# Twenty-first meeting of the Advisory Expert Group on National Accounts

Washington, D.C. October 18–20, 2022 SNA/M4.22/10

### **Global Consultation Questionnaire**

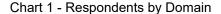
## WS.7 Guidance Note on the Treatment of Emission Trading Schemes

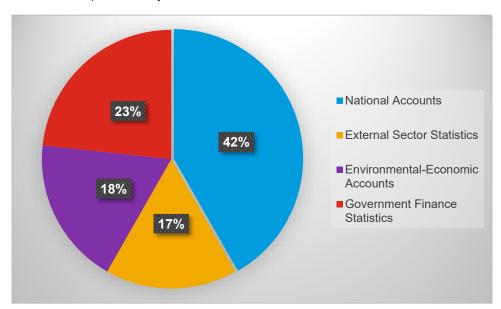
## Global Consultation Questionnaire - Guidance Note on the Treatment of Emission Trading Schemes

Summary: One of the research items on the SNA agenda is a re-examination of the treatment and recording of emissions trading schemes in the national accounts. Currently it is recommended to record all emissions trading schemes (ETS) as taxes on production, in part because the SNA notes that these permits do not involve the use of a natural asset. This note proposes alternative methods in which the atmosphere is viewed as a natural asset and therefore, proceeds from ETS permits sold by governments are not recorded as taxes but (1) as sales of non-produced assets or (2) as a rent payable for the right to use a non-produced asset, i.e. the atmosphere, for emitting CO2. The note also outlines two options (including the current SNA guidance) to record ETS as taxes on production.

The questionnaire consisted of five major questions with some sub-questions. A total of 63 respondents contributed to this consultation, 45 of which agreed to the publication of their verbatim responses which are also provided in the appendix. All figures exclude non-response.

In terms of domains, 41.7 per cent represent the national accounts (NA), followed by Government Finance Statistics (GFS) at 23.3 percent, Environmental Economic Accounts (EEA) at 18.4 percent and External Sector Statistics (ESS) at 16.5 percent. There are some variations amongst domains as the number of respondents from EEA and GFS is significantly lower. It should be noted that for some economies, one individual responded to more than one domain.





In terms of geographical representation, 55 economies are covered. Chart 2 shows the geographical representation of the respondents.

3% 16%

Africa

America

Asia

Europe

Oceania

Chart 2 - Geographical Representation

#### Significance of the issue

67.6 percent of respondents indicated that an emission trading scheme exists in their economy to mitigate against the adverse effects of climate change. They also reported that the issue is of high relevance (59.4 percent) or medium relevance (36.2 percent), whereas for those respondents where an ETS does not exist in their economy (33 percent), the issue was of less relevance (40 percent).

Furthermore, for the economies that have an emission trading scheme the data availability was either good or reasonable to compile ETS statistics. Data availability was not an issue for any of the domains. Generally, information for issuance of ETS is readily available, however, significant challenges exist to acquire granular information at the micro level, market prices, secondary trading, and cross border transactions.

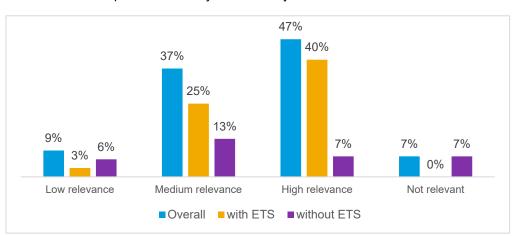


Chart 3 – Is this topic Relevant to your economy

#### The Atmosphere as an asset

Overall, 76 percent of respondents agreed with the recognition of the atmosphere as an implicit asset (not to be recorded in the SNA balance sheet), as explained in the guidance note. 14 out of 58 respondents or 24 percent disagreed with this notion.

In terms of domains, 33 percent of NA respondents agreed with the notion of the atmosphere as an implicit asset, followed by GFS, ESS and EEA.

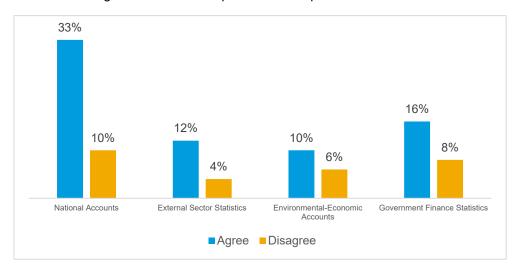


Chart 4 – Recognition of the Atmosphere as an Implicit Asset

The principal reasons provided by respondents for not recognizing the atmosphere as an implicit asset is, because, as noted in the SNA manual one of the criteria for an asset is ownership and control. Participants expressed that ownership rights cannot be established for the atmosphere. Another key factor for one respondent is "that natural resource permits derive their value from the underlying asset. For the ETS with the atmosphere as an implicit with zero value recorded on the balance sheet implies the associated permits must also have zero value."

Respondents have requested additional clarification regarding the recognition of the atmosphere as an asset. In particular, what is the definition of an implicit asset? How would control of the environment be determined? And to which domestic sector it should be allocated to? How will the atmosphere as an implicit asset align with the SEEA manual?

#### Preferred Option for Recording ETS

There was no clear consensus for a particular option to record ETS. The top 3 options for recording ETS are: Option 1 - Emissions Permits recorded as a non-produced non-financial asset – contracts, leases, and licenses, is the preferred option for 16 respondents or 28 percent; followed by option 4.a Emission Permits recorded as a financial asset with taxes on production recorded at surrender (at issuance value), 22 percent (13 respondents) and option 2 - Emissions permits recorded as a resource lease (financial asset), with resource rent recorded at surrender and option 3 - Emissions permits recorded as contract, leases, and licenses, with taxes on production recorded at auction, at 17 percent.

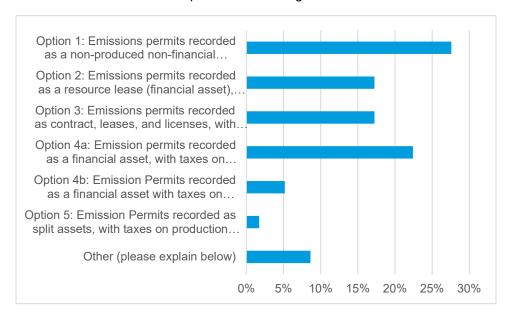


Chart 5 - Overall Preferred Option for Recording ETS

The current recommended option in the SNA, Option 5: Emission Permits recorded as split asset with taxes on production recorded at surrender, is the preferred option for 1 respondent or 1.5%.

Although, overall option 1, is ranked the highest, emissions permits recorded as a non-produced non-financial asset – contracts, leases, and licenses is not the preferred option by domain. Option 4a Emission Permits recorded as a financial asset with taxes on production recorded at surrender (at issuance value), is the preferred option for GFS. For ESS, option 4a and option 1, are equally preferable. For EEA, option 4a and option2 are equally preferable and finally for NA, option1 followed by 3.

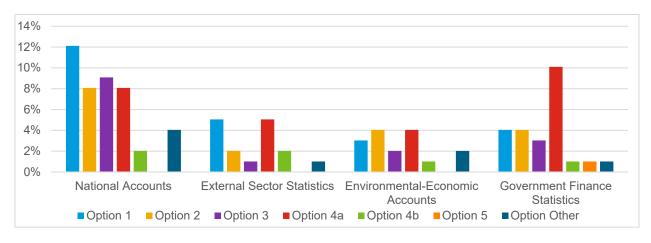


Chart 6 – Preferred Option for Recording ETS by Domain

#### Feasibility

Respondents were asked how feasible it is to compile national account statistics for their preferred options, using a scale of 0 to 10, where 0 = Not feasible and 10 = Highly feasible. The chart below provides the overall results by domain.

Chart 7 – Feasibility of Preferred Option by Domain

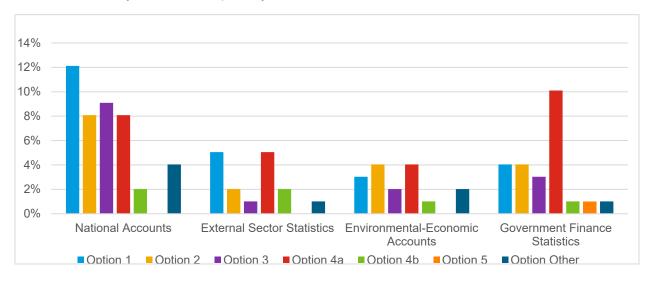
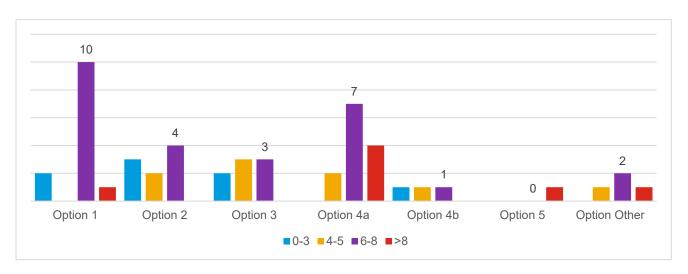


Chart 8 – Overall Feasibility of Preferred Option (no. of respondents)



Respondents indicated that the main strengths for option1 are data availability, simplicity, transparency, interpretability, and that option 1 is consistent with the existing treatment of radio spectrum and fishing quotas. Some of the benefits for Option 4a include simplicity, alignment with other carbon emission schemes and government revenue. Some of the challenges for both of these options are data availability and transparency. More importantly, respondents indicated that the main challenge facing all of these options is with data availability to record cross border transactions.

#### Other Selected Comments

- "It is important to consider the implications of how we define implicit assets, and the inclusion of the atmosphere as an asset, on the SEEA and its cohesion with the SNA.

While ecosystems are currently within scope of the SEEA, the atmosphere is not. There could be scope for the measurement of the proposed treatments through the concept of externalities, however these implications should be considered prior to a final option being endorsed".

- "Another important consideration for helping determine the best option is the treatment of penalties for businesses/purchasers who are unable to meet their quota/targets and are then required to make penalty payments. Option 1 is likely a good candidate for this through the use of contracts/penalties".
- The guidance note as well as the questionnaire could have enquired more on some basic principles, in particular:
  - "We think that there is a tax event. ETS is not an alternative to taxing, but a more efficient way to tax. This eliminates Option 1 and 2"
  - "Aside from a narrow GFS view, tax recording also allows showing the cost of business and
    correctly measuring the GOS of corporations. This seems important in national accounts. This
    eliminates Option 1, and perhaps less clearly Option 2 as D.45 could be a valid option in so
    far as it deducts from entrepreneurial income."
  - "ETS are fundamentally a sort of money issued by government specifically created to redeem specific fiscal obligations imposed on polluters. As such, ETS are best portrayed as financial assets of holders and liabilities of government. A sort of prepayment of tax (or of rent)."
  - "The fact that the ETS implies a tax does not conflict with the ETS being an asset. The taxing event is the pollution or the surrendering. The ETS itself is sold and bought between parties as a financial asset."
  - "Option 3 is artificial by recognising both a tax and an NP. Option 3 also does not follow the accrual principle with recording the tax on a cash basis. We are worried of the possibility to engineer the B.9 (net lending/net borrowing) of government by overselling ETS in a year or even buying them back at convenient time in another year (with an analogy with monetary gold). All things that option 1 and 3 allow to do."
  - 'Recognizing NP is not aligned with the AN.222 category, at least as interpreted by ESA 2010: only option 5 (split asset) is consistent with this definition, i.e. recognizing a nonproduced asset for the difference between the market value and the purchase value (see the March 2017 Guidance Note of Eurostat on mobile phone licences)."
  - "We prefer the valuation of tax to be consistent with the cash collected over time, rather than to the market value. This tax recording can be reconciled with the market value of the permits by allowing recording other economic flows (revaluation) for the difference. Most options lead to some sort of artificial other economic flow at one point or another. "
  - "Option 1 and 3 have the inconvenience of recording no transaction in the system upon ETS surrendering. This is highly anomalous, as ETS surrendering is a cost to business (and an inflow of resource to government)."
  - "Permits given for free can be treated as a subsidy on production in all options, while the GN seems to suggest the contrary."
  - "The problem raised by multicountry schemes are specific and difficult to go around, and deserve more consideration."