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**Environmentally motivated transfers in Norway
2007**

A test of the methodology proposed by
Eurostat Task Force on Environmentally Related
Transfers

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Preface

The Eurostat Task Force on Environmentally Related Transfers (ETF) has drafted a method for including statistics on environmentally motivated transfers within the framework of the System of Environmental Economic Accounts (Eurostat TF 2010), and has requested members to test the approach.

The Norwegian national accounts for 2007 has been examined to try to identify environmentally motivated transfers from general government to industry and other recipients. The transfers identified, using the current national accounts encoding only, have been compared to the transfers identified using the definitions and terminology proposed in the ongoing work in the ETF.

We found that the current encoding of the national accounts and the proposed ETF methodology approach produced similar results for the grand total of environmentally motivated transfers (a difference of 13 per cent). However, the distribution of the transfers into categories of recipients (industry and others), as well the nature of the transfers (subsidies, other current transfers and capital transfers) were considerably different.

Specifics pertaining to e.g. Norwegian government organisation and the detailed evaluation of individual government budget items are omitted in this document, but can be found in the extended Norwegian language version.

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Keywords

Environment, economic instruments, general government, subsidies, capital transfers, current transfers, National Accounts

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Abstract

Statistics on economic instruments may contribute to an understanding of the effectiveness and economic efficiency of government environmental policy. Among these instruments are transfers of subsidies, other current transfers and transfers of capital from general government to industry, organisations and households.

This report applies the Norwegian national accounts of 2007 to identify transfers from the general government where the environment is the explicit motivation, and categorises these transfers according to definitions proposed as part of the work by the Eurostat Task Force on environmentally motivated transfers (Eurostat TF 2010)¹.

The Norwegian national accounts has already categorised all items in the government accounts by purpose and kind of transfer. In addition to the categories proposed by Eurostat (subsidies, other current transfers and capital transfers), a category labelled "mixed transfers" has been introduced to encompass transfers that have elements of both subsidies/other current transfers as well as capital transfers.

The rationale for government transfers are found in the budget documents. To which degree environmental concerns are mentioned and being a primary driver varies, and is not always very explicit. This uncertainty is illustrated by dividing environmentally motivated transfers into three categories: 1) Predominantly environmentally motivated where the environment is the decisive motivation, 2) Partially environmentally motivated and 3) Weakly environmentally motivated where an assumed beneficial effect on the environment is part of the motivation, but clearly subordinate to other concerns.

The detailed analysis following to the Eurostat proposal, where also uncertainties in the information on the nature of the transfers and the encoding in the national accounts are considered, estimates that the Norwegian government in 2007 made payments totalling NOK 1 138 million in predominantly environmentally motivated transfers. In addition, there were 714 million in partially environmentally motivated transfers, and 1 358 million in weakly environmentally motivated transfers.

The national accounts shows government expenditure on the environment totalling NOK 2 738 million, of which 1 282 million were environmentally motivated transfers (137 million in subsidies and 1 145 million in other current transfers). The encoding in the national accounts therefore estimates that environmentally motivated transfers to be NOK 144 million (13 per cent) more than 1 138 million found to be predominantly environmentally motivated transfers using the definitions and categories in the Eurostat proposal. The current encoding of the Norwegian national accounts seems therefore suitable to provide a rough estimate of the total environmentally motivated transfers by general government. However, to use the breakdown of the national accounts figures into groups of recipients and transfer categories is less advisable. For example, in the national accounts environmental transfers to industry (subsidies and capital transfers) amount to 11 per cent of the total environmental transfers, whereas the analysis using the Eurostat methodology estimates transfers to industry at 37 per cent of the total predominantly environmentally motivated transfers.

For the national accounts to be a useful tool to identify transfers according to Eurostat methodology, the latter should be further developed, in particular with respect to what is sufficient (environmental) motivation and how explicitly it should be formulated, as well as in defining when a transfer recipient is an entity inside or outside the boundaries of general government.

¹ The work in the Eurostat Task Force on environmentally related transfers is not finalised, and the definitions and documents referred to in this project must be seen as proposals as part of an ongoing process and not final definitions in use approved by Eurostat. The definition used in this project is based on the status in the Task Force in February 2010 where chapter 3.1 does not include municipalities as part of general government. This may be changed in revised versions of the definition.

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1. Background

Economic instruments are widely used for the implementation of environmental policy: Taxes and transfers in the form of subsidies, current expenditure support to non industrial entities as well as capital transfers such as investment support.

Methods to produce statistics on environmentally related economic instruments are to be included in SEEA² and is one of the focus areas of the “London group”, established by the UN statistical division in 1993 whose task is ”to allow practitioners to share their experience of developing and implementing environmental accounts linked to the economic accounts of the System of National Accounts” (UN 2010).

In 2005 Statistics Norway performed a study (SSB 2005) to evaluate the practical relevance of motivation vs. environmental effect as two possible criteria for determining what should be identified as environmentally related subsidies. The quantitative results were compared with a Swedish (SCB 2003) and two Danish reports (DST 2003 og DST 2005). The study concluded that there still is a need to further develop definitions and terminology before environmentally related subsidies can be established as official statistics.

Between 2007 and 2009 Statistics Norway participated in a Eurostat group to establish SEEA definitions of environmentally related subsidies and other transfers from government that were consistent with the definitions used in the national accounts, while also covering the economic aspects of interest to SEEA. The outcome (Eurostat TF 2009) was presented to the London Group and further developed by the the Eurostat Task Force on Environmentally Related Transfers, resulting in a proposed way forward for developing a methodological handbook (Eurostat TF 2010).

2. Project objectives

Concerns for the environment are rarely the sole criteria in a decision making process leading to a particular government expenditure. Even when analysing the detailed rationale, it is not straightforward to determine the relative weight of the environment. Such practical difficulties are especially problematic in the area of infrastructure expenditures such as transport and energy. To make matters even more difficult, the central government transfers funds to various agencies, within or external to the general government, to implement environmental policy.

The methodology proposed by the Eurostat Task Force (Eurostat TF 2010) is intended to facilitate quantification and comparison of environmentally motivated transfers across individual countries. This project is an evaluation of whether and how the national accounts can be used to identify environmentally motivated transfers from general government and to produce annual statistics, in line with the proposed Eurostat definitions.

For practical reasons, the national account for 2007 was used. The state accounts and government budget proposals were consulted in so far detailed information on individual items was needed.

² System of Environmental Economic Accounts

3. Terms and definitions

In this chapter, the most important terms in the Eurostat Task Force proposal are discussed as a prerequisite to their application on the Norwegian national accounts.

3.1. Proposed Eurostat definitions of transfers

The Eurostat Task Force has arrived at the following definitions (Eurostat TF 2010):

“Transfers are on budget as well as off budget³ current and capital transfers.

On budget transfers are transfers which are included in the government budget. On budget current transfers include subsidies as defined by the SNA 2008 and current transfers to households and other organisations. On budget capital transfers are investments grants as defined by the SNA 2008.”

Environmentally motivated transfers are defined as a sub set of environmentally related transfers

*“Environmentally **related** transfers include transfers which can be environmentally motivated or potentially environmentally damaging....*

*An environmentally **motivated** transfer will be a transfer which is **intended** for protecting the environment (environmental protection motivated transfers) as well as saving natural resources (resource management motivated transfers)*

Environmentally related transfers (also: SEEA transfers related to the environment):

1. On-budget transfers:
 - 1.1. Current transfers:
 - 1.1.1. Current transfers from General Government to industry (i.e. SNA 2008 subsidy)
 - 1.1.1.1. Environmentally motivated
 - 1.1.1.2. Potentially environmentally damaging
 - 1.1.2. Current transfers from General Government to others (households, organisations and non-profit organisations, municipalities and international receivers) – (SNA 2008 Social benefits other than social transfers in kind, Social transfers in kind related to expenditure on products supplied to households via market producers, Other current transfers)
 - 1.1.2.1. Environmentally motivated
 - 1.1.2.2. Potentially environmentally damaging
 - 1.2. Capital transfers from General Government (e.g.: SNA 2008 investments grants):
 - 1.2.1. Capital transfers from General Government to industry
 - 1.2.1.1. Environmentally motivated
 - 1.2.1.2. Potentially environmentally damaging
 - 1.2.2. Capital transfers from General Government to others (households, organisations and non-profit organisations, municipalities and international receivers)
 - 1.2.2.1. Environmentally motivated
 - 1.2.2.2. Potentially environmentally damaging
 2. Off-budget transfers:
 - 2.1. Preferential tax treatments
 - 2.1.1.1. Environmentally motivated
 - 2.1.1.2. Potentially environmentally damaging
 - 2.2. External cost reference value estimate
- Source: Eurostat TF (2010 par. 3.1)

³ “off-budget transfers” has since been replaced by the term “other flows” in order to be consistent with SNA terminology.

Eurostat TF (2010) does not define "subsidies" nor "transfers", but refers to SNA 2008 (UN 2009) where subsidies is divided into subsidies on products (including import and export subsidies) and other subsidies on production: "Subsidies are not payable to final consumers; current transfers that governments make directly to households as consumers are treated as social benefits".

The most important difference between a subsidy to industry and other transfers is that a subsidy has to be unrequited. "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" (UN 2009 pp. 148-149). Transfers included in section 1.1.2 or 1.2.2 in the Eurostat definition (see text box above) may be required in the sense that the government expects some degree of policy implementation in return for the transfer.

In economic terms, tax exemptions etc. are also counted as (indirect) subsidies. Such transfers, except for compensation of VAT, are not found in the state accounts.

It is somewhat unclear how financial transaction should be treated in the context of (environmentally motivated) transfers. Such transactions are not accounted as expenses or current costs, but do nevertheless transfer money. Transfer of funds to .e.g. a trust (as capital) is not a transfer in the context of this analysis. However, some financial transactions have been identified as environmentally motivated transfers.

3.2. Environment

Environment in this report is restricted to the environmental domains included in the UN Classification of environmental Protection Activities and Expenditures - CEPA (UN 2000):

- 1 Protection of ambient air and climate
- 2 Waste-water management
- 3 Waste management
- 4 Protection and remediation of soil, groundwater and surface water
- 5 Noise and vibration abatement (excluding workplace protection)
- 6 Protection of biodiversity and landscapes
- 7 Protection against radiation (excluding external safety)
- 8 Research and development
- 9 Other environmental protection activities

Note that some CEPA domains refer to the object of influence (air, soil) and some domains refer to the influence on the environment (waste noise, radiation). In the Norwegian national accounts all government expenditure are assigned a code according to the UN system "Classification of the Functions of Government"- COFOG (SSB 2006):

- 01 General public services
- 02 Defence
- 03 Public order and safety
- 04 Economic affairs
- 05 Environmental protection
- 06 Housing and community amenities
- 07 Health
- 08 Recreation, culture and religion
- 09 Education
- 10 Social protection

The COFOG 05 group is of particular interest:

051	Waste management
052	Waste water management
053	Pollution abatement
054	Protection of biodiversity and landscape
055	R&D Environmental protection
056	Environmental protection n.e.c

Items in the national accounts encoded with COFOG 05 are by definition “environmentally motivated”. It is still worth noting that there is no one-to-one relation between the sub divisions of CEPA og COFOG 05.

An improved environment is a decision criterion in many government functions and projects. It is therefore important to define how unambiguous the environmental motivation must be expressed, and its weight relative to other criteria. It may be highly subjective judging whether conversion to or development of renewable energy may be solely motivated by its potential for an improved environment or for improved energy security. Another example may be improved public transport which also reduces traffic congestions and pollution from vehicles in urban areas. Different government agencies are also likely to emphasise different aspects of a project.

3.3. General government and transfer recipients

(Environmentally motivated) transfers are transfers from “General government” to other sectors of the economy. But what are the exact boundaries of the general government? This raises a number of practical problems. In this report, and contrary to the the definition used in the (Norwegian) national accounts, a municipality is not part of the general government (re. text box in chapter 3.1.), but often acts on behalf of the general government in transferring ear marked funds to local recipients as current transfers or capital transfers.

The Eurostat TF (2010) distinguishes between “transfers from General Government to industry” and “transfers from General Government to others (households, organisations and non-profit organisations, municipalities and international receivers”⁴. In the (Norwegian) national accounts most (but not all) items are encoded with the Standard Industrial Classification division of the recipient.⁵ In this analysis, all NACE divisions except the following are taken as “industry” (vs. “organisations” and “others”): NACE 75 (Public administration and defence; Compulsory social security), and 91 (Activities of membership organisations n.e.c.). In the Norwegian society, NACE 80 (Education) and 85 (Health) are in part general government itself and in part “industry” and “organisations”. This is however of relatively little relevance to the current analysis because “health” and “environment” are separate CEPA domains from “environment”.

In this respect, classifying these transfers does not pose any problem. However, when using the results for analysing economic instruments of environmental policy, one should note that the distinction between government and other sectors is not completely straightforward. A foundation established (in part) by the general government, is legally not a part of the government. However, in Norway there are some examples of foundations performing government functions⁶, e.g. the

⁴ It is unclear why what the distinction is between “organisations” and “non profit organisations”. In this report it is assumed that current transfers that pertain to service production are subsidies to “industry”. See, however, also the discussion of trusts and non profit organisations below.

⁵ The Standard Industrial Classification (SN2002 - NACE rev. 1.1) is used in this analysis.

⁶ Some foundations are in the national register of enterprises categorised as “publicly owned foundations”.

foundation for Ecolabelling⁷. Some non profit organisations and foundations/irrevocable trusts may therefore be regarded as being part of the institutions of general government. This problem will probably also apply to a future international comparison.

Many (current) transfers are made to entities in charge of R&D programs, industry development programs etc. Such funds may eventually have non governmental final recipients which are not always readily apparent. A similar case is when the central government budgets include environmentally motivated transfers to other government agencies, i.e transfers that are encoded as “internal government transfers” in the national accounts, but there is little additional information on how the funds are to be used, in particular whether the receiving agency will further transfer the money to other sectors. How such ambiguities are resolved is important to a future comparison between countries with different governmental institutions as well as using the results of the analysis for research purposes.

4. Methodology

The choice of data sources and methods of analysis are interlinked for a number of reasons. Primarily because the aim of the project is partly to evaluate whether the way data are extracted from the national accounts is suitable for the production of annual statistics. This has implications to how much resources can be used in data collection and manual inspection as part of the analysis.

4.1. Data sources and data collection

The analysis used a selection of government expenditures as represented and coded in the Norwegian national accounts. For practical reasons, the national accounts for 2007 were used, because when the project started, this was the latest available fiscal year fully processed in the national accounts. The budget proposals of each Ministry were used only in so far it was necessary to obtain more detailed information on individual transfers. Other information sources were deliberately not consulted in order to keep the resource use to a level applicable to regular statistics production and thus highlighting the uncertainties (information deficits) present in the sources used.

The national accounts has already categorised environmentally motivated transfers (subsidies, current transfers and capital transfers) as transfers to nongovernmental recipients encoded as COFOG 05. These transfers will be compared to the transfers extracted using the Eurostat methodology.

The project objective is in part to evaluate whether the methodology suggested by the Eurostat TF (Eurostat TF 2010) can be used to establish a system to extract the necessary information from the national accounts. The set of budget items extracted must be as complete as possibly, while also sufficiently selective to minimise manual analysis/use of resources.

Two different approaches were tried and compared as to which transactions were potentially environmentally motivated transfers, following the proposed Eurostat methodology, and to which degree they were able to find all relevant transactions. The purpose being to identify criteria for automatic extracting environmentally motivated transfers from the national accounts, not being limited to COFOG 05 encoded transactions only:

⁷ ” The Nordic Ecolabel is the official Ecolabel of the Nordic countries and was established in 1989 by the Nordic Council of Ministers with the purpose of providing an environmental labelling system that would contribute to a sustainable manufacturing and consumption.” (source: <http://ecolabel.svanen.nu/About.aspx>)

A Step by step elimination of not environmentally *related* transfers

Transactions meeting a set of criteria, and therefore not expected not to be environmentally motivated, are stepwise eliminated. For the purpose of validation of the method, these eliminated transactions are manually examined to ensure that the procedure does not exclude relevant transactions. The

B Extraction of possible environmentally *related* transfers

In this approach, we have identified positive criteria that will extract relevant transactions, the opposite of elimination.

Whether the transactions in resulting data sets were environmentally *motivated* was determined through manual inspection.

The two approaches resulted in 205 and 101 transactions respectively⁸. All transactions in the latter approach were also included in the first. The step by step elimination method is probably the best as the number of transactions found is manageable and because

- it is conceptually easier to determine what is *not* to be included than having a perception of all possible cases that should or might be relevant.
- the extraction approach is more sensitive to changed budgetary practices from one year to the next

4.2. Environmental motivation

A possible strategy for indentifying potential environmentally motivated transfers, is to attempt to formulate precise and unambiguous definitions. Apart from being a formidable task, there is also the risk that such definitions may become difficult to communicate outside the statistics community and make international comparisons difficult. There are particularly three areas that are challenging:

- A government transfer may serve several purposes of which but one is as an instrument in environmental policy.
- In practice, the national accounts uses primarily each Ministry's main area of responsibility as a starting point for determining the code of government function (COFOG) to the transfer. Environmental responsibility is now however delegated to all government ministries.
- "Environment" is a complex concept and the effects of an action may be both positive and detrimental. Which is most important will depend on the viewpoint of the analyst or decision maker. At the same time non-environmental criteria such as increased energy security may have a positive environmental effect, even if environmental concerns may not be a major driving force.

Determining whether a transfer of government funds is environmentally motivated may therefore be highly subjective and/or require intimate knowledge of the process leading to the decision. The same applies to an attempt to separate a transfer into an environmental part and a non-environmentally motivated part. Due to this, the uncertainties stemming from necessarily limited information on individual transactions as well as a wish to present a result that may be readily communicated, the environmentally motivated transfers found with the Eurostat methodology are separated into three categories: **Predominantly environmentally motivated transfers** where the environment is the decisive motivation and other concerns are of no or only minor importance, **partially environmentally motivated transfers**, where environmental concerns apply, but other considerations are equally important, and finally **Weakly environmentally motivated transfers**, where it is assumed that the transfer will have a beneficial

⁸ The detailed procedure is omitted since it is assumed to be specific to the Norwegian setting.

effect on the environment, but this is clearly subordinate to other concerns. This means that the COFOG encoding in the national accounts in some cases has been ignored.

A transfer category “**mixed transfers**” is used to encompass transfers with a combination of subsidies/current transfers and capital transfers as well as cases where it is unclear whether there is a transfer of capital included – using the chosen information sources.

The above is applied to the transactions found using the Eurostat TF approach. No attempt has been made to decompose the COFOG 05 encoded transfers in the national accounts in a similar way, since the emphasis has been on the Eurostat approach.

5. Norwegian environmentally motivated transfers in 2007

5.1. The national accounts – COFOG 05

The national accounts comprises COFOG 05 encoded transactions with a total of NOK 2 738 million. There were NOK 1 282 million in environmentally motivated transfers, of which 137 million in subsidies to industry and 1 145 million in other current transfers. No capital transfers with COFOG 05 were found.

5.2. The Eurostat Task Force approach

In 2007, the Norwegian general government made NOK 1 138 million in predominantly environmentally motivated transfers, of which NOK 425 million to industry and 713 million to others⁹. In addition there were partially environmentally motivated transfers of 714 million and weakly environmentally motivated transfers of 1 358 million. The latter may be underestimated due to the elimination process in selecting transactions for analysis.

Table 1. Norwegian environmentally motivated transfers 2007 (NOK 1 000)

	Degree of environmental motivation		
	Predominant	Partial	Weak
Grand total	1 138 028	713 667	1 357 521
Industry, total	425 472	35 696	0
Subsidies	351 791	35 696	0
Capital transfers	10 298	0	0
Mixed transfers	63 383	0	0
Other recipients, total	712 556	677 971	1 357 521
Current transfers	585 175	677 971	0
Capital transfers	0	0	0
Mixed transfers	127 381	0	1 357 521

Among the predominantly environmentally motivated transfers, there are NOK 236 million that are formally accounted as transfers to other entities within the general government.

The following tables show how the transfers are distributed among the different functions of government codes (COFOG).

⁹ Only a single transfer to households has been identified: Payment of car wreck deposits (NOK 159 million).

Table 2. Predominantly environmentally motivated transfers 2007 (NOK 1 000)

	General public services (COFOG 01)	Economic affairs (COFOG 04)	Environmental protection (COFOG 05)
Grand total	21 629	121 660	994 739
Industry, total	0	27 011	398 461
Subsidies	0	0	351 791
Capital transfers	0	10 298	0
Mixed transfers	0	16 713	46 670
Other recipients, total	21 629	94 649	596 278
Current transfers	0	2 837	582 338
Capital transfers	0	0	0
Mixed transfers	21 629	91 812	13 940

Table 3. Partially environmentally motivated transfers 2007 (NOK 1 000)

	General public services (COFOG 01)	Economic affairs (COFOG 04)	Environmental protection (COFOG 05)
Grand, total	0	713 667	0
Industry, total	0	35 696	0
Subsidies	0	35 696	0
Capital transfers	0	0	0
Mixed transfers	0	0	0
Other recipients, total	0	677 971	0
Current transfers	0	677 971	0
Capital transfers	0	0	0
Mixed transfers	0	0	0

Determining whether the recipient is in “industry” and hence, whether a current transfer is a subsidy, is particularly important to the prospect of establishing an automated extract of environmentally motivated transactions from the national accounts. The analysis has identified several environmentally motivated subsidies that would not be found without manual inspection.

Solely using the function of government coding, the (predominantly) environmentally motivated transfers found in the national accounts would amount to NOK 144 million (13 per cent) more than the estimates from the analysis using the Eurostat methodology.

In the national accounts, environmental transfers to industry (subsidies and capital transfers) amount to 11 per cent of the total environmental transfers, whereas the analysis using the Eurostat methodology estimates transfers to industry at 37 per cent of the total predominantly environmentally motivated transfers.

6. Conclusions and recommendations

The principal purpose of the analysis has been to evaluate whether it is possible to extract the environmentally motivated transfers from the national accounts. Whether the national accounts with or without supplementary manual inspection as in the current report, can be used to describe the environmentally motivated transfers, will depend on the required accuracy and level of detail.

The COFOG encoding is not sufficiently detailed to identify the environmental domain of the transfer, nor to distribute a transfer to multiple environmental domains. Neither is the coding of the nature of the transfer (e.g. recipient categories) always sufficient to determine whether a transfer is a subsidy or a current transfer to some other organisation. Also, some recipients of governmental transfers are not clearly definable as belonging to industry or to other organisations. Hence, a subjective evaluation is necessary to classify a transfer as a subsidy or other current transfer.

The classification of some transfers in the national accounts as environmentally motivated should be reconsidered. There are examples of subsidies encoded in the national accounts as environmentally motivated (COFOG 05), may equally well be considered a subsidy for other purposes, such as promoting business development in rural areas. The environmental aspect is not improving the state of the environment, but rather that the quality of the environment as an input factor in production (e.g. wildlife tourism). Also, it has proven difficult to capture the environmental fraction embedded in lump sum transfers to complex research, infrastructure or industrial development programs.

Some internal transfers between bodies of the general government are clearly intermediate transfers of funds that eventually will be made to other sectors. However, the information of which intermediate transfers that are environmentally motivated and how much of the transfers have a final recipient outside the government is inadequate. In the current report a number of such transfers has been identified.

The uncertainties that stem from lack of information and other ambiguities as mentioned above, is illustrated by distributing environmentally motivated transfers into the categories predominantly, partial and weakly environmentally motivated, as well as the category "mixed transfers" to show the difficulty of identifying whether a transfer is a current or capital transfer.

Using the Eurostat definitions, the analysis has identified predominantly environmentally motivated transfers of NOK 1 138 million. In the Norwegian national accounts for 2007 transfers totalling NOK 1 282 million are encoded as environmentally motivated, i.e. about 13 per cent higher. However, transfers totalling 944 million have been identified as partially environmentally motivated.

The Task Force document (Eurostat TF 2010) used as reference to this report, has a more restricted definition of "general government" than used in the (Norwegian) national accounts, where the latter includes municipalities.¹⁰ However, this has had no practical consequences as there are no environmentally motivated transfers to municipalities in the national accounts for 2007.

Today's COFOG encoding therefore appears adequate to provide an estimate of the total environmentally motivated transfers. Using the current breakdown of the figures into categories of recipients and the nature of the transfers for detailed reporting to Eurostat and for analysis of economic instruments cannot be recommended. Neither can the data be used to distribute the transfers according to the CEPA 05 subcategories.

With a few exceptions, it is not possible to use the current methodology of extracting transactions from the national accounts to identify indirect subsidies.

¹⁰ As noted earlier this is likely to be amended in further TF work.

To give reliable data for the analysis of (environmental) economic instruments, the methodology should be further developed providing more practical guidelines to:

1. determine how strong the environmentally related motivation must be for a transfer to be considered "environmentally motivated" and how explicitly this must be formulated
2. quantify the minimum environmentally motivated share of a grant (transfer) that is provided according to multiple objectives or mixed criteria, e.g. to a technology development project
3. make the distinction between industry and other entities
4. make more precise definitions as to where the distinction between government and non government entities is drawn. This problem applies particularly to e.g. trusts that are established principally to implement government policy and to state owned enterprises with both commercial and policy objectives.
5. reducing the number of "mixed transfers", i.e. more precisely distinguish between subsidies/other current transfers vs. capital transfers.

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