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**Outcome Paper**

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## **Outcome Paper for Global Consultation**

### **Issue #7: Environmentally Related Subsidies<sup>1</sup>**

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<sup>1</sup> This outcome paper has been prepared by the SEEA Editor. It is based on papers presented to the London Group of Experts on Environmental Accounting and discussions among those experts. Investigation and research for this outcome paper was led by Nancy Steinbach, Viveka Palm and Maja Cederlund of Statistics Sweden, and Anda Marina Georgescu of Eurostat.

## **A. Introduction**

1. One motivation for the development of environmental and economic accounting is the recognition of the linkages between the economy and the environment. Some of these linkages concern the unpriced use and extraction of environmental resources both as input to, and sinks for, economic activity. Consequently, the boundary between the economy and the environment contains many and varied externalities reflecting the inability of naturally forming markets to operate effectively. In this situation there is a role for governments to enact relevant policy to ensure a use of the environment consistent with societal expectations.
2. Two primary mechanisms of government in this regard are taxes and subsidies. This outcome paper considers how environmental subsidies and related transactions should be defined and accounted for in the revised System of Environmental and Economic Accounts (SEEA). A separate issue on the definition and treatment of environmental taxes and related transactions is also the subject of the SEEA revision. The relevant outcome paper is Issue #6: Environmentally related taxes.
3. Environmentally related subsidies are introduced in SEEA-2003 Chapter 5 *Accounting for economic activities and products related to the environment* and in Chapter 6 *Accounting for other environmentally related transactions*. Subsidies and other transfers are mentioned in relation to a range of issues including forest management, environmental protection expenditure accounts, government fiscal accounts and in relation to income and capital accounts.
4. In all of these cases a key connection is the identification of transactions currently in scope of the core economic accounts (as articulated in the System of National Accounts (SNA)) but not clearly visible in those accounts as being of an environmental nature. The starting point for determining treatment of these transactions is therefore to identify the relevant types of transactions in the SNA and then determine which of those transactions should be considered to be environmental.
5. The paper is structured to follow this basic approach. First, the relevant SNA transactions are defined and considered. Then, discussion turns to the way in which environmentally related subsidies might be identified. Recommendations for the revised SEEA are presented through the paper.

## **B. Relevant SNA transactions**

6. The SNA defines a number of relevant transactions for determining the possible scope of environmentally related subsidies. Before discussing these transactions it is noted that all of the relevant transactions are a form of transfer as defined by the 2008 SNA. A transfer is a particular type of transaction “*in which one institutional unit provides a good, service or asset to another unit without receiving from the latter any good, services or asset in return as a direct counterpart.*” (2008 SNA, paragraph 8.10).

### *Subsidies*

7. Subsidies are defined in the 2008 SNA as:

*“Subsidies are current unrequited payments that government units, including non-resident government units, make to enterprises on the basis of the levels of their production activities or the quantities or values of the goods or services that they produce, sell or import. They are receivable by resident producers or importers. In the case of resident producers they may be designed to influence their levels of production, the prices at which their outputs are sold or the remuneration of the institutional units engaged in production. Subsidies have the same impact as negative taxes on production*

*in so far as their impact on the operating surplus is in the opposite direction to that of taxes on production.” (2008 SNA paragraph 7.98)*

8. The 2008 SNA goes on to say that

*“Subsidies are not payable to final consumers; current transfers that governments make directly to households as consumers are treated as social benefits. Subsidies also do not include grants that governments may make to enterprises in order to finance their capital formation, or compensate them for damage to their capital assets, such grants being treated as capital transfers.” (2008 SNA paragraph 7.99)*

9. The SNA defines two broad categories of subsidies - subsidies on products and other subsidies on production. Within the category “subsidies on products” special note is made of subsidies to public corporations and quasi corporations (2008 SNA 7.105). These payments include, for example, ongoing payments by government to public transport corporations who often make persistent losses because they charge lower prices than they might otherwise due to deliberate government policy. While there may be many reasons for such policy including general social policy there may be environmental motivations that need to be taken into account in a SEEA context.

10. The definition of other subsidies on production is particularly interesting in an environmental context as it includes as an example subsidies paid to reduce pollution.

*“b. Subsidies to reduce pollution: these consist of subsidies intended to cover some or all of the costs of additional processing undertaken to reduce or eliminate the discharge of pollutants into the environment.” (2008 SNA paragraph 7.106)*

#### *Social benefits to households*

11. The definition of subsidies given above notes that “current transfers that governments make directly to households as consumers are treated as social benefits”(2008 SNA paragraph 7.99). Social benefits are defined as follows

*“Social benefits are current transfers received by households intended to provide for the needs that arise from certain events or circumstances, for example, sickness, unemployment, retirement, housing, education or family circumstances” (2008 SNA paragraph 8.17)*

12. While the examples provided in the SNA relate more to social outcomes this transaction in the SNA is the place where all payments that governments make to households as consumers are recorded and hence it may be that some of the payments have an environmental purpose.

#### *Other current transfers*

13. These transfers are defined as

*“Other current transfers consist of all current transfers between resident institutional units, or between resident and non-resident units, other than current taxes on income and wealth, etc., social contributions and benefits, and social benefits in kind” (2008 SNA paragraph 8.19)*

14. This type of transaction should be considered as it incorporates flows between non-government economic sectors – in particular bringing into focus transactions involving non-profit institutions serving households which are active participants in environmental activities both domestically and internationally.

### *Investment grants*

15. In an SNA context investment grants are a form of capital transfers which themselves are unrequited transfers linked to a capital asset or a financial claim. They are often large and irregular but these are not necessary conditions for a transfer to be considered a capital transfer. Following the 2008 SNA

*“Investment grants consist of capital transfers made by governments to other resident or non-resident institutional units to finance all or part of the costs of their acquiring fixed assets.”* (2008 SNA paragraph 10.208)

16. The recipients are obliged to use investment grants for purposes of gross fixed capital formation, and the grants are often tied to specific investment projects, such as large construction projects. Given the nature of environmental activities there may well be large scale projects of an environmental nature and hence these types of transactions should be considered for inclusion alongside other environmentally related subsidies.

### *Other capital transfers*

17. These are capital transfers other than investment grants and capital taxes (2008 SNA 10.210) and can potentially include a wide range of transactions. Since some of these may be of an environmental nature then this type of transaction should be included within the scope of environmentally related subsidies.

18. It is noted that there is a common issue, discussed at length in the 2008 SNA, concerning whether transfers should be treated as current or capital in nature. Of importance in the context of environmentally related subsidies is that there may well be transactions of an environmental nature for which determining the boundary line between whether they are current or capital is difficult. Given that the intent is to bring together transaction of a common purpose the distinction between current and capital is not a significant consideration and hence both current and capital transactions should be considered to be within scope.

19. Discussion in the London Group about the scope of the transactions that should be included in a category “Environmentally related subsidies” concluded that all of the above transfers should be included. It is noted at this point that while it would be possible to use the terminology “Environmentally related transfers” this term could potentially include other SNA transfers not listed here, specifically environmentally related taxes, and hence while the scope of environmentally related subsidies is broader than subsidies alone, this term is considered the most appropriate.

**Recommendation 7.1:** That in the revised SEEA environmentally related subsidies should have a scope that includes the following types of transfers as defined in the 2008 SNA: Subsidies, Social benefits to households, Other current transfers, Investment grants, and Other capital transfers.

## **C. Definition of environmentally related subsidies**

### *Determining environmental purpose*

20. The discussion in the previous section concerned the types of transfers in the 2008 SNA that should be considered when seeking to identify environmentally related subsidies. However, it is not the case that all of the transfers that are considered in scope should be defined as environmental. Thus a method for determining which transactions are environmental is required.

21. There are two main approaches that might be taken. The first considers the environmental effect of the expenditure – that is, once the resource or benefit has been received does the subsequent action of the user have a positive effect on the environment. The second considers the issue from the perspective of the provider of the resources and asks whether their intention for the use is environmental.

22. There are a number of difficulties with the first approach. In the first instance it is likely to be unclear whether any positive effect on the environment has been caused solely by the transfer and, to the extent that any environmental effect is likely to have been caused by a number of factors, then determining the contribution of a particular payment is not straightforward.

23. Second, since environmentally related subsidies are being defined from the perspective of the provider of the subsidy, it is unlikely that they will know whether the payment has been used or when a possible positive environmental effect might be achieved.

24. From an analytical perspective the primary focus is to determine how many resources are being allocated towards achieving environmental outcomes. Thus, the second approach is the one proposed for adoption in the revised SEEA. That is, an environmentally related subsidy should be defined on the basis of the intent of the payer. The types of intent or purpose that are included are defined as those being either for environmental protection or for resource management – as defined in the SEEA-2003.

25. It is likely to be the case that payments of subsidies are motivated by a number of different purposes. Discussion in the London Group concluded that the scope of environmentally related subsidies should include those subsidies whose main purpose was environmental and also, in some cases, those subsidies that had an environmental purpose but a different main purpose, for example the main purpose might be regional development. Those subsidies without any environmental purpose should not be included.

**Recommendation 7.2:** That environmentally related subsidies should be included where the main purpose or subsidiary purpose of the payment is for environmental protection or resource management.

#### *Potentially environmentally damaging subsidies*

26. One consideration is that subsidies may be both environmentally beneficial and environmentally damaging. For example, in several countries subsidies and other transfers to biofuel production can be seen as motivated by developing a substitute for fossil fuels, but this activity may also be potentially environmentally damaging if rainforest is being cut down as a consequence.

27. Analytically, there is interest in defining potentially environmentally damaging subsidies (PEDS). While a similar logic to that used to define environmentally related subsidies can be applied, there is less clarity on exactly what purposes would be used to scope PEDS. It would seem likely that purposes aligned with resource use and exploitation activities, such as coal mining, would need to be within scope to define PEDS, but there is no final delineation of the range of purposes to be considered in the definition of PEDS.

28. In addition, work on PEDS has considered whether there is a need to include other types of government policy, for example, preferential tax rates, and place values on any implicit subsidy these mechanisms might create. Since implicit subsidies are not an SNA transaction they are not considered within scope of the proposed definition of environmentally related subsidies.

29. As there are a range of definitional and measurement issues that need to be resolved in the area of PEDS it is not recommended to include a definition in the revised SEEA. Nonetheless

it is noted that some environmentally related subsidies, as defined here, are likely to be within scope of PEDS and this overlap needs to be explained in the revised SEEA.

**Recommendation 7.3:** That the relationship between environmentally related subsidies and potentially environmentally damaging subsidies (PEDS) should be explained in the revised SEEA but that a definition of PEDS should not be included.

#### *Source of environmentally related subsidies*

30. While subsidies and social benefits to households are defined in the SNA as being payments by general government, the other types of transfer included in the scope of environmentally related subsidies may be paid by any institutional sector including to and from the rest of the world. Discussion in the London Group concluded that the key policy focus was on payments by general government and hence the definition of environmentally related subsidies should be restricted to those payments made by general government including payments by general government to the rest of the world. It is noted that in certain contexts it may be of interest to record receipts of environmentally related subsidies from foreign general government units.

**Recommendation 7.4:** That environmentally related subsidies should be restricted to payments from the general government sector to all domestic sectors and the rest of the world.

#### **D. Classification and accounting**

31. Since the definition of environmentally related subsidies is based on the definition of environmental protection and resource management purposes then it is possible to consider the use of classifications such as the Classification of Environmental Protection Activities (CEPA) and the Classification of Resource Management Activities (CReMA). However, efforts at applying these classifications have proved that the task is difficult due to the multi-purpose nature of most subsidies.

32. It is possible to classify the transactions by the industry or sector of the recipients using ISIC or standard SNA institutional sector classifications.

**Recommendation 7.5:** That environmentally related subsidies should be classified according to standard economic classifications and, where possible, using classifications of environmental activities.

## References

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