TT-SIEC Global Consultation
Summary Report
September 2023

Introduction

The revision of the Standard International Energy Products Classification (SIEC) was mandated by the United Nations Statistical Commission during its 53rd session in March 2022 (Decision 53/125f of E/CN.3/2022/41). The United Nations Committee of Experts on International Statistical Classifications (UNCEISC) created the Task Team on the Standard International Energy Products Classification (TT-SIEC) with the mandate to carry out the revision and prepare a new version of SIEC and to improve harmonization between SIEC and CPC.

As part of the revision process, the TT-SIEC has identified an initial list of issues for the revision of SIEC and conducted a global consultation with countries and relevant international/regional organizations to seek comments on the list and collect additional issues, if any.

On the basis of the results of this global consultation, the TT-SIEC will finalize the list of issues. Discussion on some of these issues has already begun. The objective is to prepare a revised structure of SIEC for submission to the United Nations Statistical Commission, through the UNCEISC, in 2025.

This questionnaire was circulated to NSOs and relevant international/regional organizations, and was intended to be completed by experts in these institutions who use SIEC or other classifications for energy products. Part 1 asked information on the respondent and the current use of SIEC in the respondent's institution. Part 2 sought feedback on the existing list of issues and aimed to collect information on additional issues with the revision of SIEC. When filling the questionnaire, respondents were encouraged to consult with relevant users of this classification in their institutions and/or in other relevant institutions in their country.

This document reviews the key findings from the consultation, and includes annexes with complete responses to selected questions.

Key Findings

- 81 respondents completed the questionnaire, primarily from NSOs and with a fairly representative geographic distribution

- The initial list of 18 issues put forward by the TT-SIEC was shown to be highly relevant, with most being seen as relevant by a majority of respondents

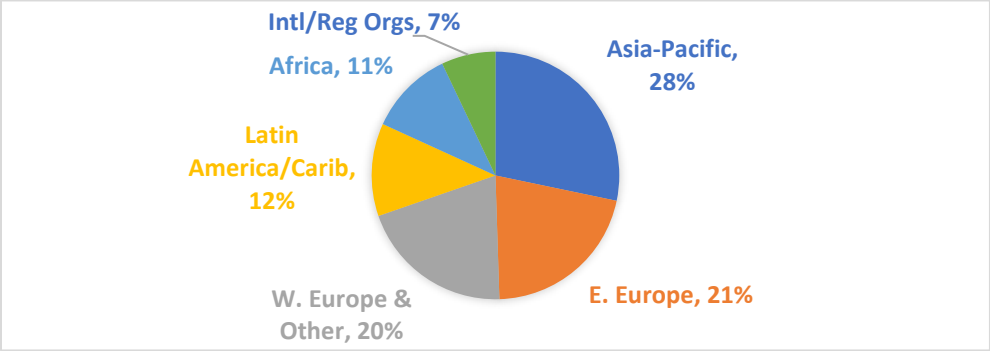
- The list was also shown to be comprehensive, with a limited range of additional suggestions. Topics raised by more than one respondent include: harmonization with other classifications including SNA, UNFC and IPCC; disaggregation by source/renewability; training and/or a simplified version for small/developing countries; and the circular economy/waste/home energy generation

- The Task Team may wish to briefly consider these additional topics, though there was no great consensus on any particular one (see page 6 and Annex B)

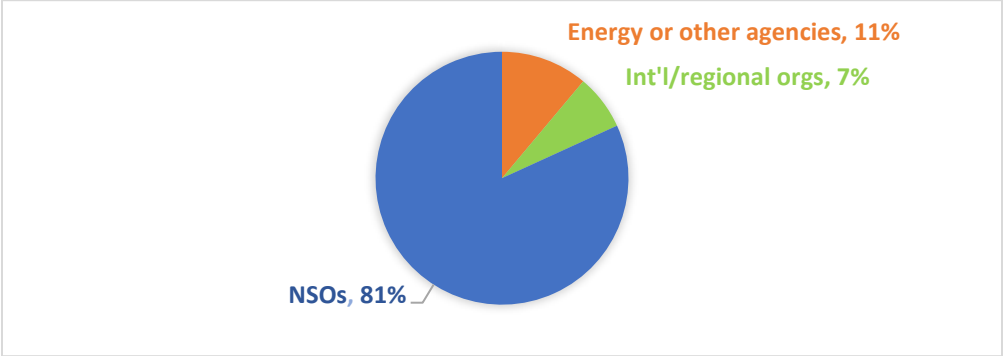
- Just over half of respondents noted that they do not use SIEC, while just over 1/3 use it for statistical data collection and/or dissemination

Respondents

A total of 81 respondents completed the questionnaire, with a fairly even distribution by region:



The large majority of respondents come from NSOs, with the remaining from energy or other agencies/ministries/etc or international/regional organizations:



Survey Results - Part I

Question 1: Please indicate below if your response is coordinated with experts in the following areas within your institution:

Responses to the survey were completed to a large degree in coordination with other areas within the respondent institution. The majority coordinated with Energy Statistics experts, while about half coordinated with Energy Accounts and/or Classification experts, and one-third with National Accounts experts:

- 73% with Energy Statistics
- 48% with Energy Accounts
- 47% with Classification
- 33% with National Accounts
- 11% with Other

Approximately 40% coordinated across at least 3 areas, and nearly 60% across at least 2:

- 15% with 4+ areas
- 26% with 3 areas
- 17% with 2 areas
- 41% with 1 area
- 1% with no areas

2. Is your response coordinated with other institutions in your country?

Most respondents (65%), however, did not coordinate with other institutions. Among those who did:

- 82% are NSOs that coordinated with a separate energy agency/ministry/etc.
- 18% are Energy agencies/ministries etc. that coordinated with NSOs or NSOs that coordinated with other agencies/ministries

3. How is SIEC used in your institution?

A small majority of respondents noted that they do not use SIEC, while a little over one-third use it for statistical data collection and/or dissemination:

	Total	Africa	Latin America & Caribbean	Western Europe and Other	Int'l and Regional Orgs	Eastern Europe	Asia - Pacific
Do not use SIEC	52%	22%	60%	56%	50%	59%	52%
Use SIEC for data collection	38%	67%	40%	31%	50%	24%	39%
Use SIEC for data dissemination	35%	67%	10%	38%	50%	35%	26%
Non-statistical use	6%	0%	0%	6%	33%	0%	9%

By region, respondents from Africa were notably more likely to report using SIEC, both for data collection and dissemination, while international/regional organizations were most likely to use it for non-statistical purposes.

Among those who use SIEC for data collection, 58% use it also for data dissemination; while among those who use SIEC for data dissemination, 64% use it also for data collection.

Not surprisingly, data is generally collected at a higher level than it is disseminated. Among those who use SIEC for data collection:

- 33% collect at Sub-class level
- 53% at Class level
- 7% at Group level
- 7% at Division level

While among those who use SIEC for data dissemination:

- 30% disseminate at Sub-class level
- 23% at Class level
- 5% at Group level
- 15% at Division level
- 5% at Section level

Respondents who noted that they do not use SIEC listed a number of alternatives that are used:

- 28% Use CPC/CPA or national variant
- 16% Use ISIC/NACE or national variant

- 16% Use various Eurostat/EU regulations
- 9% Use HS/CN
- 9% Use IEA
- 6% Use a custom system
- 20% Did not specify

Survey Results - Part II

4. For each issue, please indicate whether the issue is relevant in your institution and if you have any additional comments on the issue

Overall, respondents noted that the proposed list of issues was in line with the issues relevant to their country/organization. Industrial and municipal waste, the definitions of biofuels, and the overall review the classification of renewable energy products were considered most relevant. Issues considered less relevant were generally those with limited geographical scope, i.e. oil shale and oil sands.

Respondents from Africa, Western Europe and Other, and International/Regional Organizations were most likely to note that the proposed issues are relevant. Respondents from the Asia/Pacific region were least likely to note the relevance of the proposed issues.

		% indicating issue is relevant						
		Total	Africa	Latin America & Caribbean	Western Europe and Other	Int'l and Regional Orgs	Eastern Europe	Asia - Pacific
11	Industrial and municipal waste	79%	100%	80%	94%	100%	88%	48%
18	Overall review the classification of renewable energy products	79%	100%	80%	94%	100%	76%	57%
13	Definitions of biofuels	78%	78%	80%	88%	100%	94%	52%
12	Breakdown of fuelwood, wood residues and by-products	74%	89%	70%	81%	100%	100%	39%
1	Improvement of harmonization between SIEC and CPC	72%	89%	80%	75%	100%	65%	57%
4	Classification of Hydrogen and Ammonia	67%	56%	80%	88%	83%	82%	35%
9	Distinction b/t liquefied and compressed natural gas	67%	89%	70%	69%	67%	88%	39%
2	Review of the underlying scope, principles and concepts of SIEC	65%	78%	70%	88%	67%	65%	43%
3	Review of SIEC structure	64%	89%	70%	88%	50%	53%	48%
14	Classification of bio-methane	64%	67%	60%	81%	100%	76%	35%
16	Classification of blending and mixed products	62%	78%	80%	81%	83%	53%	35%
17	Review the breakdown of biogases	60%	78%	70%	81%	83%	53%	35%
15	Classification of synthetic fuels	54%	67%	70%	81%	67%	53%	22%
6	Review the definition of coal	48%	78%	70%	31%	33%	53%	39%
10	District cooling as an energy product	46%	56%	50%	63%	50%	41%	30%
5	Classification of "concentrated coal" or "washed coal"	41%	78%	50%	38%	17%	29%	39%
8	Classification of "wet gas"	41%	67%	70%	44%	33%	29%	26%
7	Classification of oil shale and oil sands	31%	56%	50%	31%	50%	24%	13%

Please see **Annex A** for all additional comments on the list of issues.

5. In your view, are there other issues that should be considered for the revision of SIEC?

The only issues mentioned by multiple respondents are the following: harmonization with other classifications including SNA, UNFC and IPCC; disaggregation by source/renewability; training and/or a simplified version for small/developing countries; and the circular economy/waste/home energy generation.

The Task Team has already considered and decided against including a breakdown of renewable and non-renewable energy; and is considering the harmonization of SIEC with the most relevant classifications. The Team could consider the addition of the circular economy and burning of waste when discussing Issue #11; and may also want to consider home energy generation and training and/or a simplified version.

Please see **Annex B** (page 28) for all relevant responses to Questions 5 through 9.

The Team may also want to consider the responses to Questions 6 through 9 below, though again there was no clear consensus on any particular issue:

6. Are there categories of SIEC that need new groups, classes, or subclasses?

The only issues mentioned by multiple respondents were the following: the breakdown of renewable/non-renewable for electricity, heat and waste; hydrogen/green hydrogen; and more detailed breakdowns for some products (namely crude oil, fuel oil, charcoal).

7. In your view, are there categories in SIEC that are now obsolete?

Only a handful of responses were received regarding obsolete codes, including coal, kerosene and peat.

8. Are there any modifications or adaptations to SIEC that your country has made to facilitate the collection of energy data in your country?

Some countries mentioned specific modifications/adaptations, for example with biofuels, or gasoline by octane level, while others simply noted general changes at the national level.

9. Do you have any additional comments?

Responses to this question were varied, including further comments on harmonization with other classifications/systems; and the importance of obtaining diverse viewpoints.

Annex A - Additional Comments on the List of Issues

Below are all the additional comments received regarding each of the 18 issues:

1. Improvement of the harmonization between SIEC and CPC

World Customs Organization	Any amendment to the CPC may affect its alignment with the Harmonized System
Statistics Canada / Centre for Statistical and Data Standards	Interested in the discussion about the harmonization with CPC as it can inform us about the alignment with NAPCS Canada
Chile - Instituto Nacional de Estadísticas	Currently, the SIEC is not used in the statistics produced by our INE Chile. Although there are current statistical operations that compile energy products such as the industrial, waste and residue survey, electricity production survey, in addition to the treatment of administrative records related to environmental variables, along these lines, the main classification used is national adaptation. of Chilean Product Classifier, CPC2.CL (based on CPC Rev. 2) and the National Classification of Basic Environmental Variables. In line with the above, it will be very useful and beneficial if the link between CPC and SIEC is much more specific and detailed, in this way, it will be possible to identify energy products that are not visible in the current CPC and delve into their characteristics. Likewise, generating links between statistical classifications of similar or related fields is considered a good practice in accordance with the recommendations of the United Nations (https://unstats.un.org/unsd/classifications/Meetings/UNCEISC2022/UNCEISC_2022_meeting_Session_1_Bk3_Best_Practice. pdf). As part of the improvements, it would be important for the link to specify the product(s) (or the "part") that link one classifier to the other (mainly in cases with 1 to n directionality in classification). Finally, it is recommended to keep the correspondence between these classifiers updated, considering that in 2024 a new CPC structure will be presented. Additionally, it would be ideal to be able to establish a formal and official link with the Harmonized System 2022."
Colombia - Departamento Administrativo Nacional de estadísticas	The SIEC review provides the opportunity to improve harmonization between SIEC and CPC by providing recommendations for changes to CPC while considering adjustments to SIEC categories as well as relationships between updated classifications.
Dominican Republic - Oficina Nacional de Estadística	In process, through the project of implementation of the System of Environmental and Economic Accounting.
Hungarian Energy and Public Utility Regulatory Authority	Transposition between SIEC-CPA/CPC and SIEC-HS is necessary due to comparison with industrial production, value-added and foreign trade statistics data.
BPS-Statistics Indonesia	It is relevant for linking the information on monetary SUT, which based on CPC, with Physical Energy Flow Accounts (PEFA), which based on SIEC
Kazakhstan - Bureau of Nat'l Statistics of the Agency for	Not all countries use SIEC in energy statistics, as production data is collected using separate classifier based on CPA or CPC. Therefore it is convenient for statisticians to use maximally harmonized classifications

Strategic Planning and Reforms	
Kenya National Bureau of Statistics	It is very important as it links energy data to economic statistics
Lao Statistics Bureau	Most product were classified by ISIC and CPC, there are difficulty when they transfer to SIEC
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	This harmonization clarifies the relationship between SIEC and CPC
Statistics Netherlands	And please harmonize with trade statistics (HS) as well.
Statistics New Zealand	Is important to continue the discussion on whether SIEC remains as a stand-alone classification, whether it is embedded into the CPC or treated as a view/extension of CPC. Alignment with the HS is also important
Saudi Arabia - General Authority for Statistics	Since we are using CPC we need to ensure the consistency between SIEC and CPC
Swedish Energy Agency	Swedish Energy Agency which is responsible in the Swedish Official Statistical system in the domain of energy. Sees that it is important that there is improvement of the harmonization between Standard International Energy Commodity classification and Central Product classification.
UNECE	We are involved in various products and services and are keen on promoting business models such as energy and resources as services.
Turkish Statistical Institute	That harmonization can improve the level of harmonization between energy accounts and national accounts

2. Review of the underlying scope, principles and concepts of SIEC

Chile - Instituto Nacional de Estadísticas	Regarding the scope of the classification, it is advisable to incorporate the categorization of primary/secondary and renewable/non-renewable sources to the energy products presented by the SIEC, in this way adding an additional characteristic for the understanding of the products, which would contribute to the development of national adaptations of the classification. Currently, it is observed that these data are incorporated into the IRES document (as an annex) that contains the classification, but they are not integrated into the SIEC structure.
Colombia - Departamento Administrativo Nacional de estadísticas	We considered the inclusion and work of features addressing the question: Should, for example, the scope of SIEC be expanded to cover products that are typically for non-energy uses but have the potential for energy use? It is relevant and related to what is necessary to determine the use and application of the classification, we consider that aligning in the best way the relationship between the harmonized system and the CPC, taking into account the last amendment presented by the WCO is very important.
Cook Islands Statistics Office	Suggest training provided to countries yet to use the classification
Dominican Republic -	In process, through the project of implementation of the System of Environmental and Economic Accounting and consulting with the Latin American Energy Organization.

Oficina Nacional de Estadística	
Hellenic Statistical Authority	Relevant, if the scope of SIEC is expanded to cover more products or a review of the classification criteria is applied.
BPS-Statistics Indonesia	Indonesia has such products as mentioned in the list of issues. Therefore, the revision of scope, principles, and concepts of SIEC will have an impact on the reporting of energy statistics in our institution.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico – INEGI	It is suitable for the definition of where to classify the energy products
Statistics Netherlands (CBS)	We think the structure should be made suitable for monitoring fossil, renewable, nuclear and other energy sources as well as for mixed products (which sre to be unraveled). Further, tailor made solutions for energy industries and fossil fuels should be prevented.
Statistics New Zealand	Need to be explicitly clear on the statistical unit being measured, and being explicitly clear on the scope of the classification in comparison to other like classifications such as HS and CPC. It is important to understand that there is a need for consistency with SEEA and SNA and that SIEC is practical in terms of data integration for energy statistics - whether data, accounts or indicators. What is the relationship to the SDGs and how does SIEC inform or support understanding energy use/support/intensity/emissions for GDP, and for enabling input-output tables for, for example, consumption based emissions. Also ensuring energy product data feeds into the GHG Inventory, and that the relation of SIEC to IRES is clearly articulated
Statistical Office of the Republic of Slovenia	If the revision of the SIEC will have impact on the international questionnaires, we will adjust our questionnaires (e.g. monitoring more detailed data) and reporting.
Sri Lanka Sustainable Energy Authority	We are keen to adopt SIEC and look forward to engage.
Swedish Energy Agency	It is important that this methodology, definitions, principles, concepts is reviewed and changed between these classification where it is most efficient.
United Nations Economic Commission for Europe	It is essential to consider climate and sustainability-related aspects in any project or initiative. This includes incorporating close-looped systems, minimizing waste, and exploring new materials and energy carriers, such as hydrogen and ammonia. By taking these factors into account, we can work towards a more environmentally responsible and sustainable future.
Office of the U.S. Chief Statistician	The U.S. supports classification that employs consistent, clear, and logical foundations

3. Review of SIEC structure

Chile - Instituto Nacional de Estadísticas	In general terms, the structure of the SIEC classifier is coherent and clear in its organization, that is, its structure groups elements into categories according to the objective of the classification and the desired level of detail, in this case, in four levels (Section, Division, Group and Class) ordering the products from the most general to the most particular, therefore responding to a hierarchical classification.

	As a recommendation, in addition to having rules of interpretation (criteria), the classification should incorporate explanatory notes of the categories in which the products that are included and excluded are detailed, in this way the understanding of users is facilitated, both at the level of of each category, as well as the classification as a whole. Specifically, attention should be paid to the difference in numbering of the "Lignite" product, since there is an inconsistency between the Group code 021 and Class 0220 between the English and Spanish versions. Also, it is suggested to consider reviewing the titles of class 0320 “Agglomerate” and class 4300 “Raw material for Refinery”, since they are very generic, making it difficult to understand their content and correspond to other classifiers. In strict relation to this last class, there is a situation with the product “Naphtha”, since it is presented in the structure of the classifier under Class 4640 “Naphtha”, however, it is also mentioned in Division 43 within the point " D. Definitions of energy products", thereby breaking the principle of mutual exclusivity of the categories.
Colombia - Departamento Administrativo Nacional de Estadísticas	Regarding the premise: The SIEC review provides the opportunity to review the structure of the classification to possibly align it with international reports and/or output tables for energy statistics, balances and accounts, it is essential that it be addressed in terms of the latest versions of the CPC and Harmonized System classifications. (S.A.)
Cook Islands Statistics Office	comments as 1 and 2 above
Dominican Republic - Oficina Nacional de Estadística	In process, through the project of implementation of the System of Environmental and Economic Accounting.
Greece - Hellenic Statistical Authority	Relevant, if changes are applied between the links of PEFA and SIEC codes.
BPS-Statistics Indonesia	Linked to the way information is collected and disseminated across statistical products/data
Kenya National Bureau of Statistics	It is important to update this as there have been changes over time
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Department of Statistic Malaysia	Flexible to capture technology advancements and emerging energy products and services.
Mexico - INEGI	We think it is adequate to correlate it with the CPC
Statistics Netherlands	Currently there are a couple of unnecessary refinements, e.g.sections 0 Coal and 1 Peat and 2 can be combined in one section. The same counts for section 2 and 4. Section 5 could be expanded to renewables. Sections 7 and 8 can be, together with H2 and NH3 in one section for source independent secondary products. And finally a section with mixed products could be added.
Statistics New Zealand	Consideration of whether a hierarchic structure is warranted or whether there are other methodologies for using the detailed level of SIEC and creating views/aggregation. Also important to recognise how the structure can inform policy-making for impact of energy consumption or usage by indigenous communities. Structure also needs to be practical for international reporting and for developing country usage

Swedish Energy Agency	It is important for statistics in, all domains that the structure in SIEC is easy to merge between the other classifications. Why review of structure of SIEC is necessary.
United Nations Economic Commission for Europe	The current SIEC structure must be assessed to ensure it is in line with emerging energy systems that incorporate hydrogen, ammonia, batteries, and hybrid modes. This shift towards new technology is resulting in innovative advancements across all areas, as well as new business models such as energy as a service.
Office of the U.S. Chief Statistician	SIEC structure should be as simple as possible while meeting user needs

4. Classification of hydrogen and ammonia

Brazil - IBGE	It's important to improve the definition and treatment, mainly because ammonia is a raw material for hydrogen production.
Chile - Instituto Nacional de Estadísticas	In our adaptation CPC2.CL, the products hydrogen and ammonia are only identified in Division 34 "Basic Chemicals", specifically, in Group 342 "Basic Inorganic Chemicals n.e.c." and in Group 346 "Mineral or chemical fertilizers, nitrogenous", however, to date we do not have statistical records of these products as carriers of energy sources. Now, the information needs on energy production and use are increasing for those responsible for formulating policies that address climate change, especially when countries evaluate the substitution of fossil fuels towards renewable energy sources, that is, In that sense, the first hydrogen plant is being developed in Chile, which will allow it to be the cheapest producer of green hydrogen on the planet (https://energia.gob.cl/sites/default/files/estrategia_nacional_de_hidrogeno_verde_-_chile.pdf). Likewise, a project for the construction of a green ammonia production plant has been presented (in the environmental impact evaluation stage), which would mean the first production plant of this type in Chile (https://www.enaex .com/cl/es/green-ammonia/). In the context of the above, that is, potential uses and emergence of new businesses at a local and international level, it is considered important to make the distinction of these products in the classification.
Colombia - DANE	As new fuels are talked about globally, we share the assessment contained in the classification that hydrogen and ammonia are becoming increasingly important energy sources, as they can provide clean alternatives to fossil fuels.
Cook Islands Statistics Office	comments as 1 and 2 above
Statistics Denmark	Production of hydrogen from power to produce of synthetic fuels (Power to X) is expected in some years.
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
Statistics Estonia	SIEC should provide clear guidance on how to classify hydrogen and ammonia and should consider if a distinction is necessary in the classification to further distinguish hydrogen and ammonia according to the production process, namely if derived from fossil fuels or from clean or renewable sources.
Greece - Hellenic Statistical Authority	Hydrogen is currently reported in several subclasses.
India - Ministry of Statistics and	Hydrogen and ammonia needs to be classified separately. Hydrogen can be grey, blue , tarquise, green etc. depending on the process and energy sources through which it is produced. The green hydrogen generally produced by using Renewable Energy sources.

Programme Implementation	However, the standard definition of green hydrogen is under formulation. Biomass derived hydrogen comes under green category even though it has not been classified.
Kenya National Bureau of Statistics	New area
State Data Agency (Statistics Lithuania)	According to the new legislation of energy statistics, EU countries will have to account hydrogen in the near future.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - National Institute of Statistics and Geography	This classification improves their identification as products
Statistics Netherlands	For sure these two products should be taken up in SIEC. We consider them as secondar energy products without a 'by nature coupled' energy source (like e.g. diesel). A problem might be that the definition of H2 and NH3 is still in progress. Which purity makes a product H2. Also in refineries and chemical plants waste gases containing H2 are already in place. The choice whether a product is H2 or refinery/waste gas is to be made yet.
Statistics New Zealand	Given the increasing use of both as clean alternatives, then good explanatory notes will probably suffice
Spain - Ministry for Ecological Transition and Demographic Challenge	New energy carrier that needs to be further identified, its use, and its carrier form.
Swedish Energy Agency	There is necessary that commodities and flows which is coming in to play for green deal. climate neural manufacturing products from industry have correct classifications so it easy to trace and merge with other classifications. Hydrogen and Ammonia is two of these kind of energy carriers.
United Nations Economic Commission for Europe	A new taxonomy and classification system for hydrogen and ammonia is being introduced, which will be based on multi-para sustainability indicators. This international standard will align with the United Nations Framework Classification for Resources (UNFC) and the United Nations Resource Management System (UNRMS). It will be crucial for SIEC to conform to the new H2 framework.
UK Statistics Authority	The definition of biofuels is of interest to the UK
Office of the U.S. Chief Statistician	As an energy carrier, hydrogen is similar to other types of energy storage.

5. Classification of “concentrated coal” or “washed coal”

Brazil - IBGE	In Brazil, two types of R.O.M. (run-of-mine) and washed coal. Therefore, we believe that this distinction is interesting.
Colombia - DANE	Which refers to the problem of how to classify this product in SIEC and whether separate categories should be created in the classification, and a single class can be established for this product, taking into account its nature at the most aggregate level.

Cook Islands Statistics Office	comments as 1 and 2 above
Statistics Denmark	Coal is imported and is mainly used in power plants and some industries. These distinctions does not seem relevant for Denmark.
Dominican Republic - Oficina Nacional de Estadística	In process, through the project of implementation of the System of Environmmental and Economic Accounting and consulting with the Latin American Energy Organization.
Eurostat (European Commission)	Use of coal decreased significantly in last 30 years in the European Union (nearly -60%) and is expected to further decrease in next 20 years to achieve decarbonization targets. Work on coal has much lower priority for us than other fuels.
Greece - Hellenic Statistical Authority	Not currently reported separately in PEFA accounts.
BPS-Statistics Indonesia	If such products has different conversion factor or emission factor from other types of coal, it is better to classify it in separate category in order to have more accurate data on energy content and GHG emission
Kazakhstan - Bureau of National statistics of the Agency for Strategic planning and reforms	It was our proposal to add concentrated coal. We tend to concentrated coal, since some producers use dry enrichment methods
Central statistical bureau of Latvia	There is no such products used in Latvia, so cannot comment on this issue.
State Data Agency (Statistics Lithuania)	Coal is not mined in our country, and the use of imported coal is low and continues to decrease.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - National Institute of Statistics and Geography	The classification of concentrated or washed carbon is suitable for its production function.
National Statistics Office of Mongolia	It is expected that washed coal will be produced in the future, so a category is required
Statistics Netherlands	In our opinion is washed coal, the same coal with a higher calorific value.
Statistics New Zealand	If there is a significant user/country need for a distinction of these in the classification then not opposed
Instituto Nacional de Estadística e	There is no coal information at that level of detail

Informática - INEI	
Swedish Energy Agency	The issue of concentrated coal or washed coal are not a mayor issue in Sweden but for harmonization and having same recommendation internationally then other states can have much more need for clarification of the item for that it is relevant to have same definitions.

6. Review the definitions of coal

Brazil - IBGE	Using the same HS criteria facilitates the treatment.
Statistics Canada	…and coal products by extension
Colombia - DANE	Regarding the question of whether this characteristic property of coal ("vitrinite mean random reflectance") should be maintained in its definition, we consider seeking alignment with a harmonized system as much as possible.
Cook Islands Statistics Office	comments as 1 and 2 above
Statistics Denmark	Coal is imported and is mainly used in power plants and some industries. These distinctions does not seem relevant for Denmark.
Dominican Republic - Oficina Nacional de Estadística	In process, through the project of implementation of the System of Environmental and Economic Accounting.
Eurostat	Use of coal decreased significantly in last 30 years in the European Union (nearly -60%) and is expected to further decrease in next 20 years to achieve decarbonization targets. Work on coal has much lower priority for us than other fuels.
Greece - Hellenic Statistical Authority	Not currently needed in PEFA accounts.
Kenya National Bureau of Statistics	Very important
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Department of Statistic Malaysia	Central Product Classification is sufficient enough
Mexico - INEGI	The definition is adequate to clearly define its functions as a product
National Statistics Office of Mongolia	SiEC coding should be complemented by CPC coding.
Statistics Netherlands	Coal will be out if use from 2030 on. It seems more appropriate to focus on new energy products.
Statistics New Zealand	But need to ensure consistency with the HS, ISIC and CPC. Not sure if there is value retaining the vitrinite mean random reflectance.
Swedish Energy Agency	The issue of reviewing definitions of coal is not a major issue in Sweden but for harmonization and having same recommendation internationally then other states can have much more need for clarification of the item for that it is relevant to have same definitions.
UNECE	It is worth noting that coal can also serve as a vital source of crucial raw materials that are necessary for the successful implementation of energy transitions.

7. Classification of oil shale and oil sands

Statistics Canada	Here also to consider products such as bitumen (especially crude vs diluted) and synthetic crude oil and how they can differ from other crude oil types and asphalt
Colombia - DANE	To provide a balanced structure of the classification, it should be available for review.
Cook Islands Statistics Office	comments as 1 and 2 above
Statistics Denmark	Oil shale and oil sands does not exist in Denmark
Statistics Estonia	Important for Estonia
Eurostat	Lower priority as production is very limited and is not expected to significantly increase in the future (current estimates).
Greece - Hellenic Statistical Authority	Both are currently reported under one PEFA code (P12).
Statistics Lithuania	Not used in our country
Department of Statistic Malaysia	SIEC is align with Central Product Classification
Mexico - INEGI	The oil shale presents a better classification defining a class where it would be grouped
Statistics Netherlands	Not relevant, we know it is very relevant in several countries, however having a section for this product is a bit too much. In general this product is transformed into an oil product early in the life cycle.
Statistics New Zealand	A balanced classification structure is not relevant - it is about ensuring the right categories at the right level(s) and not making default placeholder categories to fill a level just because it won't look balanced. The whole notion of statistical balance is a dated classification ideal
Swedish Energy Agency	The issue of oil shale and oil sands are not a major issue in Sweden but for harmonization and having same recommendation internationally then other states can have much more need for clarification of the item for that it is relevant to have same definitions.
UNECE	Similar to coal, shale and oil sands possess the potential to serve as a significant source of essential raw materials.

8. Classification of "wet gas"

Chile - Instituto Nacional de Estadísticas	Considering that this classifier aims to cover all products that are used for energy purposes, we consider it extremely important and very necessary to analyze the specification of the classification of wet gas, in this way, establish the differences with dry gas, in terms of its characteristics and uses. Added to the above, taking into account that CPC and Harmonized System (HS) do not identify them separately, it will be an advance in terms of facilitating and improving the experience of using the classifiers, both for users and producers of statistics (specialists and non-specialists).
Colombia - DANE	Given the importance that this product represents for our country, we consider that the SIEC needs to add clarity regarding the classification of this product.
Cook Islands Statistics Office	comments as 1 and 2 above
Statistics Denmark	Not used in the Danish energy system
Hungarian Energy and	Reporting burden would increase, no strong need for new product.

Public Utility Regulatory Authority	
Central Statistical bureau of Latvia	There is no such products used in Latvia, so cannot comment on this issue.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	The classification is correct and according to the CPC
Statistics Netherlands	Not relevant for us. However, it is a relevant issue. In fact wet gas is the real natural gas. We might seek the solution in that direction.
Statistics New Zealand	If there is sufficient demand to warrant separate inclusion then some form of clarity is needed but what is the need/demand from users for this
Swedish Energy Agency	The issue of oil wet gas is not a mayor issue in Sweden but for harmonization and having same recommendation internationally then other states can have much more need for clarification of the item for that it is relevant to have same definitions.

9. Distinction between liquefied and compressed natural gas

Brazil - IBGE	It can help identify gas compression and liquefaction services.
Statistics Canada	Clarify these products: natural gas liquids (NGLs) and Liquefied Petroleum Gases (LPGs)
Chile - Instituto Nacional de Estadísticas	The proposal to make the distinction between natural and compressed gas within the SIEC clear, specifying their definitions, seems very useful to us, taking into account the different uses and characteristics of these products, especially Compressed Natural Gas, which corresponds to a clean energy source that is currently being used as vehicle fuel.
Colombia - DANE	Given the exposed situation of the distinction between liquefied and compressed natural gas, we fully agree that it should be made explicit in the SIEC and its definitions clarified.
Cook Islands Statistics Office	comments as 1 and 2 above
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
Hungarian Energy and Public Utility Regulatory Authority	This would be useful for data collection purposes in the end-use sector.
BPS-Statistics Indonesia	Indonesia also produces LNG to facilitate the transport of natural gas via pipeline or other modes of transportation.
State Data Agency (Statistics Lithuania)	Data is already collected in accordance with EU legislation.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	For the application in National Accounts it is convenient to have it, in the classifier we do not notice it

Statistics Netherlands	LNG is very relevant to monitor and this a a real and seriously traded product. It differs form gaseous natural gas and in our system we distinguish gaseous, liquefied and compressed natural gas. The latter, CNG, was introduced when it came up as motor fuel, but is now no longer very relevant.
Statistics New Zealand	Yes this would be helpful
Swedish Energy Agency	Distinction between liquefied and compressed natural gas is quit important issue for Sweden.

10. District cooling as an energy product

Statistics Canada	Also, clarify steam and heated or cooled air or water used as energy
Colombia - DANE	Urban cooling as an energy product is new for us, and it is where we have the greatest interest in seeing it displayed in our country.
Cook Islands Statistics Office	comments as 1 and 2 above
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
Eurostat	We would like to further generalise this item towards "cooling/cold" in general and especially include cooling using renewable energy sources.
Greece - Hellenic Statistical Authority	Not currently reported a a district product in PEFA.
Kenya National Bureau of Statistics	We do not have this in Kenya
Central Statistical Bureau of Latvia	Districy cooling is not relevant in Latvia
State Data Agency (Statistics Lithuania)	Our country belongs to the cold climate zone.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Department of Statistic Malaysia	Could establish specific classification codes or subclasses which could include codes for energy input (e.g electricity, thermal energy) used in the production of chilled water and codes for energy outputs (eg. chilled water or cold air) delivered to buildings.
Mexico - INEGI	Applies because the concept is tinted for the country
Statistics Netherlands	The energy used for district cooling is relevant, in the way heating and cooling are energy use types. Cooling is not an energy product, since it does not carry energy. Ironically the cooling intends to carry away heat from places which are too hot. If this removed heat is used, then this is considered as ambient heat in our national statistical methodology.
Statistics New Zealand	Depends on the definition of what an energy product is - this seems an outcome of a process and for many countries not something that is used (as yet) - may not be worth including

Spain - Ministry for Ecological Transition and Demographic Challenge	Cooling is an increasing energy service but non an energy product, specially relevant for south Mediterranean countries. The purpose in the mid-term is to increase the share of RES in this services. The better it is characterized, the best will be monitored.
Sri Lanka Sustainable Energy Authority	Not yet provided in the country.
Swedish Energy Agency	Important to clarify district cooling due to market of cooling in electricity and heat is increasing.
UNECE	It is worth mentioning that the utilization of geothermal energy for district heating is currently experiencing an upward trend.

11. Industrial and municipal waste

Brazil - IBGE	It's positive the improvement of these definitions.
Statistics Canada	Should the type of waste by materials also need to be considered (plastic, paper, etc.)?
Chile - Instituto Nacional de Estadísticas	In the new version of CPC, changes are being considered in Division 39 "Waste or scrap" so that it is possible to facilitate the classification of information regarding these products. For this reason, and to improve harmonization between classifications, it is considered necessary to make improvements to the definitions of industrial waste, municipal waste and mixed waste, emphasizing the limits (in the improvement it could be taken into account to establish limits with the concepts waste and waste due to its similarity with the term waste) and clearly defining the link with the concepts of renewable and non-renewable energy, the above, added to the fact that at the national level, there is interest (government agencies that deal with environmental issues) in working statistics related to the generation and reuse of waste.
Colombia - DANE	Regarding the need to review these definitions to provide a clearer link with the concepts of renewable and non-renewable energy products. As part of the discussion, the inclusion of industrial waste from renewable energy in biofuels should also be reevaluated, we consider it extremely important, taking into account the work that is being carried out on all environmental issues.
Cook Islands Statistics Office	comments as 1 and 2 above
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
Eurostat	There are many classification issues and countries report this split is very difficult to establish.
Greece - Hellenic Statistical Authority	A clearer link with the concepts of renewable and non-renewable energy products in municipal waste should be considered.
India - Ministry of Statistics and Programme Implementation	Biodegradable organic component of Industrial and Municipal wastes are included under Biomass and energy recovered is classified under Bioenergy category

BPS-Statistics Indonesia	It is closely linked to the generation of electricity from waste incineration.
Kenya National Bureau of Statistics	Very important to Kenya
State Data Agency (Statistics Lithuania)	We are of the opinion, that there is no need to review definitions. They are clear and relevant.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Department of Statistic Malaysia	Developing specific and detailed classification codes or subclasses within the SIEC for different types of industrial and municipal waste can enhance the accuracy and granularity of waste classification for future purposes.
Mexico - INEGI	The concept is used for industries as well as regional waste
Statistics Netherlands	These products are relevant, however they are treated differently. Waste can be mixed products which are to be unraveled in fossil and renewable parts. This means that for e.g. municipal waste we have three products in our system (mixed/total, fossil and renewable municipal waste). For Eurostat and IEA we publish these separately. Industrial waste is now by definition fossil (not renewable). In practice it will be difficult to decide if a product is liquid biomass or liquid bio-waste. This means we support to reassess definitions and classification of industrial and municipal waste. Also relevant is to assess which energy products from waste are sold and thus relevant for CPC and which are only for own use.
Statistics New Zealand	Is a need for a clearer link with the concepts of renewable and non-renewable energy products. Is there comparative treatment of this topic with CPC/ISIC/EWC?
Spain - Ministry for Ecological Transition and Demographic Challenge	Yes. It Is relevant and more and more RES share in industrial residues should be gathering
Swedish Energy Agency	Important to clarify waste.
UNECE	The next two decades will be heavily focused on close-looped systems, hence

12. Breakdown of fuelwood, wood residues and by-products

Chile - Instituto Nacional de Estadísticas	We agree to improve this distinction, although in Chile one of the main sources of energy is firewood, there is interest in promoting other sources of energy derived from wood (pellets or other) whose energy potential is greater (also being advantageous in environmental terms), easier to transport, store and use.
Colombia - DANE	Aligning with the CPC, we consider that the distinction between primary raw wood products and those that are processed (for example, wood pellets and wood briquettes) should be reflected, given that their energy content may be substantially different.
Cook Islands Statistics Office	comments as 1 and 2 above
Statistics Denmark	DEA and SD divide in wood chip, firewood and waste wood
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
Eurostat	We already have some mandatory reporting in energy statistics for detailed supply of solid biofuels (biomass).
Greece - Hellenic Statistical Authority	Not currently reported separately in PEFA accounts.
India - Ministry of Statistics and Programme Implementation	All are classified as biomass including agro residues, under solid liquid and gaseous biofuels category. Chemicals and Biochemicals derived from biomass are green by products.
BPS-Statistics Indonesia	If such products has different conversion factor or emission factor, it is better to classify it into separate category in order to have more accurate data on energy contents and GHG emissions.
Kenya National Bureau of Statistics	Very important to Kenya
State Data Agency (Statistics Lithuania)	Primary wood and processed wood are accounted together in our country. It is always difficult to estimate the calorific value of fuel. If updated definitions would help in this, we would welcome it.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	Currently, SIEC Group 511 - Firewood,residues and wood by-products distinguishes between SIEC Class 5111 - Wood pellets and SIEC Class 5119 - Other firewood, residues and wood by-products. The question is whether the SIEC Group 511 breakdown should rather reflect the distinction between primary raw wood products and those that are processed (for example, wood pellets and wood briquettes), since their energy content can be substantially different. The data can be used within the Material Flow Account (CFM,by its Spanish acronym)
Statistics Netherlands	Currently in Europe a different subdivision of solid biomass is being used. It would be very helpful if there is one global classification. The European classification is better harmonized with the UN wood statistics (JFSQ and JWEE).
Statistics New Zealand	The distinction proposed may be too difficult to operationalise
Spain - Ministry for Ecological Transition and	Yes, this is becoming relevant. Synergies with other energy questionnaires (this would help to fill gaps).

Demographic Challenge	
Swedish Energy Agency	Mayor issue in Sweden important to have more breakdown of fuelwood, wood resudues and by-products.
UNECE	The importance of bioenergy is increasing, particularly the development of advanced biofuels made from waste and other materials.

13. Definitions of biofuels

Brazil - IBGE	We agree with an improvement in the definitions of liquid biofuels.
Chile - Instituto Nacional de Estadísticas	To more precisely analyze the products included in Division 52 “Liquid Biofuels”, it is necessary to update Classes 5210 “Biogasoline” and 5220 “Biodiesel”, in order to improve the conceptualization, in terms of the characteristics of the products. products, in addition, it would be useful to incorporate a list of products for each category. The above would allow, on the one hand, to identify the different products that comprise these classes and, on the other, make the link with CPC and the HS easier.
Colombia - DANE	Totally agree on the identification of the components of the substance as hydrogenated vegetable oil, bioethanol, biomethanol).
Cook Islands Statistics Office	comments as 1 and 2 above
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
Eurostat	Especially in the context of synthetic fuels, e-fuels and blending of products of different origin at the produciton phases.
BPS-Statistics Indonesia	It is relevant for the reporting of energy statistics and energy accounts as Indonesia also produces such products.
Kenya National Bureau of Statistics	Very important to Kenya
State Data Agency (Statistics Lithuania)	However, we have no opinion on updating the definitions.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	Biofuel definitions are largely based on the intended use of liquid biofuel. The question is whether the definitions of the classes in SIEC Division 52 - Liquid Biofuels can be revised to include a reference to product characteristics (e.g., substance component as hydrogenated vegetable oil, bioethanol, biomethanol). This would possibly facilitate the link between the SIEC and other product classifications. It can be used in the construction of the environmental Goods and Services Account (By SA, by its Spanish acronym), provided that the value of intermediate production and consumption is available in parallel
Statistics Netherlands	HVO could be added as product, together with FAME. HVO can be mixed with fossil diesel in higher proportion. Further, blended and pure products should be distinguished.
Statistics New Zealand	This needs review

Spain - Ministry for Ecological Transition and Demographic Challenge	The increasing variety of biofuels in the market needs to be accommodated in the classification. In addition, they should be classified in sich a way to allow easy interrelation with other products classificacion. As per liquid biofuels, it may NOT be a good idea to base the classification on substance components instead of uses, as it is based right now. In our opinion, the uses will not change but the composition can be very diverse depending on the raw material or fabrication processes, and if a concrete origin has not been included it could be wrongly classified as not bio. It will be necessary to include bio options for all the products that are not included nowadays (e.g. biopropane, which is already very relevant in Spain)
Swedish Energy Agency	Mayor issue in Sweden to have clear definitions of biofuels.
United Nations Economic Commission for Europe	It has been noted that a number of bioenergy sources are currently being made available for commercial use.

14. Classification of bio-methane

Brazil - IBGE	Since biomethane is obtained from the refining and processing of biogas, regardless of the origin (anaerobic fermentation or thermal processes), we don't see how to classify it in a single category in the SIEC.
Colombia - DANE	Given the importance of Biomethane, as an alternative renewable source of energy, we consider that it should be recognized. in addition to establishing uses.
Cook Islands Statistics Office	comments as 1 and 2 above
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
Hungarian Energy and Public Utility Regulatory Authority	Reporting burden would increase, no strong need for new product.
India - Ministry of Statistics and Programme Implementation	Biogas with 55-70% methane content as raw gaseous fuels; Compressed Biogas with 95% methane content. The biogas, which predominantly produce from degradable bio wastes such as agro industry, crop residues, animal waste, biodegradable organic component of market waste and Municiple waste etc considered as renewable biofuels.
BPS-Statistics Indonesia	It is relevant for the reporting of energy statistics and energy accounts in the future as currently the Government of Indonesia also promotes the development of bio-methane.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	Biomethane is methane produced by the fermentation of organic matter. Given its importance as an alternative renewable source of energy, the question is whether this product should be recognized by the SIEC. It can be used in the construction of the environmental goods and Services Account (BySA), provided that the value of intermediate production and consumption is available in parallel
Statistics Netherlands	We understand that bio-methane is biogas upgraded to the quality of the natural gas in the local gas grid. Therefore it seems relevant to reconsider the definition of natural gas. In our

	methodology a company produces biogas which is fed into the grid. After feeding in it is considered as natural gas. By then, natural gas is a blended product consisting of fossil and bio-methane. We do not think is is necessary to consider bio-methane as a separate product. And if so, it would fall under item 17 Breakdown of biogases. Currently we only consider biogas as an energy carrier in our system. This includes bio-methane. Maybe this would be sufficient in the global classification. Countries/regions could add subdivisions when appropriate.
Statistics New Zealand	As a fuel alternative this needs to be encapsulated in SIEC
Spain - Ministry for Ecological Transition and Demographic Challenge	Yes
Swedish Energy Agency	Important issue to have clear classification and definition of bio- methane.

15. Classification of synthetic fuels

World Customs Organization	Don't know, would need more information
Brazil - IBGE	The proposal to better reflect them in the classification according to the production process is adequate in order to distinguish them from renewable and non-renewable sources.
Statistics Canada	e.g., Synthetic crude oil from oil sands
Colombia - DANE	It is valid that synthetic fuels distinguish their production process, which leads to identifying between renewable and non-renewable.
Cook Islands Statistics Office	comments as 1 and 2 above
Statistics Denmark	There are plans of e-fuel production in the coming years.
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
BPS-Statistics Indonesia	It is relevant for the reporting of energy statistics and energy accounts in the future as Indonesia plans to produce synthetic fuel using its abundant coal stocks, as part of its energy diversification program.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	The classification of synthetic fuels into other hydrocarbons is correct
Statistics Netherlands	It seems relevant to add these on a high level. We think this high level synthetic fuel should be added after H2 and NH3 in the earlier mentioned source-independent secondary products. The problem will be that definitions are still in progress.
Statistics New Zealand	This might be a nice to have
Spain - Ministry for Ecological Transition and	The increasing variety of biofuels in the market needs to be accommodated in the classification. This is specially relevant for e-fuels in order to identify if they come from RES electricity or non-res electricity.

Demographic Challenge	
Sri Lanka Sustainable Energy Authority	Not yet used in the country.
Swedish Energy Agency	Important issue for Sweden to have principles, structure, definitions and concepts of synthetic fuels.

16. Classification of blending and mixed products

World Customs Organization	ETBE is considered a blended product, I don't understand this, it is a chemically defined substance.
Brazil - IBGE	We consider the proposal interesting, but the challenge would be to establish a criterion for this distinction. Predominance? Use?
Statistics Canada	Gasoline blending components for example; ethanol fuel to some extend; naphthas
Chile - Instituto Nacional de Estadísticas	We agree with the need to clarify the classification of combined or mixed energy products, mainly because these types of products tend to be on the border between one category or another, which makes the task of classification very complex. It is essential to advance in the approach of criteria or differences for this type of products, given that it will be a great advance in terms of product classifications in general, since also in CPC there are times when it becomes complex to be able to differentiate the border between a category and another when it refers to products that are "mixtures or mixtures."
Colombia - DANE	It is absolutely necessary to establish the classification of mixtures and mixed products.
Cook Islands Statistics Office	comments as 1 and 2 above
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
Eurostat	Especially in the context of synthetic fuels, e-fuels and blending of products of different origin at the production phases.
India - Ministry of Statistics and Programme Implementation	This can be done in consultation with the academic, technical and R&D institutions based on the feasibility/ adaptability, requirements and availability of produced biofuels with conventional fuels. For example (i) E1 to E100(gasoline blended with bioethanol) subscript number denotes volume % of bioethanol with gasoline. (ii) B1 to B100(diesel blended with biodiesel) subscript number denotes volume % of biodiesel with petroleum diesel.
Kenya National Bureau of Statistics	Important
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	The classification is correct
Statistics Netherlands	As said earlier we think it is helpful to have a section for blended and mixed products. In our country we have this section and we use this for observation purposes. For example gasoline

	is observed as a mixed product and it is also traded as a mixed product. Relevant is to decide whether pure fossil gasoline, or pure rebewale of course, should fit in this section.
Statistics New Zealand	This might be a nice to have
Spain - Ministry for Ecological Transition and Demographic Challenge	Yes, especially for the RES content. It is essential that it is very well defined which products, before blending, are classified as raw material or final product. For example, since the paper talks about ETBE or bioETBE: we suggest that oil questionnaires consider the to-blend product to come from the raw material balance, so that it is considered part of the product balance only once it is blended, and in the same line that the biofuels (biodiesel, biogasoline…). Having said that, we know that this procedure does not fit easily a real physical balance. This problem has been elevated to EUROSTAT, but no clear solution has been agreed yet.
Swedish Energy Agency	Important issue for Sweden to have principles, structure, definitions and concepts of blended and mixed products.
UNECE	Over the course of the next two decades, the utilization of hybrid systems is expected to increase significantly due to the demand for innovation climate projects.

17. Review the breakdown of biogases

Chile - Instituto Nacional de Estadísticas	Based on our experience, we know that new products (goods) frequently appear or emerge in the economy and users need to have guidelines to classify them correctly. Likewise, many products have special characteristics that are not explicitly described in the Gloss or in the explanatory notes, which provide characteristics and examples similar to the products in question. However, it is possible that some products (understood as goods) cannot be easily classified, so it is advisable to have a residual category, to be able to include and assign a coding to products that do not fit any of the categories previously defined in the classifier. Therefore, the incorporation of “gases such as those generated by the pulp and paper industry (mixture of methanol, hydrogen and other sulfur gases, often called odorous gases), could have a place in code 5319 “Other biogases”. of anaerobic fermentation. In both CPC2 and SA, regarding “Biogases” they are not so specific, that is, they do not provide that level of detail. Both classifiers only separate them into “Liquefied” or “in a gaseous state”. The first, in Subclasses 33410 “Propane and butane, liquids” and 33420 “Ethylene, propylene, butylene, butadiene and other petroleum gases or gaseous hydrocarbons, except natural gas”, and the second, places them in Subheading 2711.29 “The rest".
Colombia - DANE	In the classification, 5319 Other biogases from anaerobic fermentation should be addressed as residual and generally, and establish a category such as 5313 Other biogases from anaerobic fermentation.
Cook Islands Statistics Office	comments as 1 and 2 above
Dominican Republic - Oficina Nacional de Estadística	Future analysis, currently not available.
India - Ministry of Statistics and Programme Implementation	This can be done in consultation with the academic, technical and R&D institutions
BPS-Statistics Indonesia	It is relevant for the reporting of energy statistics and energy accounts as Indonesia also produces such products. If different types of biogas have significant differences in terms of

	energy contents and GHG emissions, then it is better to breakdown it in order to have more accurate data on energy content and GHG emission.
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Mexico - INEGI	It is adequate for its classification
Statistics Netherlands	We wonder if it is necessary to have a breakdown of biogases in SIEC. If it is deemed to be useful to make a subdivision of biogases (on regional level), this should be based on the properties of the product and not on the installation in which it is produced (e.g. pulp/paper industry or from landfills). This also relates to item 14, bio methane is in fact biogas which is produced and fed into the grid. Of course when making a breakdown, it is possible to consider biomethane as the first element in a breakdown of biogas, followed by bio-ethane and bio-propane and ending with 'other biogases' which are unspecified mixes.
Statistics New Zealand	Need to review Division 53
Spain - Ministry for Ecological Transition and Demographic Challenge	Yes, to accommodate the variety in the market.
Swedish Energy Agency	Important issue for Sweden to review the breakdown of biogases to get better principles, structure, definitions and concepts.

18. Overall review the classification of renewable energy products

Chile - Instituto Nacional de Estadísticas	It is a good proposal in SIEC to distinguish between electricity and heat from renewable and non-renewable energy, in order to be able to collect more detailed and relevant information to support the needs of users who work on issues related to the environment and climate change (the electrical matrix of Chile contemplates the separation between renewable and non-renewable: see >> https://bcn.cl/2ua8d#:~:text=In the primary energy matrix, and natural gas (16%), on the other hand, it would allow create an increasingly noticeable space for this type of products, which would lead to being able to produce more precise statistics on this topic.
Colombia - DANE	The statement is correct, in terms of distinguishing between renewable and non-renewable electricity and heat.
Cook Islands Statistics Office	comments as 1 and 2 above
Eurostat	We are obliged to start collecting information on renewable cooling based on the Directive for promotion of energy from renewable sources.
India - Ministry of Statistics and Programme Implementation	There are great relevance of overall classification of renewable energy products based on sources of origin.
BPS-Statistics Indonesia	It is relevant as Indonesia also utilizes renewable energy sources to generate electricity.
Kenya National Bureau of Statistics	Very important to Kenya.
State Data Agency	We fully agree that it is important and that more information is needed on the distinction between renewable and non-renewable electricity and heat.

(Statistics Lithuania)	
Malaysia - Energy Commission	For better and clearer understanding among our data providers and data users
Department of Statistic Malaysia	Periodically review and update these categories to account for emerging technologies and variations within each energy source.
Mexico - INEGI	It seems to us the right one for renewable energies
Statistics Netherlands	We think renewable sources for electricity, heat, hydrogen, ammonia etcetera should have an own section. For example wind power/energy or solar power/heat/energy. This distinction is very relevant to keep the SIEC relevant for making statistics on renewable energy. The current option is not suited, because this relates produced energy to a production method. It is difficult to explain why electricity produced from natural gas is a secondary product, while electricity produced from a wind turbine is primary electricity from wind.
Statistics New Zealand	Totally needs it for relevance and ensuring consistency for official statistics with other like frameworks and classifications
Spain - Ministry for Ecological Transition and Demographic Challenge	Overall yes.
Swedish Energy Agency	The overall review of classification, structure, definitions, concepts of renewable energy products is of importance in Sweden.
United Nations Economic Commission for Europe	At present, there is no universally recognized standard for categorizing renewable energy sources, with the exception of the United Nations Framework Classification for Resources (UNFC). It is crucial to harmonize the classification system for renewable energy under the SIEC with the UNFC.

Annex B – Complete Responses to Questions 5 through 9

Below are the complete relevant responses received on Questions 5 through 9, grouped by subject matter to the extent possible:

5. In your view, are there other issues that should be considered for the revision of SIEC?

Kenya National Bureau of Statistics
Yes. It would be important in future to consider fuelwood as renewable/un-renewable depending on the sustainability and efficiency of the cooking methods.

Lao Statistics Bureau
Electricity generated from different sources, thus should be classify electricity by sources

Food and Agriculture Organization of the United Nations
1.Indicate the source of energy products in the classification (especially in the case of bioenergy)
2.Conversion factors (mass/volume/energy content)

Chile - Instituto Nacional de Estadísticas
Taking into account the current electrical matrix of Chile and the interests (public and private) in disaggregating statistical information on this matter, at the lowest possible level, group 700 "Electricity" could be disaggregated according to the types of energy sources, for example, hydro, solar and wind

Spain - Ministry for Ecological Transition and Demographic Challenge
Hydrogen should begin to be treated as a differentiated energy product from other hydrocarbons in IRES and SIEC because there is hydrogen from fossil origins but also there is hydrogen from renewable energies.

IAEA
Hydrogen as energy carrier, storage technology but outside of SIEC. Better representation of electricity and power generation but outside of SIEC. Improvement in treating heat and cooling services. Introduction of energy "services" but outside of SIEC.

Statistics Canada / Centre for Statistical and Data Standards
-Clarify and define: light fuel oils
-What is the relevance of the broad category ‘Oils’ in SIEC? Why not start with the types of oils at the high level of the classification such as ‘crude oil or bitumen’ -which then can be split between how they are produced (conventional, non-conventional) – and 'refined petroleum products’, etc.?
-It could be interesting to clarify and define the various level of crude oils: light, medium, heavy, as well as products such as ‘pentane plus’ and 'lease condensate' along with other LPGS.
-Clarify and define ‘cofiring’ (related to electricity generation)
-Review classes 4300, 4400 and 4500 to make them more specific, considering also the CPC treatment of these products
-Are there new types of (more) efficient fuels, in particular in aviation?
-Is ‘stove oil’ part of SIEC?
-Clarify product 5230, compare to those also called ‘kerosene type aviation turbo fuel’ or ‘naphta type aviation turbo fuel’. Is 5230 excluded from 4661?
-Is charcoal in 5160 the same as ‘activated charcoal’ (sometimes classified with chemicals)?

Office of the U.S. Chief Statistician (OCSOTUS)
EIA has developed a nomenclature for a range of light hydrocarbons using the term hydrocarbon gas liquids or HGLs. The SIEC might benefit from consideration of this or similar treatment.

Statistics Netherlands (CBS)
The definition and subdivision of natural gas might be reconsidered. In fact the term natural gas is used for methane with a quality which is defined by the local grid operator. This can be confusing. Sometimes produced natural gas is named wet gas, as it contains e.g. ethane. Further it is transported as LNG. But when gasified it is transformed to the quality required for feeding into the local grid. As nowadays biogas is fed into the grid (in some countries called bio-methane) natural gas is in practice a blended product. The degree of physical blending is very relevant for energy statistics.

Department of Statistics Malaysia
Emerging energy technologies: The revision could consider advancements in renewable energy, energy storage, smart grid technologies, electric mobility and others related that can help capture contribution to the energy sector accurately.

Circular economy and energy transition: The revision could explore the intersection between energy classification and the concept of the circular economy which would involve energy recovery from waste, circular business models in the energy sector and resource efficiency measures that contribute to the energy transition.

Digitalization and energy data management: The revision could consider the impact of digitalization on energy systems and the associated data management challenges that reflect the role of digital technologies, data analytics and internet of things (IoT) in optimizing energy operations and enabling data driven decision making.

In addition, the revision of SIEC should take into consideration regarding the data collection on the ground, exploring possibilities of obtaining data from industries or data providers.

National Statistics Office of Mongolia
Low-income people/household generate heat energy by burning various types of garbage. Will it be used to generate energy? Which group do you belong to?

Sri Lanka Sustainable Energy Authority
Solar rooftop generation and onsite biogas generation by large number of users are creating issues for accurate reporting of both supply and end use. A formal approach is required to address these issues.

Samoa Bureau of Statistics
Consider how SIEC is simplified to be used by small island states economies. Definitions of biomass versus biofuels seem to confuse some other institutions

Statistics New Zealand
A clear maintenance plan for future updating and a clear implementation plan ie timeline for when international reporting against any new framework is required. Ensuring the revision speaks to the relationship between energy data and supply use proportions, and the quality of microdata for use in statistical compilation. Ensuring that any alignment with CPC doesn't undermine the link between the energy statistics and GHG inventory. Also having clarity on the relationship and interaction of SIEC within the wider SEEA framework. May also be useful to consider how SIEC can support presentation of joint data eg household consumption based emissions into changes in population, household expenditure per capita and the carbon footprint pre dollar of expenditure

India - Ministry of Statistics and Programme Implementation
The SIEC system is primarily based on two factors i.e. Gross Calorific Value (moist, ash free basis) and Vitrinite mean random reflectance. However, IS 770:2013 classification system is more elaborate and based on different factors such as Basic Parameters: Mean random reflectance, Volatile matter (dry mineral matter free basis, dmf) and Gross calorific value (dry mineral matter free basis, dmf) and Supplementary Parameters: Capacity moisture equilibrated at 96% relative humidity and 400 C; Gray King low temperature (GKLT) coke type; and Crucible swelling number (CSN). Hence, the classification system as per IS 770:2013 is more suitable for classifying Indian coals which are widely heterogeneous in nature.

Coking coal as defined in SIEC is purely based on functional usage i.e. for supporting blast furnace charge. However, as per IS 770:2013, coking coal is defined as per caking propensity and not on functional usage. GCV basis for SIEC system is on moist, ash free basis, however the same for IS 770:2013 is on dry mineral matter free basis, dmf basis. Hence, for SIEC classification of Indian coals, GCV on dry mineral matter free basis, dmf basis may be adopted.

Colombia - Departamento Administrativo Nacional de Estadísticas
We believe that all classifications related to the SIEC classifier must be aligned with the latest versions (S.A, CPC, among others).

Oman - National Center for Statistics and Information, Ministry of Energy and Mining
It need to be sure that links with SNA 2008

Malaysia - Energy Commission
The revision of SIEC should harmonize with CPC/HS codes.

Venezuela - Instituto Nacional de Estadísticas
Once the problems raised have been reviewed and analyzed, it is considered that the issues that must be addressed are included there, in order to have an updated SIEC, taking into account its relationship and harmonization with other product classifiers such as the CPC and SA. allowing more countries to take an interest in using the world

United Nations Economic Commission for Europe
Ensuring the proper alignment of the United Nations Framework Classification for Resources (UNFC) for Sustainable Infrastructure and Energy Coalition (SIEC) is of utmost importance. It is necessary to maintain consistency and accuracy in the classification of resources for sustainable development.

BPS-Statistics Indonesia
The harmonization between SIEC and IPCC. It would be helpful if there is a standard emission factor for each category of energy products listed in SIEC in order to make better estimate the GHG emission generated from the combustion of energy products.

Cook Islands Statistics Office
Training provided to country in the use of the classification

Eurostat
Technical issues linked to SDMX initiative from the perspective how codes should be structured (i.e. for technical reasons of some IT systems, do not start a code with a number, especially with zero - a letter as the first character is highly preferred).

Greece - Hellenic Statistical Authority
The Natural inputs variables (subcategories N01-N07) used in physical energy flow accounts (PEFA) should be considered in SIEC.
The revision of SIEC is very possible to affect the PEFA classification of rows and thus the related questionnaire.

6. Are there categories of SIEC that need new groups, classes, or subclasses?

Greece - Hellenic Statistical Authority
As reported above: 1) SIEC classification of electricity by various renewable energy products (hydro, wind, solar, biomass, etc) 2) categories of renewable and non-renewable energy products in municipal waste.

National Statistics Office of Mongolia
Can it be considered renewable energy? 7010-energy (conventional), 7020-energy (solar), 7030-energy (wind), 7040-energy (hydro), 7050-energy (diesel), and etc.

Palestinian Central Bureau of Statistics
Electricity generated by source

Swedish Energy Agency
Sweden thinks it is good that the breakdown of renewables. The harmonisation between SIEC and CPC have started.

Kenya National Bureau of Statistics
It is important to expand electricity to include electricity by technology; hydro, coal etc. It will be essential when calculating renewable energy indicators (probably as a sub-class of electricity).

Uruguay - Direccion de Energia
Yes, everything that refers to hydrogen, its origin, production process, generation of synthetic fuels, chemical transport, should be a whole new chapter in the SIEC.

IAEA
Hydrogen and other energy carriers.

State Statistics Service of Ukraine
In terms of production and usage of "green hydrogen" that should be classified as renewable energy sources

United Nations Economic Commission for Europe
Hydrogen, Waste (Anthropogenic Resources and Renewable Energy.

Statistics Netherlands
A lot of revision seems possible, we mentioned these above. We make this comment in general terms. A classification ideally starts with coal, oil and gas as section 0, 1 and 2. Then follow sections for renewable energy and other primary products. Next would follow source-independent secondary products (a.o. electricity and hydrogen). The above sections are pure in the sense that they do not contain mixed products (diesel including blended biodiesel). In a specific section mixed products could be classified. In general, we advise to keep SIEC a high level classification on the global level and only go in detail when necessary. This is for e.g. 'big' products for which harmonization is relevant. Detailed subdivisions could be left to regional/local classifications. In case harmonization with economic classifications are relevant, a more detailed breakdown is advised.

Eurostat
Hydrogen, ammonia, e-fuels, synthetic fuels, cold - those mentioned before in previous questions. For waste, the first level of split should be renewable and non-renewable and only afterwards a split between municipal and industrial.

Ghana - Energy Commission
Consider having subclasses for charcoal 5160 to include sources based on production type and sources

Venezuela - Instituto Nacional de Estadísticas
In the SIEC review process and in order to respond to the global query through the questionnaire sent, it suggests the following classification for Section 7 Electricity:

7 Electricity
71 Electricity from non-renewable primary source
711 Thermoelectric power plants

7111 Conventional cycle thermoelectric power plants
7112 Combined cycle power plants
712 Nuclear Power Plants
7120 Nuclear power plants
719 Other non-renewable primary source power plants
7190 Other non-renewable primary source power plants
72 Electricity from renewable primary source
721 Wind power
7210 Wind power
722 Solar energy
7220 Solar energy
723 Hydraulic power
7230 Hydraulic power
724 Tidal power
7240 Tidal power
725 Geothermal energy
725 Geothermal energy
729 Other renewable primary source electricity
7290 Geothermal energy
Section 8 Heat, like electricity, can be classified according to different production processes

Colombia - Departamento Administrativo Nacional de Estadísticas
In the case of section 7 Electricity and 8 Heat in the structure, the 4-digit class level is not evidenced.

Statistics Estonia
Yes. O4681 Fuel oil (low sulphur <1%); O4682 Fuel oil (high sulphur ?1%). Now 0,5% must be used and this change should also be reflected in the SIEC classification.

Statistics Canada / Centre for Statistical and Data Standards
4100 could be broken down by types of crude oils (light, medium, heavy crude oils); same for 4200/4630 by types of (dominant/prominent) mixes; 4652 could be broken down by types of motor gasoline (premium, mid-grade, regular) if relevant for SIEC main intent; 5210 can be broken down by types (ethanol, biomethanol…)

India - Ministry of Statistics and Programme Implementation
In 4680, Fuel oil, further classification based on Sulphur content is required. Similarly in Bio-gases (531), classification based on percentage of CO2/CO will be required in future. Classification on origin required in electricity based on Renewables or fossil fuels.

Different Renewable Energy Forms such as bioenergy, solar, wind and hydropower groups may be separated.

The purpose of SIEC is to cover all products necessary to provide a comprehensive picture of the production, transformation and consumption of energy throughout an economy. In this regard, as far as coal products are concerned, as of now, the groups, classes and sub classes of SIEC are sufficient for the aforementioned purpose. Since, Indian coals are very heterogeneous in nature, following class and sub classes may be considered for addition in SIEC:

Sub class under coking coal:

Code	Description	Parameter
0121a	Strongly to medium caking	Vitrinite reflectance: 0.85-1.40
0121b	Weakly caking	Vitrinite reflectance: 0.65-0.84 or Vitrinite reflectance 1.41-1.79

In addition, one additional class under group Bituminous coal i.e. High sulphur coal may be added for Indian coals i.e. Bituminous coal having Sulphur more than 1%.

Malaysia - Energy Commission
Maybe on natural gas transformation process such as LNG, FLNG, RGT and etc.

Statistics Austria
Biogases, electricity, heat, other fuels n.e.c.

National Statistical Committee of the Republic of Belarus
Yes. Detailing of electric and thermal energy into primary and secondary products.

Food and Agriculture Organization of the United Nations
Yes. Solid biofuels (51)

Hungarian Energy and Public Utility Regulatory Authority
Yes. We recommend a separate code for SRF and RDF within Wastes.

Statistics New Zealand
Critical issue is to ensure that the terminology used in the category labels and definition is globally representative and not Eurocentric or overly technical - to assist in implementation in developing countries. Being aware of what are the new and emerging products and providing a minimum of future proofing needs consideration

Jordan - Department of Statistics
classification of the energy account

7. In your view, are there categories in SIEC that are now obsolete?

Eurostat
From European perspective and current trends, coal categories are too detailed. Future reporting in the EU might be reduced to the Division level of current SIEC, to maintain the optimal cost-benefit ratio for energy statistics (expected further significant decrease in quantities). However, we are fully aware that from the global perspective, reductions on the class level are not desirable.

Spain - Ministry for Ecological Transition and Demographic Challenge
In some countries, the leaving of coal as an energy source may lead to the disappearance of certain coal products. In the future, and as long as the economy moves towards its decarbonization, it may be necessary to retire the most polluting coal products such as, for example, lignites.

Peru - Instituto Nacional de Estadística e Informática
Yes. In our country, the kerosene product has been prohibited for sale since 2009, according to Supreme Decree N° 045-2009-EM.

Statistics Netherlands
With peat and peat products there might be obsolete products when harmonizing with CPC and HS. Further there are a lot of opportunities to lower the number of divisions under section 4 Oil and maybe also under 5 Biofuels.

8. Are there any modifications or adaptations to SIEC that your country has made to facilitate the collection of energy data in your country?

Chile - Instituto Nacional de Estadísticas

In Chile, there is the national energy and electricity matrix, which allows the compilation and publication of energy statistics. Available at: https://bcn.cl/2ua8d#:~:text=In the primary energy matrix, and natural gas (16%). Government portal for statistical data, indicators, maps, legal regulations, studies and web applications for the energy sector: http://energiaabierta.cl/

Statistics Estonia
Yes. More detailed R5110 is used

Eurostat
A new SIEC Section/Division/Group elements for non-combustible categories of renewables were added: hydro, wind, solar, geothermal, ambient heat and specific methodologies applies to them. For example, wind energy can be only used to produce electricity and is equal to the gross electricity production. Eurostat can present details of its approach in the future Task Team meetings.

Malaysia - Energy Commission
Yes, for example Gasoline. In our country we have RON95 and RON 97.

Statistics Netherlands
Yes, we mentioned these above under questions 3 and 4. These adaptations are too many to mention here. Of course we are willing to share our list of energy carriers.

Russian Federation - Federal State Statistics Service
Yes, there are. For statistical observation, the local code "Biofuel" is included in the departmental directory of product codes.

State Statistics Service of Ukraine
The Classification of industrial products has been employed. It is harmonized with the EU Statistical classification of products by type of economic activity (CPA1, ver.2.1) and is based on the list of industrial products for the EU (PRODCOM1) and takes into account the energy products according to SIEC

Uruguay - Direccion de Energia
Yes, electricity generation by origin, identifying type of producer.

Vietnam - General Statistics Office
Yes. Using ISIC, CPA, HS to collect energy data

Angola - National Statistics Office
Yes there are, we will present this in new reference year of national accounts who will be carried out at the end of this year

National Statistical Committee of the Republic of Belarus
Yes. Adaptation to SIEC based on national circumstances.

India - Ministry of Statistics and Programme Implementation
Yes. Self-developed codes are used for data collection & analysis

Italy – ISTAT
In Istat Environmental Accounting, energy products classification used in the PEFA context is consistent with the SIEC-IEA/Eurostat international classifications. In this context, adaptations were made at the EU level. Istat did not introduce country-specific adaptations or modifications.

9. Do you have any additional comments?

Statistics Austria
The harmonization between SIEC and the CPC, which is now under revision, too, should be improved. The classifications criteria for SIEC should be revised. The definition of an "energy product" should be checked in time of climate change.

Brazil – IBGE
We highlight the importance of convergence between international classifications and that although the SIEC is a product classification, it is important that it is also articulated with the economic activity classification (ISIC).
Questions involving the definitions of:
- Industrial and municipal waste
- Breakdown of fuelwood, wood residues and by-products
- Definitions of biofuels
- Classification of bio-methane
- Classification of synthetic fuels
- Classification of blending and mixed products
- Review the breakdown of biogases
- Overall review the classification of renewable energy products has impacts on the review of economic activities and the definition of new economic activities such as, for example, the manufacture of solid fuels from plant biomass; manufacture of biofuels; electricity generation from renewable and non-renewable sources; and energy recovery from waste.

Vietnam - General Statistics Office
In the new version of SIEC, it is better if there is the correspondence between SIEC, CPC, CPA and HS

India - Ministry of Statistics and Programme Implementation
In India coal is classified as per IS770:2013. A concordance between IS770 and SIEC is attached.

Jordan – Department of Statistics
We need to classify green workers, vital renewable energy, in terms of gender

Malaysia - Energy Commission
SIEC is a good reference for us in order to develop energy balance. However, when it comes for trade statistics from Customs Department, it sometimes give confusion and misunderstanding. Clear and harmonize definition description will much needed.

UNCECE
Conducting a horizon scanning is absolutely crucial to anticipate potential developments that may occur in the next two decades. According to UNECE, three key factors stand out: closed loop system, intelligent resource management, and innovation in hybrid systems and the discovery of new materials. These factors must be taken into consideration to ensure preparedness for the future.

Uruguay - Direccion de Energia
To achieve a good product, it is necessary to have experts from the energy information systems of regions-countries, trying to have the participation of representatives of the different energy systems that exist in the world and not leaving a very biased view.

Statistics New Zealand
This response does not include input from our external partners as their input was not received in time.
What correspondences will be established to other classifications eg HS, CPC, ISIC, and will SIEC have an alphabetic or coding index supplied with it?

Eurostat
Eurostat is member of TT-SIEC and will make its comments during the Task Team meetings.

Statistical Office of the Republic of Serbia
SORS is in charge of implementing Regulation 1099/2008 and all its amendments. In this regard, we fully follow the instructions and recommendations of Eurostat.
National Energy Balances and Five Joint Annual Questionnaires that are transmitted to Eurostat are fully complied with the Eurostat methodology (Regulation 1099/2008) which is coherent with the International Recommendations for Energy Statistics (IRES) adopted by the United Nations Statistical Commission in 2011. The methodology for constructing energy balances is also coherent with IRES.
Classification of energy products (commodities/carriers) within the Regulation 1099/2008 is in general highly consistent with the UN's International Recommendations for Energy Statistics (especially its chapter 3: "Standard International Energy Product Classification" SIEC).

Italy – ISTAT
Istat full comment to question 3: Istat mainly uses a national version of the CPA (Classification of Products by Activity) which is the official product classification by activity of the European Union consistent with the CPC (Central Product Classification). Concerning SIEC, in Istat it is used only indirectly. For example, in Environmental Accounting, as part of the production of the Physical Energy Flow Account (PEFA), a specific classification of energy flows (natural energy inputs, energy products, energy residues) is used. The part relating to energy products is consistent with the SIEC-IEA/Eurostat international classifications (these international classifications, that do not consider natural energy inputs and energy residues, are perfectly consistent and compatible; there are only some differences on the level of disaggregation/aggregation of some energy products). PEFA manual includes bridging tables between PEFA-IEA/Eurostat-SIEC energy product codes (PEFA labels are closely aligned with SIEC ones). In the context of energy residues, only the part relating to waste can be connected with the SIEC one.

Chile - Instituto Nacional de Estadísticas
For new queries related to the SIEC classification, it is recommended to also send directly to the Chilean Ministry of Energy: contactoweb@minenergia.cl

Dominican Republic - Oficina Nacional de Estadística
1.This response contains information from the National Energy Commission, but the National Statistics Office does not directly use the classifier, but cooperates.
2. The Electricity Superintendency and the Coordinating Body do not use this information.
3. It is important to consider for countries with less development in the implementation of statistical standards to contemplate a training program that allows strengthening capacities from basic to advanced level.

Peru - Instituto Nacional de Estadística e Informática
It is suggested that on another occasion the questionnaire is also addressed to the sectoral entity, which in our country is the Ministry of Energy and Mines, the entity in charge of compiling statistics on energy products from mining and hydrocarbons.

Greece - Hellenic Statistical Authority
The above views concern exclusively the PEFA, which are compiled by the National Statistical Institute (ELSTAT) and the respective primary data source is Energy Statistics.
Energy Statistics and the respective data collection are performed by another Institution which is the Ministry of Environment and Energy of Greece.

Czech statistical office
We would like to inform you that we do not directly use SIEC in our institutions as we are bound by EU regulations and therefore we use classifications approved and agreed by Eurostat and IEA/OECD/UNECE, which are in many respects compatible with SIEC.

As we understand the main purpose of the SIEC and the need to periodically review, revise and harmonise it to improve comparability of data across countries, we have indicated issues that are also relevant to us in the Part 2 of your questionnaire.

Colombia - Departamento Administrativo Nacional de Estadísticas
We consider important the work that the UN has been doing.