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SNA update: Environmental-Economic topics

Session 2: beyond GDP

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- SNA update and environmental accounting: explaining the context
- Explaining a few of the most significant SNA update topics*
 - Depletion of natural resources
 - Emission trading schemes
- Renewable energy resources

- Strengthening of classifications
- Gross versus net income
- 3 Main conclusions
 - * Please have a look at the <u>System of National Accounts</u> webpage for a complete overview of SNA update guidance notes

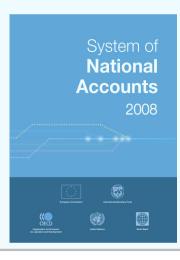




Explaining the context

Scope of the Well-being and Sustainability Task Team (WSTT):

- A Broader SNA framework for Wellbeing and Sustainability
- Distributions of household Income, consumption and wealth, human capital and unpaid household services
- Environmental concerns:





Objectives SNA update:

- Strengthening the representation of environmental concerns in the SNA.
- Reduce (where possible and useful) conceptual differences between the SNA and SEEA.
- Advance accounting methodology in certain areas where needed (which may also affect the SEEA).
- SNA should not duplicate the SEEA.





Topic 1 – Natural resource depletion

- Extraction of natural resources should not account as income
- Contrary to the 2008 SNA, SEEA-CF identifies natural resource depletion as an element that should be removed from net income



 The proposal is to align the next version of the SNA with the SEEA-CF which has the following implication:

gross domestic product

- consumption of fixed capital
- = net domestic product (2008 SNA)
- depletion of natural resources
- = net domestic product (2025 SNA, expectedly)





Topic 1 – Natural resource depletion (continued)

a related concern: who owns the natural resource?

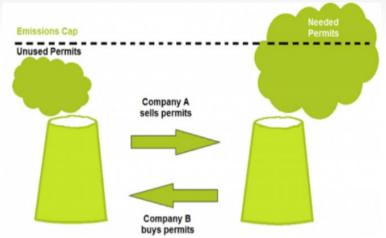
- There is overwhelming evidence that in most countries the income from natural resources is shared between government and extractors.
- The 2008 SNA acknowledges this complexity but recommends for simplicity reasons government ownership by convention.
- This convention does not align with reality as in several cases governments obtain less than half of a mine's resource rent. The accounts should reveal the extent to which governments are able to capture mining income.
- → The recommendation for the 2025 SNA is to assign economic ownership according to *resource rent* shares.





Topic 2 – Emission trading schemes

- The issue was debated in the past (OECD/Eurostat task force, 2010) without arriving at a shared outcome.
- The 2008 SNA update provides an opportunity to further develop a satisfactory recording solution.



The main discussion points:

- Surrender of a permit: payment of **tax** (unrequited, which is the current recording practice) or the use of the atmosphere for carbon storage: i.e., a **rent** payment?
- Between issuing and surrender the permit represents an asset: financial or a non-financial?
- The surrender of the permit represents an economic transaction (e.g., tax or rent payment). Its transaction value: **issuing value** or **market value** at surrender?
 - ► Accrual accounting seems to imply the prevailing market value should be followed.
 - ▶ Yet, recording of tax revenues which are unequal to actual receipts is undesirable.





Topic 3 – Renewable energy resources

- Recognition of renewable energy resources under certain conditions as natural resource assets in the revised SNA.
- Symmetric representation of fossil and renewable energy resources.
- Represents the 'harvestable amounts' now and in the future prevailing technology and economic conditions at present.
- Two critical premises:
 - The production of renewable energy will give rise to a resource rent, an income element expressing the value of having obtained access to the resource under consideration.
 - This value is not captured by other existing asset values such as land or water bodies.

SNA	Renewable energy resources
d	Water energy resources
al reserves	River water energy resources
ewable energy resources	Tidal energy resources
able energy resources	Wave energy resources
vated biological resources	Solar energy resources
esources	Wind energy resources
ural resources	Geothermal energy resources
Radio spectra Other	Other renewable energy resources







Topic 4 – Improving presentation of environmental concerns

By adding supplementary environmental classes to the SNA classification system

- Financial instruments: explicating environmental, social and governance (ESG) investments.
- Classify rents by type of natural resource.
- Explicate environmental taxes (cf. SEEA) and carbon pricing mechanisms (carbon taxes, emission permits).
- Explicate fixed assets (investment, assets) used for renewable and fossil energy production.
- Stronger positioning of natural resources in the SNA asset taxonomy.





Topic 5 – Net income and saving



- As capital depreciation is not newly created value, the 2008 SNA rightly explains national income is conceptually a net concept.
- Yet, compilers and users stick to gross domestic product, income and savings.
- Agreed, measuring capital measurement and consumption of fixed capital can be challenging.





Topic 5 – Net income and saving

Why the time has come to embrace net income and net saving:

- Stiglitz, Sen & Fitoussi (2009) explain sustainability is closer related to net rather than gross income.
- Increased prominence given to the recording of natural resource depletion (cf. Topic 1).
- Expanded scope of IPs (software, R&D, data, marketing assets) diminishes national accounts information on their user costs and contributes to 'GDP inflation'.
- Instant sourcing of IP and related services output may cause significant GDP shocks while NDP is much lesser affected.





Topic 5 – Net income and saving



What is needed?

- 1. The 2025 SNA should more convincingly advocate net income.
- 2. Strengthen international cooperation regarding capital measurement.
- Discuss the issue with users.





To conclude

- The next version of the SNA will expectedly adopt the SEEA-CF recording of natural resource depletion.
- It will also provide an improved picture of natural resource wealth at institutional sector level: government vis-à-vis non-financial corporations
- Emission permits will remain to be recorded as taxes; however, its asset classification may change from non-financial to financial. How to value the tax is still being discussed.
- Expectedly, the asset boundary of the 2025 SEEA will include renewable energy assets.
- Regarding the gross versus net discussion: global consultation is expected to start soon.





THANK YOU!

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