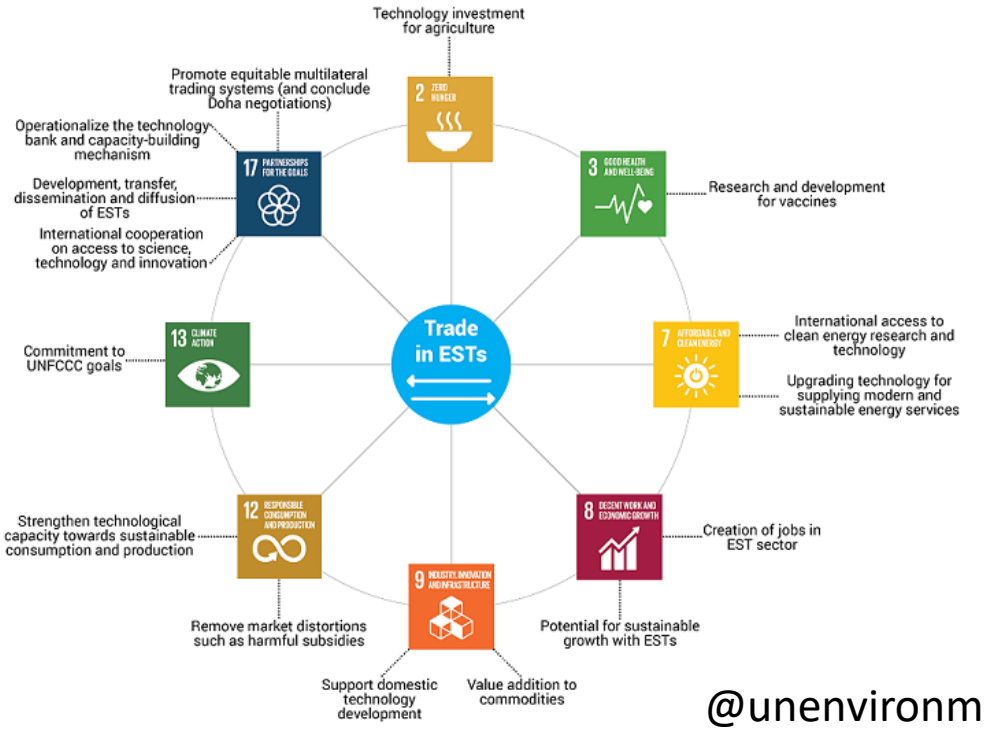
- If the criteria measures are qualitative and can only be measured by the extent to which the trade-off is considered negative, they should be converted to a numerical form on a scale, e.g. from 0 to 100 where “0” means the least preferred option and “100” means the most preferred option.
- There are broadly two sets of criteria, **one related to the benefits** and **the other related to negative trade-offs.**

Partners

Multi-stakeholder partnerships are supported to accelerate and consolidate the change in consumption and production patterns. This includes **governments**, **non-profit organisations** and the **private sector**.

Summary

- This indicator is now classified as Tier II
- Communication has been shown to be important in every stakeholder analysis to date. Combine that with management monitoring and response and sustainable lifecycle performance and it becomes clear that the identification of EST use within industry and manufacturing could prove a powerful stakeholder engagement tool.
- Below are indicators where uptakes of ESTs contributes to their achievements.



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