

Development of environmental subsidies and similar transfers

Deliverable 3.1 of Eurostat grant project 2023_SE_EGD

Frida Hellman, Statistics Sweden, Environmental Accounts



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Development of environmental subsidies and similar transfers accounts

Producer Statistics Sweden, Economic
 Statistics and Analysis
 SE- Örebro, Sweden
 +46 10 479 40 00

Enquiries Frida Hellman
 Environmental Accounts
 +46 10 479 40 97
 Miljorakenskaper@scb.se

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Summary

This report presents the result from work package three in the project 2023_SE_EGD that focuses on environmental subsidies and similar transfers (ESST). The general objective of this work package is to further develop and improve the Swedish ESST accounts and to adapt these accounts to the requirements stated in the ESST handbook as well as to the Amended Regulation 691/2011, as well as improving the validation process. The specific objectives are to revise current data sources, investigate new potential sources, adapt the ESST data production to the ESST handbook and the amended regulation (EU) 691/2011, and to improve data accuracy by improving the production and validation of ESST accounts.

Data of environmental subsidies and other similar transfers have been reported yearly by Statistics Sweden since 2015 for a time series of 2000-2023. The primary data sources are The Swedish National Financial Management Agency (ESV), The Swedish Board of Agriculture and The Swedish International Development Cooperation Agency (SIDA). In this project it was found that a new data source can be applied for forest subsidies, which previously have been excluded from ESST. The Forest Agency publish data of the environmentally motivated shares of relevant forest subsidies for ESST and the inclusion of these subsidies increased the total ESST by 5.74 - 32.92 million SEK between 2018 and 2023.

Improvements of the production of ESST was performed by analyzing the possibility to improve chosen methods and identifying new relevant methods. Identification of new methods mainly concerned the implementation of NACE Rev.2 in ESST. The transfers were divided into NACE by applying data from National Accounts and by analyzing information regarding the remaining transfers in the state budget, the paying agencies' webpages, and by looking at the classifications of environmental protection activities (CEPA) and resource management activities (CReMA).

The production of ESST was also improved by implementing more detailed data from SIDA regarding the environmentally motivated shares of their subsidies. The new shares are divided into 19 different subsidy-programs and the previous shares consisted of an average percentage for each year for all of their subsidies. The implementation of the new shares increased total subsidies for international aid by 29 - 62 percent.

This project also investigated whether NA codes were applied correctly, and it was found that 2 355 million SEK was moved from subsidies, 1 414 million SEK was added to other current transfers and 2 170 million

SEK was moved from capital transfers because of previous incorrect classifications.

The final part of this project was to improve the validation process of ESST data collection, and this was done by listing and analyzing frequently asked questions from Eurostat in order to make future data collections easier. More information was also submitted in Meta Data in order to avoid questions that have the same answer every year.

To conclude, this project has improved ESST accounts by implementing new shares from SIDA, including data of forest subsidies, correcting wrongly applied NA codes, dividing ESST by NACE Rev. 2, and by making the validation process easier.

1. Introduction

This report presents the result from work package three of Statistics Sweden's grant project 2023_SE_EGD which focuses on developing statistics of 'Environmental Subsidies and other Similar Transfers' (ESST). The work package addresses section 2.2. in the call for grants which states to "Produce estimates of environmental subsidies and similar transfers accounts according to the specifications in the Commission proposal COM/2022/329 final. The grant project can revise those specifications to the final amendment of Regulation (EU) 691/2011 that the European Parliament and the Council will adopt".

The ESST accounts record payments from the general government to institutional sectors, both domestic and to the rest of the world, as well as from non-residents. The accounts include subsidies, capital transfers and other current transfers presented divided by CEPA and CReMA, with 2023 as the first mandatory reference year¹.

The SEEA Central Framework defines an environmental subsidy or similar transfer as a 'current or capital transfer that is intended to support activities which protect the environment or reduce the use and extraction of natural resources'². This definition emphasizes the intention of a given subsidy or similar transfer, and this definition goes in line with the purpose definition in the ESST handbook.

Sweden is one of the member states that act as an example when it comes to the updated version of the ESST handbook, and so improved practices for Sweden's ESST accounts are important as a guide for other member states. Statistics Sweden has been reporting ESST accounts yearly on a voluntary basis since 2015 and improvements to these accounts have been made continuously. The data have however not been reported divided by NACE, which will be mandatory according to the amendment of regulation (EU) 691/2011. A part of this project is thereby to implement such NACE division.

This project has also been an opportunity for Statistics Sweden to improve the production and validation process for ESST accounts in order to increase quality and efficiency.

¹ Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 691/2011 as regards introducing new environmental economic accounts modules, [st05938.en24\(004\).pdf](#)

² SEEA 2012, §4.138

1.2. Objectives

The general objective of this work package is to further develop and improve the Swedish ESST accounts. The project aims to adapt these accounts to the requirements stated in the ESST handbook and questionnaire, as well as improving the production and validation process.

The work package includes tasks to revise current models and sources, improve and implement relevant changes, and to discover where new methods and modelling practices can be developed.

The specific objectives of this work package are the following:

1. Revising current sources and investigating possible new sources. Examining the involvement of other government authorities that produce relevant data.
2. The ESST handbook and the amendment of Regulation (EU) 691/2011 are currently being revised. Our ESST data production should be adapted according to the revisions.
3. Improving data accuracy by improving our techniques to produce and validate ESST accounts.

1.3. Outline

Chapter 2 of this report introduces the data of ESST accounts that was sent to Eurostat before this grant project started. Chapter 3 identifies current data sources and describe the implementation of new data sources. Chapter 4 describes the implementation of new methods. Chapter 5 goes through the applied improvements for the validation process of ESST. Chapter 6 states the conclusions of this project and chapter 7 contains the reference list.

2. Environmental subsidies and other similar transfers

Environmental subsidies and similar transfers consist of data of incentive-based tools governments implement in order to enhance activities that are good for the environment.

The SEEA Central Framework's definition of an environmental subsidy or similar transfer emphasises the purpose or intention of a given subsidy, that is implemented to protect the environment or reduce extraction and use of natural resources (United Nations, 2012). The concept "environmental subsidy" has over the years been interpreted in different ways, and other definitions has been stated. Statistics Sweden has applied the official SEEA Central Framework's definition and followed the primary purpose criteria which says to determine if a subsidy is environmental or not by understanding subsidies' primary purpose. It can be in a sense based on legislation, revealed intentions, technical nature, presumed effects or real effects.

Statistics Sweden collect data of all subsidies and other similar transfers paid by the government or by the rest of the world and determine which ones that should be classed as environmentally motivated. The subsidies are primarily analysed by their revealed intentions and presumed effects, as well as through their descriptions in the yearly state budget where each subsidy and its components are stated. Most subsidies lie within COFOG 05 (environmental protection) as described in the ESST Guidelines.

Data of environmental subsidies and other transfers have been voluntary to report to Eurostat, Statistics Sweden has reported data annually since 2015. The first reference year of the Swedish time series is 2000. As presented in Figure 1, the environmental subsidies and similar transfers has been increasing since the year of 2000. Resource-related subsidies dominated the total subsidies between 2000 and 2020, and emission-reducing subsidies have been the dominating subsidies from 2021 and forward.

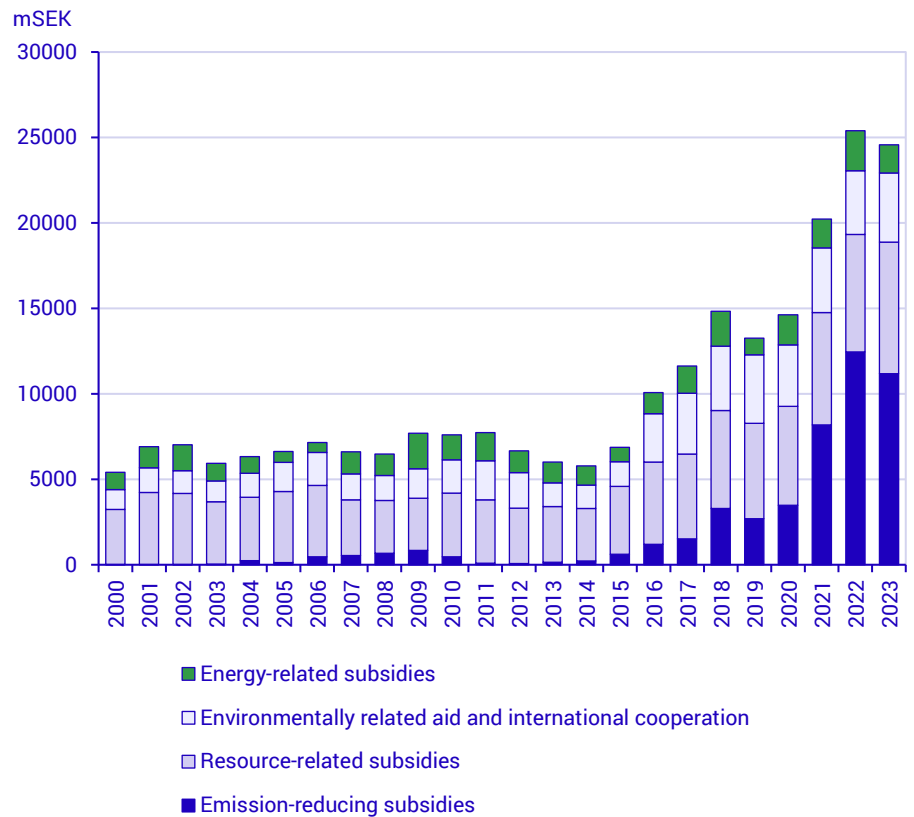


Figure 1: Environmental subsidies and similar transfers divided into four purpose areas

Examples of energy-related subsidies are energy efficiency, energy research and nuclear safety. Environmentally related aid and international cooperation consist of international subsidies regarding cooperation with other countries. Resource-related subsidies consist of biodiversity, support for forestry, agriculture and the environment in the sea, to mention a few. Lastly, emission-related subsidies consist of congestion tax and climate change.

All the detailed subsidy areas are presented in Table 1. The subsidy areas that are presented in this table corresponds to the subsidy areas Statistics Sweden publish annually at Statistics Sweden's website.⁵ The dominating areas are subsidies for climate change, environmental aid, and measures for improving the environment in agriculture.

⁵ [Total environmentally motivated direct subsidies, 2000–2023](#)

Table 1: Subsidies and similar transfers divided into environmental areas. The subsidy areas correspond to the areas that Statistics Sweden publish annually at Statistics Sweden's website⁴

Subsidy areas	2016	2017	2018	2019	2020	2021	2022	2023
Biodiversity	6%	6%	6%	7%	6%	6%	6%	4%
Chemicals	0%	0%	0%	0%	0%	0%	0%	0%
Climate change	9%	10%	18%	15%	23%	36%	43%	40%
Congestion tax	3%	4%	4%	5%	1%	5%	6%	6%
Energy efficiency	1%	2%	2%	1%	1%	1%	5%	2%
Energy research	7%	6%	5%	6%	5%	3%	3%	3%
Environmental aid	24%	27%	23%	27%	22%	17%	13%	15%
Environmental research	4%	3%	3%	3%	3%	2%	2%	2%
International cooperation	0%	1%	0%	0%	0%	0%	0%	0%
Measures for improving the environment in agriculture	36%	32%	28%	30%	29%	21%	17%	22%
Nuclear safety	0%	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	1%	1%	1%	0%	0%	0%
Protection against radiation	1%	0%	0%	0%	0%	0%	0%	0%
Renewable energy	4%	5%	7%	0%	6%	4%	2%	2%
Support for environmental marking	0%	0%	0%	0%	0%	0%	0%	0%
Support for international environmental cooperation	3%	3%	2%	2%	2%	1%	1%	1%
Support for the environment in the sea	1%	1%	0%	1%	1%	0%	0%	2%
Sustainable communities	0%	0%	1%	0%	0%	1%	1%	0%
Transport related research	0%	0%	0%	0%	0%	0%	0%	0%
Waste water	0%	0%	0%	0%	0%	1%	1%	0%

The dominating environmental areas can also be illustrated by analysing CEPA and CReMA in ESST where CEPA 1 (climate change), 4/6 (agriculture) and 9 (international subsidies), contain most of Sweden's ESST. This is shown in Table 2.

⁴ Total environmentally motivated direct subsidies, 2000–2023

Table 2: ESST divided by CEPA and CREMA

CEPA/CREMA	2016	2017	2018	2019	2020	2021	2022	2023
CEPA 1	15%	15%	21%	21%	24%	41%	48%	44%
CEPA 2	0%	0%	0%	0%	0%	1%	1%	0%
CEPA 4	1%	2%	2%	2%	1%	1%	2%	2%
CEPA 4/6	36%	32%	26%	29%	28%	20%	17%	22%
CEPA 6	6%	5%	4%	5%	5%	6%	5%	5%
CEPA 7	1%	0%	0%	0%	0%	0%	0%	0%
CEPA 8	4%	3%	3%	3%	3%	2%	2%	2%
CEPA 9	26%	29%	25%	30%	24%	19%	15%	16%
CREMA 13A	10%	12%	12%	6%	11%	7%	4%	5%
CREMA 13B	1%	2%	7%	3%	3%	2%	7%	3%
CREMA 16	0%	0%	0%	0%	0%	0%	0%	0%

ESST can be transferred to enterprises, the public sector, households and non-profit institutions, as well as the rest of the world. Figure 2 shows that most subsidies in Sweden are received by enterprises and this is true for the whole time series. Corporations have received between 38 and 51 percent of total ESST. The rest of the world has been the second largest receiving institution from 2008 to 2019, but the second place has since then been replaced by households and non-profit institutions.

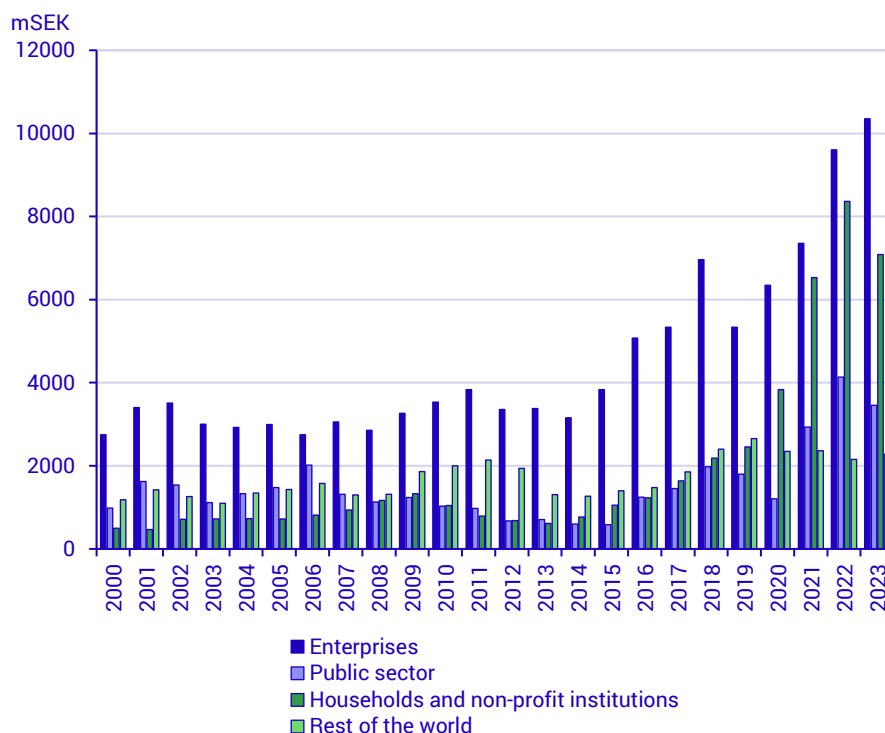


Figure 2: Environmental subsidies and similar transfers divided by institutional sectors

Statistics Sweden has, as stated above, good knowledge of ESST data collection and this project will further develop the quality of this data and the overall production and validation process of ESST accounts.

3. Identification of data sources

The SEEA Central Framework defines an environmental subsidy or similar transfer as a: 'current or capital transfer that is intended to support activities which protect the environment or reduce the use and extraction of natural resources'⁵. The criteria to determine if a transfer is to be classified as environmental depends on a range of factors, depending on the characteristics of its primary purpose.

Transfers should be included if the primary purpose can be found in a narrow sense where the dominant intention or objective is environmental. Its primary purpose can also be found at in a legislative sense, its revealed intentions read from policy statements or declarations of respondents and its technical nature when looking at the objective nature of the activity with disregard to a legislation or declaration. Finally, it can be classified as an environmentally motivated transfer based on its presumed or real effect, meaning that it can be assumed to achieve positive environmental impact of an action, or objective proven consequences on the environment.

Data sources of subsidies and similar transfers that have the possibility to be defined as environmental should be discovered and implemented. This section of the report focuses on that particular analysis.

3.1. Current data sources

The main data source for ESST accounts is collected from ESV which is an administrative agency under the Swedish Ministry of Finance. ESV publish annual data of the state budget outcome distributed over expenditure areas with detailed data covering type of transfer, transfer name, paying and receiving part, and amount of allocated Swedish SEK, amongst many more details. This data is downloaded for each new year and imported into a script together with data from previous years in the time series from that agency. The data source contains all types of subsidies, environmental and non-environmental, which means that only a small portion is selected to fit into the ESST accounts. This data source is considered to be of very high quality and accuracy, and it

⁵ SEEA 2012, §4.138

provides information needed in order to aggregate ESST into sectors and environmental areas.

Data is also collected from The Swedish Board of Agriculture where more information is given regarding the subsidies within the area 'Measures for improving the environment in agriculture'. The Swedish Board of Agriculture send data to Statistics Sweden annually of the environmentally motivated shares of the subsidies within this area, and these shares are then multiplied with data from ESV. The reason behind this extra step is because subsidies within that area only partly can be considered to be environmental. It would thereby be an overestimation to include the total SEK allocated to those subsidies. This data source is also considered to be of high quality.

Lastly, data for Environmental Subsidies and Similar Transfers within the area 'Environmental Aid' is collected from The Swedish International Development Cooperation Agency (SIDA) which is an agency that aims to create better living conditions for people living in poverty and under oppression. The agency provides data of the share of their subsidies and other similar transfers that are primarily purposed for improving the environment or to prevent harm of the environment. Data of the total amount of SEK of these transfers are collected from ESV, as previously mentioned, and multiplied by the shares from SIDA (The Swedish International Development Cooperation Agency). It has been uncertain whether Statistics Sweden apply these shares in the correct manner, and so the quality of this data needs to be analysed further.

3.2. The Swedish Forest Agency

The selected transfers in the Swedish ESST accounts does not include any transfers from The Swedish Forest Agency, even though they are responsible for actions and activities that goes to forestry, forestry owners and protective activities for the Swedish forestry. The possibility to include forest subsidies needs thereby to be discovered. Table 3 states all subsidies the Swedish Forest Agency is responsible for. Negative values occur when transfers have been withdrawn.

Table 3: Actions and activities by The Swedish Forestry Agency from 2016-2023, MSEK

Activities	2016	2017	2018	2019	2020	2021	2022	2023
Contributions to the forestry	36,6	20,7	20,5	19,6	25,0	25,3	25,1	32,2
Easier path to green jobs	0,0	0,0	-0,46	0,0	0,0	0,0	0,0	0,0
Easier path to green jobs, to The Swedish Forest Agency	0,0	0,0	0,1	0,0	0,0	0,0	0,0	0,0
Operational costs	1,5	7,5	14,6	14,3	0,6	2,3	3,2	2,4
Costs for infringement compensation and certain civil law agreements in the field of nature conservation	0,2	0,2	-0,1	1,7	0,0	0,2	0,2	0,6
The national forestry program	0,0	1,3	2,8	3,7	3,2	4,4	3,9	0,0
Jobs close to the nature	0,0	0,0	0,0	0,0	-0,6	0,1	1,4	0,0
Conservation management in formally protected forests	0,0	0,0	-0,1	0,0	0,0	0,0	0,0	0,0
Support for forest owners due to the fires in the summer of 2018	0,0	0,0	0,0	21,2	0,0	0,0	0,0	0,0

All nine of these activities cannot however be classified as environmentally motivated subsidies and similar transfers. *Easier path to green jobs*, *Easier path to green jobs – part to The Swedish Forest Agency*, and *Nature related jobs*, primarily focus on improving the labor market and the main focus is thereby not to improve or protect the environment. These subsidies should not be included in ESST. *Costs for infringement compensation* and *Certain civil law agreements in the field of nature conservation*, and *Support for forest owners due to the fires in the summer of 2018*, are purely motivated as economic support, and should also be excluded in ESST. *Operational costs* are required to keep the agency running but cannot in itself be seen as environmentally motivated. These subsidies can thereby be excluded from ESST.

The subsidies that could be relevant for ESST are *Contributions to the forestry*, *The national forestry program* and *Conservation management in formally protected forests*. The three activities that are stated have been analyzed in order to understand to which extent these activities can be classified as environmentally motivated. This analysis has been made through a discussion with colleagues at The Swedish Forest Agency to understand what the activities consist of.

The national forestry program cannot be defined as an environmentally motivated subsidy since the main goal is to improve the labor market and enhance economic growth as well as contributing to the development of bioeconomics. This development is supposed to be sustainable, but it is not its primary purpose.

Contributions to the forestry is however partly environmentally motivated. Colleagues at the Swedish Forestry Agency has been providing data concerning indicators that are monitored in order to reach the environmental goal of *Levande skogar* (thriving forests),

where two subsidies can be classified as environmentally motivated: *Nokås* which is a subsidy for nature- and cultural management, and *Support for broadleaved forests* which is a production based support with the primary aim to increase the share of broadleaved forests in Sweden and thereby contribute to environmental benefits. The Swedish Forest Agency publish data of these subsidies for the time period of 2018 – 2023 (The Swedish Forest Agency, 2024).

The sum of *Nokås* and *The support for broadleaved forests* have been divided by the total amount of million SEK within the subsidy *Contributions to the forestry*, in order to calculate the environmentally motivated share of the subsidy. All shares are stated in Table 4 together with the total amount of million SEK for each year. The environmental share has increased to 100 percent for 2022 and 2023, from being at only 36 percent in 2018.

Table 4: Environmentally motivated share of the subsidy Contributions to the forestry, in percentage and million SEK. Source: The Swedish Forest Agency (2024)

Year	Environmentally motivated share	Environmentally motivated sum in mSEK
2018	36%	7,38
2019	31%	6,04
2020	26%	6,44
2021	23%	5,74
2022	100%	25,47
2023	100%	32,92

The inclusion of subsidies for the forestry causes an increase in the resource related subsidies for 2018 – 2023. ESST can thereby be concluded to have been underestimated before adding the forestry’s environmentally subsidies. This do not only affect the total amount of million SEK for ESST accounts, but it also affects the environmental goods and services account (EGSS) and the environmental protection expenditure accounts (EPEA) since these accounts include data from ESST.

3.3. Swedish Agency for Marine and Water Management

Subsidies from the Swedish Agency for Marine and Water Management are included in ESST, but not all. *Environmental monitoring, remediation and restoration of polluted areas* are concluded to be environmentally motivated since they aim at protecting and restoring aquatic environments, and these are rightfully included in ESST. The subsidy *Measures for the marine and aquatic environment* can be used for expenditure on initiatives and measures to improve, preserve, plan,

restore and protect marine and aquatic environments, and can thereby also be concluded to be rightfully environmentally motivated.

The agency also has the subsidies *Support for wildlife damage* and *Swedish Marine and Aquatic Environment Agency*. These are currently excluded in ESST and rightfully so. The remaining subsidies are *Effective environmental assessment and water management*, *Cybersecurity*, *Strengthened fisheries control* and *Effective water management*. The first two of these subsidies are clearly not environmentally motivated since the purposes are security and efficient management, however, *strengthened fisheries control* could be relevant for ESST.

The subsidy for *strengthened fisheries control* had to be analyzed in order to conclude its primary purpose. This was done by contacting The Swedish Marine and Aquatic Environment Agency to gain more understanding regarding the subsidy's main purpose. The Swedish Marine and Aquatic Environment Agency explained that the purpose of this subsidy was not to reduce the extraction of natural resources in order to protect biological diversity or any other environmental motive, the main purposes were instead to ensure that fisheries catch remain within decided quotas and that fishing is conducted in accordance with decided rules and laws. This subsidy could thereby be concluded to not be environmentally motivated.

This investigation showed that the subsidies that already are included in ESST are correct, and no change has to be made. It is stated in this report to note that an investigation was performed.

3.4. The Swedish International Development Cooperation Agency

One part of ESST in Sweden regards international environmental aid that is paid from The Swedish International Development Cooperation Agency (SIDA) which is a government agency with the primary purpose to create living conditions for people that live in poverty, and or oppression. These subsidies are active in Africa, Asia, Europe and Latin America. SIDA has subsidies in totally 26 areas and these areas are analysed before concluding if they are environmentally motivated or not. Twelve of these 26 subsidies were included in ESST before this grant project started.

Data of the total amount of SEK of transfers to SIDA are collected from ESV, and these totals are multiplied by shares that SIDA send to Statistics Sweden every spring. The shares state how much of the total subsidies that have a principle objective that is environmental. This

calculation result in the values Sweden report for environmental aid in ESST.

Table 5: Data received from SIDA of the shares of their subsidies that are environmentally motivated.

Year	Principle objective ⁶
2016	12,5%
2017	13,9%
2018	13,8%
2019	14,7%
2020	13,0%
2021	13,5%
2022	14,7%
2023	15,6%

A part of this grant project was to investigate if these shares have been applied correctly. Representatives from SIDA were contacted regarding this matter and it could be concluded that SIDA has new improved and more detailed shares that can be implemented. It was also not correct to multiply those shares the way it had been done in previous years. The new shares are stated in Annex 1 where every nineteen different subsidy areas have its own share. These shares should then be multiplied by the total amount of SEK stated for each subsidy in the data from ESV. Negative values in Annex 1 occur due to that some sort of refund has been made. These usually occur at the end of a project if all funds disbursed have not been used. Negative values are handled in a way that is consistent with Eurostat guidelines regarding this matter.

Receiving the new shares also meant that a few subsidies that previously were concluded to not be environmentally motivated, needed to be added. Total subsidies increased from twelve to seventeen, and the added subsidies are *Global effort for economic development, Global effort for social sustainable development, Humanitarian efforts, Sustainable peace, Human rights, democracy and the rule of law, and Reform cooperation with Eastern Europe, the Western Balkans and Turkey*. One subsidy was removed: *Strategically targeted contributions*.

The impact of implementing the new shares is shown in Table 6, 7 and 8. Table 6 state the subsidies as presented before the new shares were implemented.

⁶ Principle objective = Environmental sustainability is the main objective of the project/programme and is fundamental in its design and expected results. The project/programme would not have been undertaken without this objective

Table 6: Subsidies from SIDA by applying the incorrect shares.

Subsidies	2016	2017	2018	2019	2020	2021	2022	2023
Africa	558,6	796,4	936,9	1016,0	928,1	1031,8	977,0	1041,5
Asia	183,0	249,4	304,5	335,6	271,2	231,4	209,1	219,7
Research cooperation	80,5	94,8	106,2	106,9	95,0	101,4	73,1	55,8
Global effort for environmental and climate sustainable development	90,8	117,4	0,0					
Sustainable development			489,4	499,2	456,6	471,9	388,8	433,4
Information and communication	11,0	17,3	18,8	18,3	17,2	17,4	12,3	1,7
Capacity development and Agenda 2030			75,0	81,9	71,5	77,7	60,1	57,1
Latin America	74,8	85,4	90,3	99,5	88,7	104,6	82,8	88,5
Middle East and North Africa	128,2	168,4	180,1	190,5	171,1	187,9	169,2	159,8
SIDA	0,1	0,1	0,1	0,8	0,4	0,4	0,4	0,7
Strategically targeted contributions	121,8	135,4	74,4	93,2	119,6	159,0	137,1	196,1
Support through Swedish civil society organizations	218,0	253,5	252,1	269,9	244,9	256,6	260,9	275,8
Total	1466,7	1918,2	2527,8	2711,8	2464,2	2640,1	2370,9	2530,0

Table 7 state the result of applying the new and improved shares from SIDA.

Table 7: Subsidies from SIDA by applying the improved shares.

Subsidies	2016	2017	2018	2019	2020	2021	2022	2023
Africa	474,3	796,5	1099,5	915,7	783,9	915,0	1210,6	1167,3
Asia	185,2	154,3	277,2	384,9	349,1	343,1	241,8	319,2
Research cooperation	57,9	57,1	74,2	70,1	74,5	92,3	55,1	38,5
Global effort for economic development	132,9	135,3	0,0					
Global effort for environmental and climate sustainable development	698,4	821,6	0,0					
Global effort for social sustainable development	31,1	50,6	0,0					
Humanitarian efforts	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sustainable peace			0,0	0,0	0,0	0,0	0,0	0,0
Sustainable development			1288,5	1325,6	1294,9	1298,0	1014,8	1292,6
Information and communication	0,0	2,8	2,9	2,8	2,7	3,4	3,2	0,3
Capacity development and exchange	64,3	74,3						
Latin America	9,0	31,5	51,4	123,8	90,6	94,0	96,6	122,6
Middle East and North Africa	51,6	95,2	84,3	72,6	79,0	113,4	159,5	169,4
Human rights, democracy and the rule of law			4,9	10,0	10,0	9,8	7,4	4,8
Reform cooperation with Eastern Europe, the Western Balkans and Turkey	295,7	327,4	254,9	414,1	317,3	324,8	355,2	443,8

SIDA	0,6	0,5	0,7	5,2	2,9	2,8	2,7	4,3
Support through Swedish civil society organizations	298,5	379,9	146,6	230,7	174,1	213,6	160,2	138,6
Special efforts for human rights and democratization	81,7	159,3						
Total	2381,4	3086,3	3285,2	3555,5	3178,9	3410,2	3307,1	3701,4

The differences between subsidies before and after implementing the new shares is stated in table 8. A large increase in *Global effort for environmental and climate sustainable development* is the main reason behind increase for the years 2016 and 2017 and increases in *Sustainable development* is the main reason behind the increases in 2018 – 2023. The percentage difference is stated at the bottom of Table 8 where it can be seen that the increase is largest in 2016 and 2017.

Table 8: Differences between applying the incorrect and the correct shares from SIDA. Subsidies marked in black represent added subsidy areas.

Subsidies	2016	2017	2018	2019	2020	2021	2022	2023
Africa	-84,2	0,1	162,6	-100,3	-144,2	-116,9	233,6	125,8
Asia	2,2	-95,1	-27,4	49,3	77,9	111,7	32,7	99,5
Research cooperation	-22,6	-37,7	-32,0	-36,8	-20,5	-9,1	-18,0	-17,4
Global effort for environmental and climate sustainable development	607,6	704,1	0,0	0,0	0,0	0,0	0,0	0,0
Sustainable development	0,0	0,0	799,1	826,4	838,3	826,1	626,0	859,2
Information and communication	-11,0	-14,5	-15,9	-15,5	-14,4	-14,0	-9,1	-1,4
Capacity development and Agenda 2030	64,3	74,3	-75,0	-81,9	-71,5	-77,7	-60,1	-57,1
Latin America	-65,8	-53,9	-38,9	24,3	1,8	-10,6	13,7	34,1
Middle East and North Africa	-76,5	-73,3	-95,8	-117,9	-92,1	-74,5	-9,7	9,6
SIDA	0,6	0,4	0,6	4,5	2,6	2,4	2,3	3,6
Strategically targeted contributions	-121,8	-135,4	-74,4	-93,2	-119,6	-159,0	-137,1	-196,1
Support through Swedish civil society organizations	80,5	126,4	-105,5	-39,3	-70,8	-43,0	-100,8	-137,2
Special efforts for human rights and democratization	81,7	159,3						
Global effort for economic development	132,9	135,3	0,0					
Global effort for social sustainable development	31,1	50,6	0,0					
Humanitarian efforts	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Sustainable peace			0,0	0,0	0,0	0,0	0,0	0,0
Human rights, democracy and the rule of law			4,9	10,0	10,0	9,8	7,4	4,8
Reform cooperation with Eastern Europe, the Western Balkans and Turkey	295,7	327,4	254,9	414,1	317,3	324,8	355,2	443,8
Total difference	914,8	1168,1	757,3	843,7	714,7	770,1	936,2	1171,3
Total difference in percent	62%	61%	30%	31%	29%	29%	39%	46%

Analysing the subsidies and similar transfers regarding international aid also led to the discovery of other transfers that needed to be improved. A cooperation program in the Baltic Sea within the area of international cooperation, not was fully included. The full inclusion led to a small decrease for all years between 2016 – 2023. Furthermore, environmental aid for Svenska institutet, Strålsäkerhetsmyndigheten, Folke Bernadotteakademin and Regeringskansliet needed to be added. The total increases are shown in Table 9.

Table 9: Total increases for environmental aid and international cooperation

Subsidy areas	2016	2017	2018	2019	2020	2021	2022	2023
Environmental aid	1001,5	1285,9	874,2	966,5	837,5	896,7	1063,5	1309,4
International cooperation	41,2	50,2	47,4	48,6	44,2	41,6	53,3	53,1

The conclusion of this improvement is that subsidies and other similar transfers for environmental aid and international cooperation were underestimated before this grant project and are now more accurate.

4. Identification of new methods

Annex VIII in the Amendment of Regulation (EU) No 691/2011 states that environmental subsidies and similar transfers accounts received by corporations from general government grouped by the sum of all CEPA and CReMA classes (CEPA 1-9, CReMA 10-16) are to be further grouped according to the classification of economic activities NACE Rev. 2. This section of the report describes how this implementation has been made. It also describes the implementation of current scripts, as well as the correction of wrongly stated National accounts (NA) codes.

4.1. Implementation of NACE Rev.2 in ESST

The amendment of Regulation (EU) No 691/2011 as regards introducing new environmental economic accounts modules, as well as the implementation of the new ESST handbook, implies that ESST must be adapted according to these. This implies that ESST need to be presented by NACE Rev. 2.

ESST can be divided in NACE by applying different sources of information. Most subsidies have been divided by looking at NACE division from National Accounts (NA). Some subsidies were divided by looking at the description of subsidies from the state budget and by looking at the paying agency and which information that agency has regarding that subsidy available at their webpages. A limited number of subsidies have been divided based on CEPA or CReMA.

The subsidies from ESV are divided into 58 areas based on their subsidy name in the state budget. This implies that there are currently 58 different environmentally motivated subsidies in the state budget that is included in ESST, and these 58 subsidies have been divided by NACE. It is reasonable to look at these subsidies separately and divide them by NACE, and to not divide them based on COFOG or CEPA and CReMA at this first step, since the data we receive from National Accounts state NACE division for different subsidy names.

31 of these 58 environmentally motivated subsidies could be divided into NACE based on NA data by looking at subsidy names and responsible agency. The remaining sixteen subsidies were divided by NACE based on CEPA and CReMA, subsidy names, agency names and information regarding the subsidies available at the relevant agency and information from the state budget. This means that about 53 percent could be divided by applying NA data. The specific sources that were

used to divide subsidies are stated in the Excel file of pilot data tables under sheet *Method and sources_NACE*.

Table 10 shows the NACE division of ESST by subsidy areas where all sectors are included.

Table 10: ESST divided by NACE, 2016-2023

Subsidy areas	A	D	E	H	I-U
Biodiversity	6338,2		2218,8		
Chemicals	107,5				
Climate change		14122,4		24048,5	33,2
Congestion tax				6142,1	
Energy efficiency		2837,2			
Energy research		6228,4			43,8
Environmental aid					29205,3
Environmental research					3808,1
International cooperation					492,6
Measures for improving the environment i	33646,7				
Nuclear safety	4,9				61,1
Other	278,0		0,0		151,5
Protection against radiation		146,0			46,1
Renewable energy		4238,0			
Support for environmental marking					36,6
Support for forestry	113,6				
Support for international environmental	4,5	1119,2			1021,1
Support for the environment in the sea	1230,4	146,4	10,1		
Sustainable communities					544,9
Transport related research					0,4
Waste water	531,7				
Total	42255,4	28837,7	2228,9	30190,7	35444,6

Total subsidies divided by NACE is also illustrated in Figure 3. The figure show that NACE A (Agriculture, forestry and fishing) was the largest category between 2016 and 2020, from which NACE H (Transportation and storage) overtook the first place. NACE E (Water supply, sewerage, waste management and remediation activities) is the smallest category for the whole time series.

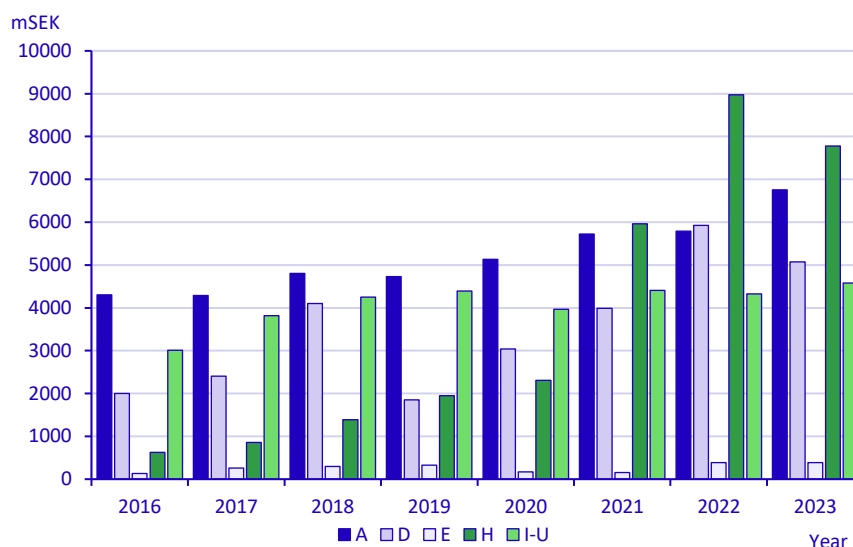


Figure 3: Total subsidies divided by NACE, all sectors included, year 2016-2023

The ESST questionnaire for data collection 2024 shows that ESST by NACE from General Government (S13) to Corporations (S11_12)⁷ is reported by separating subsidies, capital transfers and other current transfers. The data that was reported at ESST data collection 2024 by Statistics Sweden was capital transfers and subsidies between those sectors, but no other current transfers since Sweden don't have any of those transfers between general government and corporations within ESST. All the data is reported by CEPA and CReMA for the time period 2016 – 2023. The data for subsidies are presented in Table 11, and the data for capital transfers are shown in Table 12.

Table 11: Subsidies from General Government to Corporations divided by year, NACE and CEPA/CReMA

CEPA CReMA	1	2	4	4/6	6	7	8	9	13A	13B	16
2016	56,0		20,2	3595,7	9,7	52,8	233,5	26,2	782,0	26,2	
A	51,5			3595,7	9,7			4,6			
D	4,5					50,4			782,0	26,2	
E			20,2								
H	0,0										
I-U						2,4	233,5	21,6			
2017	54,9		20,8	3640,3	7,9	26,2	233,6	47,8	832,6	11,3	
A	52,7			3640,3	7,9			0,5			
D	2,0					25,4			832,6	11,3	

⁷ Institutional sector classification of European system of national and regional accounts ESA 2010

E			20,8					0,0				
H	0,0											
I-U	0,2					0,8	233,6	47,3				
2018	192,3		44,5	3774,0	4,0	2,3	240,7	60,8	1010,8	301,7		
A	57,2			3774,0	4,0			7,0		269,9		
D	135,1					0,0			1010,8	31,8		
E			44,5					0,0				
H	0,0											
I-U	0,0					2,3	240,7	53,8				
2019	97,7	0,4	51,5	3757,8	10,0	3,5	206,5	40,8	528,8	152,0		
A	60,0	0,4		3757,8	2,1			7,0		100,0		
D	37,7				7,9				528,8	52,0		
E			51,5					0,0				
H	0,0											
I-U						3,5	206,5	33,8				
2020	177,0	1,8	26,0	4043,5	10,8	2,7	239,8	25,4	522,7	167,4		
A	29,7	1,8		4043,5	3,0			5,1		120,0		
D	147,3				7,9				522,7	43,2		
E			26,0					0,0				
H	0,0									4,2		
I-U						2,7	239,8	20,3				
2021	221,7	3,2	2,5	4031,5	31,0	1,9	281,4	23,5	444,4	231,7	2,4	
A	30,2	3,2		4031,5	5,5			5,0		200,0		
D	191,5				25,5				444,4	5,4		
E			2,5					0,0				
H	0,0									26,2		
I-U						1,9	281,4	18,5			2,4	
2022	433,6	4,1	0,4	4214,2	46,0	2,7	172,7	24,8	473,5	9,5	0,0	
A	50,8	4,1		4214,2	2,9	2,4		0,0				
D	379,7				43,1			0,0	473,5	5,6		
E			0,4									
H	3,1									3,9		
I-U						0,3	172,7	24,8			0,0	
2023	965,7	0,8	5,5	5354,0	277,1	3,0	171,3	21,8	940,7	6,3		
A	81,2	0,8		5354,0	228,5	0,0		5,8		0,0		
D	884,4				48,1			0,0	940,3	6,3		
E			5,5		0,5			0,0				
H	0,0									0,0		
I-U						3,0	171,3	16,0	0,4			

The capital transfers divided by NACE for the years 2016-2023 is shown in Table 12.

Table 12: Capital transfers from General Government to Corporations divided by year, NACE and CEPA/CReMA

CEPA CReMA	1	2	6	7	9	13A	13B	16
2016	276,5		5,1			3,5	0,0	0,2
A			5,1					
D	276,5					3,5	0,0	
I-U								0,2
2017	465,2		2,4		0,1	10,9	16,4	0,7
A			2,4		0,1			
D	465,0					10,9	16,4	
H	0,1							
I-U								0,7
2018	1354,8		1,4		2,1	5,0	120,6	49,9
A			1,4		0,0			
D	1354,8					5,0	120,6	
H	0,0							
I-U					2,1			49,9
2019	394,0	22,8	1,6	0,4	0,6	12,5	59,1	11,4
A		22,8	1,6					
D	394,0					12,5	59,1	
I-U				0,4	0,6			11,4
2020	699,5	10,1	3,2	0,0	0,7	312,1	107,4	6,2
A		10,1	3,2					
D	699,5					312,1	5,5	
H							101,8	
I-U				0,0	0,7			6,2
2021	1697,5	4,9	0,6		32,6	305,6	76,2	19,3
A		4,9	0,6					
D	1650,9					305,6	44,7	
H	46,6						31,6	
I-U					32,6			19,3
2022	2817,8	10,8	0,2		36,3	281,4	1096,3	0,0
A		10,8	0,2					
D	2815,8		0,0		0,0	281,4	891,1	
H	1,9						205,2	
I-U					36,3			0,0
2023	2106,8	0,4	2,9		0,0	4,2	509,6	
A		0,4	1,8					
D	2106,8		1,1		0,0	4,2	159,4	
H							350,2	

I-U					0,0			
Total	9812,0	49,0	17,4	0,4	72,4	935,3	1985,6	87,6

ESST have now been divided into NACE Rev. 2 at the level A-U and these accounts thereby follow Annex VIII in the Amendment of Regulation (EU) No 691/2011 and the current ESST questionnaire. The transfers could however be divided into a finer level of per industry using available resources, and so a division into A01-U99 have been performed. Most of the subsidies could be divided by applying data from National Accounts, and the remaining transfers were analyzed using the same method as stated previously in this section. The more detailed level following National Accounts division by industry is illustrated in Figure 4. Statistics Sweden aims to publish these data at our webpage within 2025/2026.

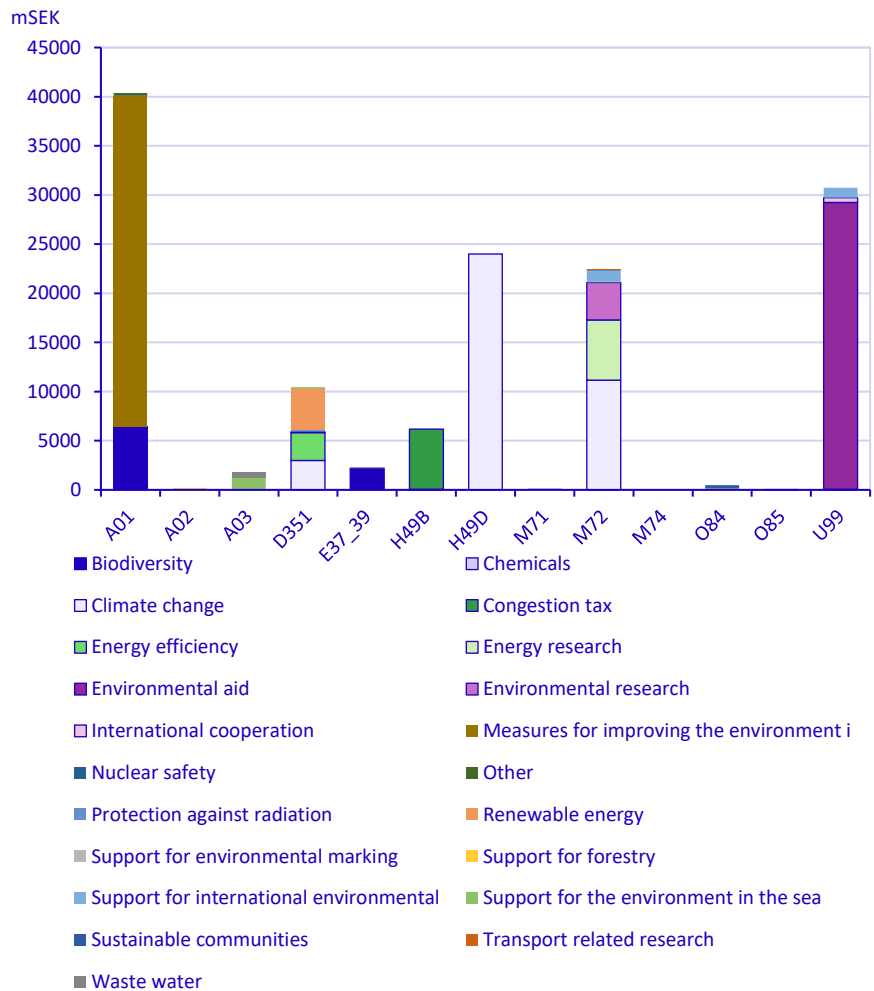


Figure 4: ESST divided by NACE A01-U99, 2016-2023, million SEK

The second part of the implementation of NACE Rev.2. was to rewrite the scripts that are used when calculating ESST. The production of ESST has two different scripts; one for importing and processing data, and one for adapting the structure of the output files to fit the structure of the questionnaire. The scripts have been updated to the new NACE implemented data and was used to submit the questionnaires for ESST data collection 2024.

4.2. Implementation of shares from The Swedish Agricultural Agency

Data of agricultural subsidies are collected from The Swedish Board of Agriculture which deliver data to Statistics Sweden in an Excel sheet. This data is used to calculate the share of the subsidies that are partially environmentally motivated. These shares were before this grant project written directly into the script in multiple places, which caused a high risk of human manual error. It was also very time consuming.

The received shares are now imported as an Excel sheet, where shares for the whole time series are included, and the risk of manual error is thereby much less than before. The data is simply imported in the beginning of the program. This improvement also makes the analysis of the results much quicker.

Lastly, the script has been made even more user friendly, and beginner friendly, by removing old comments, adding new and more clear comments, renaming variables to make it clear which data that is processed and by compressing the code.

4.3. Investigation of NA codes

All subsidies and similar transfers are assigned NA codes depending on paying and receiving sector, that categorize transfers as subsidies, capital transfers or other current transfers. This is done in order to fill in the ESST questionnaire since the data is reported by paying and receiving sector and type of transfer. The NA codes were stated for each transfer in 2022 and have since then been reused in 2023 and 2024 without analysing their correctness. An analysis has been made in this project concerning those codes, and they have, with help from our NA colleagues, been revised.

The three main categories of transfers are the following:

- D.3 Subsidies
- D.7 Current transfers
- D.9 Capital transfers

Current transfers and capital transfers are then divided into the following:

- D.73 Current transfers within the general government
- D.74 Current international cooperation
- D.92 Investment grants
- D.99 Other capital transfers

Information regarding what should be classified as subsidies, other current transfers and capital transfers needed to be studied before being able to assess whether the NA codes have been applied correctly or not.

Subsidies are defined in ESA (§4. 30) as “current unrequired payments which general government or the institutions of the European Union make to resident producers” and the purpose of these can be to influence production levels, product prices or remuneration of the factors of production.

Other current transfers include all transfers in cash or in kind between general government and governments, or international organizations in the rest of the world, except for capital transfers.

ESA (§4.145 and 4.146) describe the characteristics of capital transfers. Capital transfers in cash consists of the transfer of cash that the first party has raised by disposing of an asset or assets, or that the second party is expected, or required, to use for the acquisition of an asset or assets. The second party is often obliged to use the cash to acquire an asset, as a condition on which the transfer is made. A capital transfer in kind consists of the transfer of ownership of an asset (other than inventories and cash) or the cancellation of a liability by a creditor without any counterpart being received in return.

The analysis of these codes showed that some transfers had been misplaced at both the main categories, but also in the sub-categories. NA code **D3** for other current transfers concerning NPISH for consumption should have NA code **D73**. NA code **D992** for capital transfers concerning NPISH for investments, was wrongly coded. These transfers should have NA code **D922**. Investments for households and primary municipalities also belong to this NA code. Investments for EU countries was removed from **D92** and added to **D99**. The changes are illustrated in Table 13.

Table 13: NA codes that have been changed

NA code	Removed	Added
D3	HH and NPISH consumption	
D73	HH investments	HH and NPISH consumption
D74		
D92	EU countries investments	
D921	Primary municipalities investments	
D922		HH investments Other organizations, other non-profit associations investments Primary municipalities
D99		EU countries investments
D992	Other organizations, other non-profit associations investments	

The total changes in million SEK were the following:

- 2 355 MSEK was moved from D3 subsidies.
- 1 414 MSEK was added to D.7 other current transfers.
- 2 094 MSEK was moved from D92 capital transfers.
- 76 MSEK was moved from D99 capital transfers.

These changes can be seen in the ESST questionnaire as redistribution of values, but the total amount of million SEK in ESST remains the same.

5. Improvement of validation process

The validation process of ESST 2022 data collection went through five validation rounds, with issues regarding both the data that was sent, but mostly regarding finding explanations to all the questions. It was very time consuming and in need of improvements. This grant project mostly concerns the NACE division of ESST and improvement of data sources and applied methods, but also to investigate the validation process to try to make it more efficient and less time consuming.

The last two years of validation for ESST data collection have been less challenging than ESST for 2022, but still time consuming. The first step to improve the process has been to map out the type of validation questions that's been received from data collection 2023 and 2024, which CEPA or CReMA it concerned, if any specific years were mentioned and the response Statistics Sweden sent.

Mapping the last two years' validation questions showed that the most frequently asked years were 2017-2021 and the dominating environmental areas were CReMA 13A, CReMA 13B and CEPA 1. Approximately 84 percent of all received questions regarded time series consistency. Only ten percent regarded external consistency and six percent concerned revisions.

The questions about external consistency regard the difference between ESST data and COFOG data report, and it has been explained in validation answers, as well as in Metadata that this occurs since ESST use data of all transactions whilst National Accounts use consolidated data of the transactions. These questions should thereby not be an issue in the upcoming data collections.

ESST data was revised for 2016-2022 because of implemented changes in data sources and calculation methods, as a result of this grant project. That is the reason to why questions regarding these revisions came up in the validation process of 2024 year's data collection. These revisions have been explained in Metadata and should not appear in the upcoming data collections.

The questions regarding time series consistency are difficult to avoid since subsidies and similar transfers are decided by political parties, and varies over the years. Subsidies are removed, and new ones are introduced relatively rarely, but the amount of million SEK that is distributed to each subsidy varies a lot over time.

The time series differences in ESST will thereby always be needing explanations, but changes that previously have been explained to Eurostat can be summarized for upcoming ESST data collections in order to easier find answers to repeatedly asked questions. Table 14 summarizes the most frequent questions regarding their environmental area, years, explanatory transfers and affected sector.

Table 14: Summary of the most frequent validation questions

Type of transfer	CEPACReMA	Years	Explanation	Sector
Subsidies	1	2015-2017	Climate change	Corporations
Subsidies	13a	2016-2018	Renewable energy	Corporations
Subsidies	13b	2016-2017	Measures for improving the environment in agriculture	Corporations
Subsidies	1	2021-2022	Climate change, climate bonus, congestion tax	Corporations
Subsidies	13b	2021-2022	Measures for improving the environment in agriculture, climate bonus	Corporations
Other current transfers	1	2017-2021	Climate bonus, congestion tax, climate change	HH, GG, ROW, NPISH
Other current transfers	4	2019-2020	Biodiversity	GG
Other current transfers	13a	2016-2021	Energy research, renewable energy,	GG, HH, NPISH
Other current transfers	13b	2015-2016, 2019-2020	Energy efficiency	NPISH, GG
Other current transfers	7, 8, 9	2015-2021	Other, environmental aid, nuclear safety, environmental research	GG, ROW, NPISH, HH
Other current transfers	6	2015-2016, 2020-2021	Biodiversity, support for the environment in the sea	NPISH, GG
Other current transfers	TOTAL	2015-2016	Renewable energy	HH
Other current transfers	1	2022	Climate bonus	HH
Other current transfers	13a	2022	Renewable energy	HH
Other current transfers	4	2022	Remediation and restoration of contaminated areas, climate bonus, climate investments, energy, and climate readjustments	-
Capital transfers	1	2016-2022	Congestion tax, climate change	GG, corporations
Capital transfers	2	2019-2021	Waste water	GG, corporations
Capital transfers	6	All	Biodiversity	Corporations
Capital transfers	7, 8, 9	2018-2021	Sustainable communities, other	Corporations
Capital transfers	9	2016-2021	Environmental aid	-
Capital transfers	13a	2017-2019	Energy research	-
Capital transfers	13b	2017-2020, H2022	Energy efficiency, climate change	Corporations, GG
Capital transfers	16	2018-2021	Sustainable communities	Corporations, NPISH
Capital transfers	TOTAL	2015	Climate change, congestion tax	GG

More detailed answers to the stated validation questions in Table 13 are also compiled to improve the future validation processes even more. This information can be found in the Excel file *Pilot data tables* under the sheet *Validation process*.

The validation process of ESST accounts also contains questions regarding the coherence between National Accounts and ESST data, every year. There has been a brief explanation to the difference between these accounts in MetaData, where the following has been stated:

Data from Environmental Accounts are direct comparable with the National Accounts since it is a satellite system that comes with its principles and definitions. Environmental Accounts are thereby coherent with the National Accounts. Both National Accounts and ESST use data from the Swedish national financial management authority. The difference is that ESST use data of all transactions whilst National Accounts use consolidated data of the transactions.

This information has been complemented by the following information to avoid being asked the same questions every validation process:

Differences for COFOG99 GF0501 between 2015-2016 occur since COFOG data includes payments from the nuclear fund and the SEEA team interprets that nuclear fund payments should be allocated to CEPA 7 (protection from radiation) and not CEPA 3 (waste management). The large difference between COFOG99 GF0504 and ESST accounts for CEPA 6 occurs since the transfers related to agriculture that are included in CEPA 6, and not in COFOG99 GF0504.

These extensive explanations should help to avoid repeatedly asked questions about comparability.

To summarize, frequently asked questions are mapped, and additional information is added to MetaData and so the validation of future ESST data collections should be smoother and less time consuming.

6. Conclusions

The general objective of this work package was to further develop and improve the Swedish environmental subsidies and similar transfers in order to comply with Annex VIII in the Amendment of Regulation (EU) No 691/2011, as well as to improve the overall quality of these statistics. The project has investigated current data sources and methodologies and discovered new and improved sources and methods.

The first specific objective of this project was to revise data sources. The sources that were used before this project was data from The Swedish National Financial Management Authority which include detailed data from the state budget outcome, as well as shares from The Swedish Agricultural Agency of agriculture subsidies. These sources are kept unchanged as the quality is considered to be as high as possibly available.

Currently applied sources also include shares delivered by The Swedish International Development Agency of transfers related to environmental aid, since only a portion of these transfers are considered to be environmentally motivated. This project discovered that these shares could be improved after a discussion with representatives from SIDA. The shares were previously delivered for each year, but SIDA has available data of detailed shares for each specific subsidy area for each year, and so the quality of these calculations has improved a lot. The total ESST for environmental aid increased for 2016-2023, hence the conclusion from this investigation was that ESST were underestimated for all these years by 837,5 – 1309,4 million SEK. Between 41,2 and 53,3 million SEK was also added for international cooperation in the Baltic Sea for 2016 – 2023.

A part of this first objective was also to discover other potential Swedish agencies that could have relevant data to deliver for the purpose of ESST. One such agency is The Swedish Forestry Agency. Forest subsidies have not been included in ESST, but it has been discussed as a possible data source. The investigation of their different subsidies made it clear that a share of the subsidy *Contributions to the forestry* could be considered to be environmentally motivated. Including this subsidy increased total ESST by 7,38 - 32,92 million SEK between 2018 - 2023.

The improvement of data sources increased total ESST by 915 - 1203 million SEK as stated in Table 1.

Table 15: Increases in ESST as a result of the implemented improvements, 2016-2023, million SEK and percentage

Million SEK	2016	2017	2018	2019	2020	2021	2022	2023
Environmental aid	1001,5	1285,9	874,2	966,5	837,5	896,7	1063,5	1309,4
International cooperation	41,2	50,2	47,4	48,6	44,2	41,6	53,3	53,1
Contributions to the Forestry	-	-	7,38	6,04	6,44	5,74	25,47	32,92
Total increases	1042,6	1336,1	928,9	1021,1	888,1	944,1	1142,2	1395,4
Increases in percentage	11,6%	13,0%	6,7%	8,3%	6,5%	4,9%	4,7%	6,0%
Total ESST	10062,5	11613,7	14837,6	13255,8	14618,7	20230,0	25402,2	24570,3

The increased values are also illustrated in Figure 5 where the total increases are shown in purple. These values consist of increases in both the subsidy area for environmentally related aid and international cooperation, due to implemented improvements in data from SIDA, as well as in resource related subsidies, due to the inclusion of subsidies for forestry.

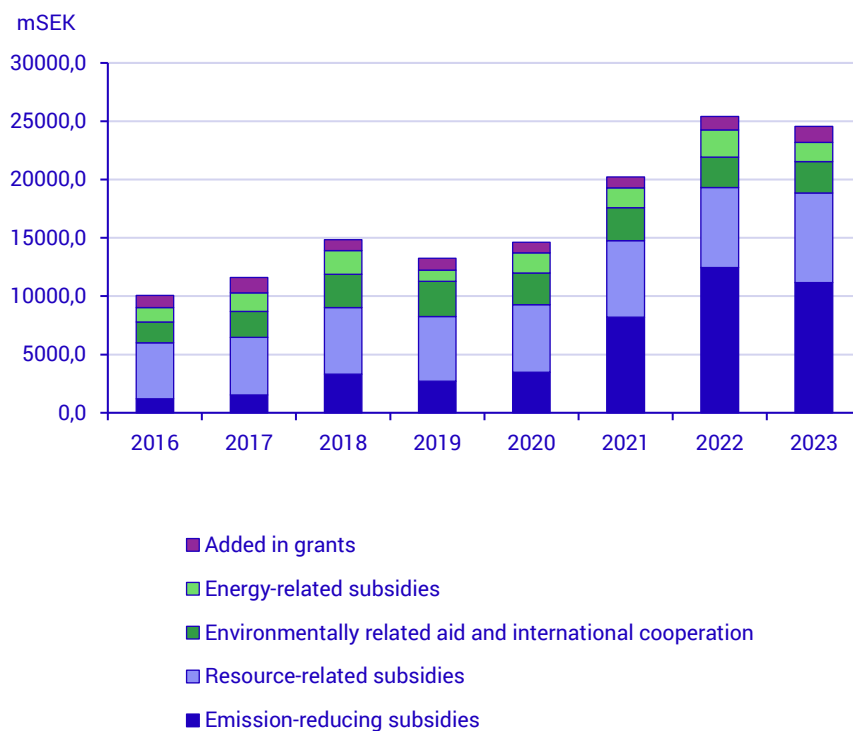


Figure 5: The impact of this grant project in ESST accounts, 2016 – 2023, million SEK

The second objective of this project was to develop ESST by dividing the transfers by NACE Rev. 2 in order to comply with Annex VIII in the Amendment of Regulation (EU) No 691/2011. This was implemented by using data from National Accounts, as well as by studying information regarding each subsidy, its receiver, purpose, environmental area and other detailed information. NACE division was performed for both subsidies and capital transfers, and it can be concluded that the largest number of transfers were placed in NACE H for 2021-2023, but the largest NACE before 2021 was NACE A. NACE E is the smallest NACE for the whole time series. ESST divided by NACE was sent to Eurostat in ESST data collection 2024 and went successfully through the validation process by January 2025.

ESST accounts was also improved by correcting applied NA codes that were misplaced. This did not affect the total amount of million SEK of the accounts, but it did affect the amounts that were distributed as subsidies, other current transfers and capital transfers. 2 355 million SEK was moved from subsidies, 1 414 million SEK was added to other current transfers, and 2 170 million SEK was moved from capital transfers. This has improved the accuracy of data filled in the ESST questionnaire.

The overall methodology for calculating ESST accounts has also been significantly improved by making the programming codes easier to follow and understand, and with less manually written values. This reduces the risk of manual error.

The final objective of this project was to improve the validation process of ESST. This was done by collecting all questions and answers during the validation process of data collection 2023 and 2024, in order to more easily track commonly asked questions, and to easier find answers. The majority of all questions regarded time series consistency, which is expected since subsidies and other similar transfers can vary a lot over the years in Sweden. Detailed answers have been listed, and so future validation processes should be less time demanding.

The general conclusions of this project are that ESST previously were underestimated, but is now much more accurate, and that the overall quality has been significantly improved. This improvement also affects the overall quality of EPEA and EGSS as a part of ESST accounts are used as data sources for those accounts.

Caveat:

It was mentioned in the application for this grant project that there is a need to adapt the data and methodological tools to the new environmental categorization, CEP. This was not done in this project since a grant project that starts in 2025 will focus on adapting the methodological tools to the CEP classification for both EPEA, EGSS and ESST accounts.

7. References

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Annex

Annex 1: New data received from SIDA of the shares of their subsidies that are environmentally motivated. Negative values occur due to that some sort of refund has been made.

	2016	2017	2018	2019	2020	2021	2022	2023
Africa	10,64%	13,90%	16,23%	13,26%	11,02%	11,95%	18,27%	17,54%
Asia	12,69%	8,60%	12,58%	16,87%	16,80%	19,99%	17,05%	22,74%
Research cooperation	9,01%	8,37%	9,66%	9,65%	10,23%	12,27%	11,12%	10,78%
Global effort for economic development	25,70%	22,57%	0,00%					
Global effort for environmental and climate sustainable development	96,39%	97,23%	0,00%					
Global effort for social sustainable development	2,49%	3,79%	0,00%					
Humanitarian efforts	0,00%	0,00%	-0,01%	-0,02%	0,00%	0,00%	0,00%	0,00%
Sustainable peace	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Sustainable development			36,40%	39,07%	37,00%	37,07%	38,48%	46,67%
Information and communication	0,00%	2,24%	2,14%	2,27%	2,06%	2,63%	3,80%	3,04%
Capacity development and Agenda 2030	22,04%	19,91%						
Capacity development and exchange	22,04%	19,91%	17,79%	17,19%	17,15%	11,13%	12,89%	15,49%
Latin America	1,51%	5,13%	7,86%	18,30%	13,32%	12,11%	17,18%	21,68%
Middle East and North Africa	5,05%	7,85%	6,47%	5,61%	6,02%	8,13%	13,90%	16,59%
Human rights, democracy and the rule of law			0,55%	0,98%	1,00%	1,00%	0,86%	0,50%
Reform cooperation with Eastern Europe, the Western Balkans and Turkey	26,60%	26,64%	20,48%	27,41%	22,03%	22,05%	19,27%	16,14%
SIDA	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
Support through Swedish civil society organizations	17,16%	20,83%	8,04%	12,57%	9,27%	11,22%	9,05%	7,86%
Special efforts for human rights and democratization	11,93%	20,90%	8,98%	-16,03%	9,26%	9,29%	-17,74%	2,90%

