



Classification of Physical Flows and Related Solid Wastes

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Sept. 3, 2009



Introduction: Status of Proposed Classification

- Proposal made to London Group on Environmental Accounting at May 2009 meeting
- Part of revision process for SEEA
- On-going discussion of proposed revisions
- Need for review by Expert Group on Classifications



Background

- The System of Environmental-Economic Accounting (SEEA-2003) is being revised at the request of UN Statistical Commission
- The objective is its elevation to an international statistical standard
- Standardization of classifications is at the core of the revision of the SEEA



Revision of the SEEA - process

- Managed by the UN Committee of Experts on Environmental-Economic Accounting established by the UNSC in 2005
- Technical matters addressed by the London Group on Environmental Accounting – City group established by UNSC in 1993
- Timeline:
 - SEEA standard (Vol.1) to be submitted to UNSC in 2012
 - Issues to be solved by end of 2009



Classifications under discussion as part of the SEEA revision

- Classification of physical flows
 - Classification of waste
 - Classification of energy products
- Classification of resource management expenditures
- Classification of environment industry
- Classification of assets



Classification of physical flows

- A proposal was discussed at the last London Group meeting in April 2009
- A subgroup to address the issue has been established with the objective to develop a final proposal for discussion at the next London Group meeting in December 2009
- Opinion of EGM on classification will serve as input in the subgroup and in the LG decisions



Information needs for tracking physical flows

- Need to track flows of materials from the environment to the economy, within the economy, returns to the environment
- Use for policy analysis, waste management
- Includes materials with no monetary value
- Principle of material balance requires information not usually found in economic accounts
- Framework used is an extension of the supply and use tables of the SNA



Frameworks for definition and classification of solid waste

- Central Product Classification Version 2 (CPC Ver. 2)
- SNA
- SEEA 2003
- Waste Framework Directive (WFD):
European Waste Commission Statistical Classifications (EWC Stat)

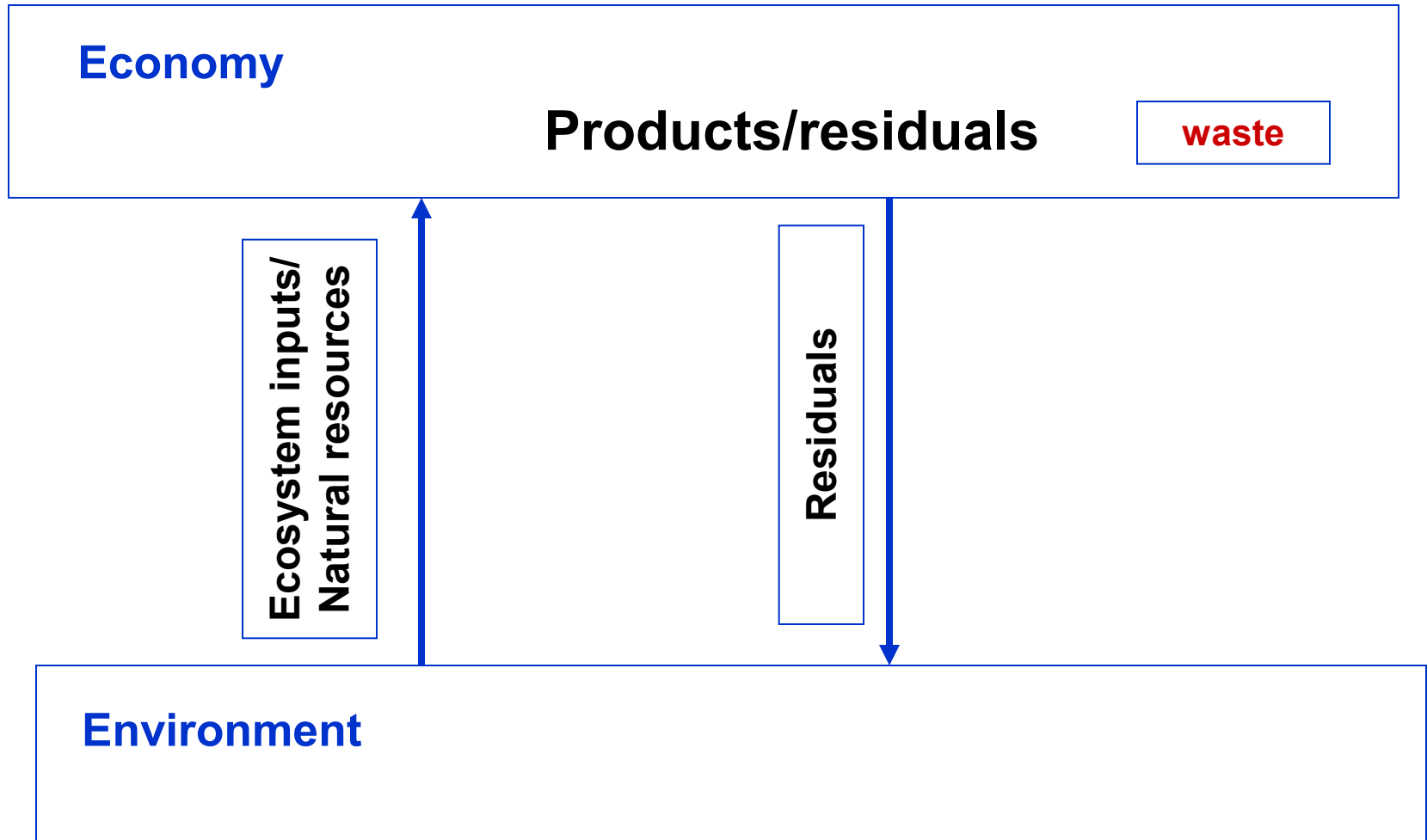


Definitions of products, residuals and waste

- Definition of products is broadly consistent across frameworks
- Definitions of residuals and waste are not
- Issues: monetary value, destination



Types of flows in SEEA-2003





Definition of products and waste, SEEA 2003

- **Products** are goods and services produced and used within the economic sphere, including residuals that have positive value to the generator (positive value)
- **Residuals** are not uniquely defined
 - Incidental and undesired outputs from the economy that have zero value to the generator
 - Flows from the economy to the environment
- **Waste** is sub-item of residual – solid waste that stays within the economy
- Need for revision: problems in tracking physical flows, especially returns to environment



Definition of products and waste, CPC ver. 2

- In general CPC and SNA are consistent
- CPC covers everything that is transacted within the economy (products and waste)
- Value is not a criterion for product definition
- Principles of CPC
 - Industrial origin
 - Physical characteristics of product
- Waste scattered in several CPC classes. CPC not appropriate to track physical generation and disposal of waste



Definition of waste: WFD

Waste: Material for which the generator has no further use for own purpose of production, transformation or consumption and which he discards or intends to or is required to discard

- Can be generated at any stage of production or consumption
- Commercial value is irrelevant



Classification of Waste to respond to WFD

- EWC Stat and List of Waste (LoW) developed by Eurostat to collect data for WFD
- EWC brings together wastes from many CPC classes
- Basic principle is physical characteristic of product (waste)
- No one-to-one correspondence between CPC and EWC Stat categories – attempt has been made by UNSD (see Annex)



Issues on the definition of waste of WFD

- Does the term "waste" apply only to material discarded for treatment or for disposal in a controlled landfill?
- Are materials discarded directly into the environment considered waste, or only those that remain within the economy?
- If discarded materials are recycled or re-used without treatment, are they waste?

Proposed definition of waste

Solid materials discarded for the purpose of treatment or disposal



Proposals on classifications of physical flows and waste

- Use CPC for all physical flows, if relevant categories exist, and complement it with additional categories for flows from the environment to the economy and back to the environment
- CPC not appropriate for waste: often difficult to distinguish between waste and other outputs
- Use EWC Stat to classify solid waste
- Broad brush correspondence between CPC and EWC only for main classes



Proposed structure of physical flows classification

- Flows from the economy to the environment
 - Natural resources
 - Additional items
- Flows within the economy
- Flows from the economy to the environment
 - Emissions to air
 - Emissions to water
 - Solid waste to uncontrolled landfill
 - Dissipative use and dissipative losses
 - Return flows of water
 - Additional items (evaporation, losses, etc.)



Questions to Expert Group

1. *What is your opinion on the proposed definition and classification of solid waste?*
2. *Do you agree with the proposed classification of flows from the environment to the economy (Annex 3), flows within the economy (products and solid waste – CPC and EWC Stat), and flows from the economy to the environment (Annex 3 and EWC Stat)?*
3. *Do you agree that EWC Stat should be used to classify solid waste?*
4. *Do you agree on replacing CPC Division 39, which covers solid waste, and possibly the most important CPC classes that include waste, with EWC Stat for the purpose of classifying waste?*



Questions to Expert Group

5. *Are there additional existing classifications that are relevant to the classification of physical flows and wastes? How does the proposed classification compare to national classification schemes? How does the proposed classification compare to classifications for other wastes (e.g., gaseous wastes), if any?*