



DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS
STATISTICS DIVISION
UNITED NATIONS

**SEEA Revision
Issue 4
Cover Note**

Cover Note

Issue #4: Renewable Energy

Outcome paper for global consultation

Outcome Paper Issue #4: Renewable Energy - The Valuation of Renewable Energy Resources

Issue description

Renewable energy has become increasingly important. The SEEA-2003 did not include renewable energy. Because of the high policy relevance, it is important that a classification of renewable energy is developed. Furthermore, the recording of renewable energy in the physical and monetary flow accounts should be addressed. Some have also argued that renewable energy should also be included in the asset accounts, whereby the stock is represented by the potential of renewable energy that is expected to be extracted depending on the technology. Should the asset classification and asset accounts be expanded to include renewable energy? Should the stock of renewable energy be valued? If yes, how?

Background

Efforts to incorporate renewable energy resources into the balance sheet are complex. The primary difficulty stems from the fact that the sources, primarily wind, solar and hydropower, are not fixed in nature. That is, the energy is derived by capturing the energy potential embodied in solar energy, wind and falling water. While in all cases investment is required to capture this energy, the solar, wind and water energy itself is usually considered to be unlimited. In economic terms products with no scarcity have no value and hence recognising the importance of these energy resources in the traditional national balance sheet is not straightforward.

Discussion of this topic within the London Group has advanced the consideration of these matters considerably. A number of recommendations with regard to accounting treatment have been made for consideration within the revised System of Environmental and Economic Accounts (SEEA). The discussion has also highlighted some issues in the calculation and interpretation of resource rent and further clarification of the concept of rent is needed in the SEEA.

It is noted with regard to the revised SEEA that it has been determined that the updated SEEA manual will contain three volumes. Volume 1 will contain guidance on measurement topics on which broad agreement can be found; Volume 2 will contain discussion of measurement topics on which theory and practice is still developing; and Volume 3 will include examples of policy and research applications of SEEA principles and structures.

Summary of outcomes

The following are the central recommendations that have emerged from the London Group discussion on the issue of renewable energy resources. These recommendations are explained in the accompanying outcome paper.

1. That the scope of measurement of renewable energy in the SEEA include only energy that has been captured from existing renewable resources.

This recommendation recognises that there are many ways in which renewable energy can be considered and many important types of information on renewable energy of relevance. However, from the perspective of SEEA the focus must be on accounting for existing renewable energy resources rather than seeking to account for energy that might be captured in the future. Hence, the total potential of renewable energy resources is not subject of measurement.

2. That the value of all renewable energy resources is embodied in changing values for any underlying environmental assets (primarily land and water) that are used in the capture of the energy resource and because of measurement difficulties no separate estimate of the value of these resources should be made.

3. That renewable energy resources should not be separately identified in the SEEA classification of assets.

4. That, notwithstanding the general recommendation regarding the recognition of renewable energy resources in the SEEA classification of assets, water reservoirs which are specifically used for hydropower generation should be classified as renewable energy assets.

Questions

1. Do you agree that the scope of measurement of renewable energy in the SEEA should include only energy that has been captured from existing renewable resources?

2. Do you agree that the value of all renewable energy resources is embodied in changing values for any underlying environmental assets (primarily land and water) that are used in the capture of the energy resource and because of measurement difficulties no separate estimate of the value of these resources should be made?

3. Do you agree that renewable energy resources should not be separately identified in the SEEA classification of assets?

4. Do you agree that, notwithstanding the general recommendation regarding the recognition of renewable energy resources in the SEEA classification of assets, water reservoirs which are specifically used for hydropower generation should be classified as renewable energy assets?

5. Any other comments?

To submit responses to these questions please complete the accompanying comment form available on the website.

Deadline for comments: 28 October 2010

Supporting papers

Renewable energy resources in the SEEA, Maarten van Rossum, Mark de Haan & Sjoerd Schenau, Statistics Netherlands, Paper presented to the 14th London Group meeting, April 2009

Discussion paper on the valuation of renewable energy resources, Maarten van Rossum & Sjoerd Schenau, Statistics Netherlands, Paper presented to the 15th London Group meeting, December 2009