

# **[Draft] minutes of the 2018 InterEnerStat Meeting:** 2 – 3 October 2018, Union internationale des Chemins de fer, 16 rue Jean Rey, 75015 Paris

#### Opening session

Chair: Duncan Millard (International Energy Agency)

Duncan opened the meeting which aims to find ways to enhance cooperation and to improve data quality and consistency.

#### Session 1: Regional/organizational priorities for energy statistics top 3 priorities Chair: Duncan Millard (International Energy Agency)

This session aimed to get an understanding of the needs for future developments in energy data from all partners, to help understanding of similarities and differences, and to identify areas for additional cooperation on methodologies etc. The priorities for all organisations are listed in Annex A.

#### **Conclusions:**

Although many areas were raised, an overall summary of common themes were: (1) Timeliness of inputs and outputs; (2) Quality (accuracy, completeness, consistency); (3) Country capability and resources; and (4) Specific topics, EE, DC, Prices, Off grid energy (5) Adaptability and modernization

### Session 2: Taking forward work on energy efficiency, including the G20 End Use data Initiative

Chair: Edito Barcelona (APEC)

**Roberta Quadrelli (IEA),** started with a presentation on IEA work on end use data availability and activity, including providing an update on the G20 Energy End Use data Initiative. This work had shown that the services sector is the least covered in many countries, although often the

main consuming sector is transport. Countries were requesting more training and workshops, and information/ good practice sharing.

Additionally Roberta updated all on the IEA's work with Africa, through Afrec, both in terms of training – with efficiency data integrated with balances – and the work on the design of new end use collection template, based on the IEA's but with greater detail on biomass and the possibility of entering qualitative information.

**Goichi Komori, APERC.** APEC started collecting energy efficiency data in 2017, and there was a need to improve completeness and quality of those. To do so, APEC participated in two training sessions organised by the IEA in 2018, in Beijing and Jakarta.

**Marek Sturc, Eurostat,** explained that the Household data collection methodology is now completed and questionnaires have been adapted to the sector needs. Industry end use data collections are now being finalized. For transport and services, two task forces are considering how to disaggregate the data further. For industry, the first data collection is planned on voluntary basis for 2019, and the first publication in 2020. JRC were starting a project in 2019 to explore synergies in activity and energy data (efficiency).

#### Key points in the discussion included:

As data are also obtained by many public services, how can organizations help countries to promote data sharing?

Can 'big data' from ICT companies (eg google data on transport) be used? The G20 initiative had to consider new technology to get data. How representative was 'big data', particularly across countries where ownership levels of different technologies differed and it was noted that in Canada, the use of GPS data is being piloted. Smart meters are an interesting example. However data protection concerns led people to not share their data, leading data that was shared to be less representative.

Eurostat would be developing indicators from energy data provided to unit E5 and activity data collected by other parts of the organization, given issues on data comparability and many discussions in countries on data sharing, the group requested feedback on the work as it progressed.

This lead to ensuring that official energy data stay relevant in the digital era (covered in a later session)? The competition with other potential statistics providers is a concern (Google, Facebook, Apple,...)

#### **Conclusions:**

There had been progress since InterEnerStat 2016, but it will take time and there remains a significant need to share best practices across countries on what has (and what hasn't worked). There were lessons to be learned from deriving indicators using data from different sources and domains beyond energy. Focus on the potential for big data for end-use data, (support or credibility challenge) but also the need for accessing administrative activity data; future role of energy statistics with emerging technologies.

#### Session 3: IRES, dissemination updates

#### Chair: Andrii Gritsevskyi (IAEA)

**Céline Rouquette (IEA,** also presenting on behalf of **UNSD)** reminded participants of the origins of IRES and its importance for improving the quality of data collection and energy statistics. She then described how its translation to key languages (Official UN languages) can contribute to the promotion of IRES. More specifically, it has already been translated in Arabic, the translation to Chinese, French and Russian is a work-in-progress by the IEA and there is also an unofficial Spanish translation to be delivered and reviewed to the Oslo group. The White Cover compilers manual is also available, with no translations yet.

#### Key points from the discussion

All organisations were using and promoting the benefits of IRES to their members and welcomed work on the translations. Specifically the **Chair (IAEA)** felt that the mapping between the codes used for statistical reporting was of paramount importance, which had to be promoted by aligning the coding and definitions between organisations. He thanked the IEA for pushing through using IRES which is a good starting point. Also mentioned that the "Compiler's Manual" needs to be translated into other languages and asked for volunteer's given the budget limitations. **Eurostat** added that the SDMX codes used by Eurostat and the IEA are based on SIEC classification

**IEA** noted that as IRES is UN endorsed meaning it can be used anywhere in the world. The Compiler's Manual is online which makes it adaptable and easily accessible; the translations can be done piece-by-piece depending on the main areas of interest and agreed to work with UN to agree to coordinate the process after the translations of IRES were complete.

**GECF** offered to assist with the Spanish, Arabic, Russian and French translation depending on time and effort; it was clarified that there were no time constraints.

**IPCC** queried IEA about the Energy Statistics Manual and IEA responded that they are updating it – currently in draft stage – but that it probably would not be printed.

**IRENA** also mentions IRES in their training events. They queried about the Glossary and whether it can be put on the InterEnerStat website. **IEA** clarified that they are open to share it once first draft is ready (version English – French).

**Eurostat** suggested that the glossary could be aligned with the EU regulation's terms because all EU regulation is translated into every other official EU language. They are keen to achieve consistency.

**IEA** advised the glossary will help with the translation of technical terms. Its production started as a help to translators who might not be familiar with technical terms. IEA is happy to share and build up together with InterEnerStat members.

#### **Conclusions:**

All welcomed progress on printing and translations, and all looking to promote IRES. Agreed IEA would look to coordinate translations of ESCM – offers to help and fine to do in parts, agreement that best kept as a web only manual.

Interest in the French glossary the IEA had produced, could other languages be added – will be circulated to all and put on IES webpage; future glossaries will consider existing sources (e.g. official translation of Energy regulation; other manuals, etc).

## Session 4: New data challenges and statistical reporting, how can we work on guidance for areas alongside IRES

Chair: Andrii Gritsevskyi (IAEA)

- **1)** Adrian Whiteman (IRENA) presented on various challenges related to measuring and reporting renewable energy data, such as:
  - the increase of off-grid power generation/auto-production (particularly solar PV)
  - the measuring/estimation of traditional bioenergy (i.e. fuelwood)
  - the treatment of primary renewable energy
  - the different treatment of hybrid plants between IEA and IRENA
  - the approach on decommissioning, which is related to plant capacity

He emphasised the need to produce estimation/modelling methods aligned between the agencies, for the cases where there are no surveys.

#### Discussion

**Chair (IAEA):** Mentioned certain examples from the IRES and recommendations, especially with respect to biodiesel definition which does say, in the most recent version, that it is fuel used in a diesel engine. SIEC as umbrella, organisations allowed to go towards more disaggregation. Chair invites IRENA to lead the way here if wanted. Also possible to integrate examples on solid biofuels NCVs (which are usually very heterogeneous so difficult to quantify) if available from IRENA.

**Eurostat:** Expressed concern about revising definitions which might lead to statistics revision due to the interests of policy makers (compliance with schemes and EU targets), especially for renewables. **IEA:** Agreed on the need to acquire aligned estimation/modelling methods and shared IRENA's concerns on the issues related to capacity, generation data needed to represent actual supply of electricity.

2) Edito Barcelona (APERC): Presented on the challenges on District Cooling, which acquires increasing importance in certain APEC countries. He believes that District Cooling should be considered a separate energy product, where in some countries it is part of the district heating whereas in others is not included at all.

#### Discussion

**Eurostat** and **IEA** mentioned that they have not resolved how to include district cooling in the balances (examples of hypothetical cases were mentioned), but would be happy to consider ideas. Challenges also because of active, passive and semi active systems that create challenges in data reporting. **APERC** will continue work on district cooling and share with InterEnerStat members.

**3)** Céline Rouquette (IEA) gave an overview of estimation techniques, covering the reasons why there might be gaps in data collection and the ways to cover these gaps by estimation, in general and with specific examples. It was also mentioned that since the countries are reluctant to use estimation techniques, organisations should consider whether to harmonise and provide best practices on them or not.

#### Discussion

**IRENA** is about to publish documentation with standard assumptions and procedures and eager to engage with organisations and countries.

**Chair** suggests putting this on the agenda of the next Oslo Group discussion.

**Eurostat** advised that the EU legal framework had been helpful in producing results for EU countries, but focuses on the outputs and not the process/methods. Estimation techniques and best practices should be recommendations only; EU cannot oblige countries to use them.

**IEA** reminded colleagues that IRES are recommendations in order to help, and not to force countries, with a range of techniques and stressed that the preferred method should always be proper data collection and estimations should be considered a last resort. IEA would be happy to coordinate work on guidance on estimation perhaps a 10-15 page guide on techniques to help countries across the world and welcomed the engagement of partners in the work.

**GECF** elaborated on details regarding the sources for estimations' base data and techniques on time series, asking IEA to give more detail on how the source for estimations was selected. IEA always tries first to have official data. If this is not possible, in case of data gaps for example, secondary sources like Cedigaz (for gas/lng), IEA colleagues in OMR, UNSD, and economic data are used. Estimates are intermediate solutions, and are adapted to the country, on an ad-hoc basis.

4) Leonardo Souza (UNSD) presented an update on Oslo Group activities, and how challenging it is to continue the work of the group.

#### Discussion

**Eurostat** and **UNSD** discussed the average size of city groups and what enlarging the Oslo group could mean. **UNSD** commenting that the London Group for example is much larger than OG. If enlarging OG, one would reach out to all countries that might be interested. **IAEA** commented on problems with long-term engagement of countries. At the start of OG, there were many countries, now mainly developed countries remaining.

**IRENA** asked about decisions of the statistics commission, problems with no country volunteering to chair OG and what will happen next. **UNSD** commented that they try to warn countries that they should act as otherwise the group might be terminated. The time to act is in the next couple of years.

**IEA** had financially supported two countries attending OG through EU4energy and discussed with Belarus as potential host for next meeting. OG, when it started, was indeed a representative group of countries with different levels of statistics, but now with no African country represented, it has shifted. The challenge was funding.

**Eurostat, UNSD and IEA** discussed the best way to help. Organisations could send emails to members to inform and ask who would have the resources to finance further development of OG. **Eurostat** proposed a webstream for observers and underlined good results achieved by the group in the past which is why it should be kept alive.

**5) Marek Sturc (Eurostat)** made a presentation that highlighted a list of issues and concerns on potential grey areas, like how the international trade and stocks reporting has been affected by liberalisation, ambient heat in non-renewable heating and cooling, blending of renewable and non-renewable fuels, conceptual borders for non-combustible fuels etc.

At the end, he recommended the starting of updating/complementing the IRES in order to address some of the questions, which concern current/future developments, because it usually takes time between the various stages in that process.

#### Discussion

**Chair (IAEA)** recognised that energy boundaries are moving, but this is not a priority for the Oslo Group.

**IEA** questioned when the right time to update IRES is and how it can be complemented in the short term. Potentially SIEC could be disaggregated in the short term. However main priority is considered the wider adoption of the IRES by countries.

**UNSD** answered that the easiest way would be through the statistics commission, mandated by the Oslo Group and that work on update should start now, as approval is not needed to start the material preparation. **IEA** and **UNSD** commented that together organisations could publish material alongside IRES, which would give first arguments for revising. **Eurostat** underlined importance to have the approval of the Commission, which is easy to get if Oslo Group approval is acquired.

**IRENA** emphasised that IRES needs to remain conceptually sound and meaningful, as well as neutral to politically driven motivations.

**UNSD with the IEA** agreed to look more closely into the procedure for revision.

**6)** Julian Prime (IEA) presented on Hydrogen. How H<sub>2</sub> is currently produced (i.e. Coal gasification with CCS, Electrolysis) and used (i.e. Transport) worldwide and mentioned the emerging questions on where to be inserted in a balance, whether it should be treated as a separate commodity (if it's going to be big) and whether a group should be formed to provide guidelines on H<sub>2</sub> reporting.

#### Discussion

**Chair (IAEA)** recalled that in the previous InterEnerStat colleagues agreed to separate it, but it's difficult since quantities are small. For now it is treated as other hydrocarbons. **APEC** queried the electrolysis and felt that treating H<sub>2</sub> as primary energy is tricky given the <100% overall efficiency. **Eurostat** stated that as H<sub>2</sub> and E-Gas have less than 20% efficiency and should be treated similarly in a conceptual thinking, unlike Oil and Gas because it's energy transformation. The argument of negligibility might not be valid as bio-jet-kerosene also is in the balances whilst small.

**Chair** recalled that, for now, most common sources for hydrogen production is steam reforming of natural gas.

**IEF commented that**  $H_2$  is both Storage and Commodity, which will grow in relevance in the coming years. It seems more relevant to include hydrogen than bio-jet-kerosene for IEF. **IRENA** questioned whether  $H_2$  should be counted as renewable fuel/energy and pointed to the Power-to-Liquid technology that will grow with use of intermittent renewable sources. **IEA** felt that inclusion of  $H_2$  in the Balances requires a lot of conceptual work. All countries that wish to report hydrogen should do it in a consistent manner. But currently, the majority of the hydrogen is not consumed in as energy.

**GECF** and **UNEP** asked questions regarding the expectations and forecasted increase. **Chair** and **JP (IEA)** mentioned studies on projections that are available. For around 6 countries have come to IEA with questions about hydrogen so it is expected to get more questions.

A key question was the expectation of growth of Hydrogen and the forthcoming IEA report should help to provide an indication of growth in medium and longer term.

**7) Roberta Quadrelli (IEA)** presented on Energy Efficiency and tools to support the relevant indicators. These are not included in the IRES now, even though they are fundamental statistics and essential for policy makers.

#### Discussion

**Eurostat** recommended that in the long term, we should have IRES for Energy Indicators. He also mentioned that Energy & Environmental Accounts use slightly different approaches in their indicators. **OLADE** discussed the set of 19 indicators they had developed, for example about Access, Affordability etc. **GECF** referred to new innovative data sources, like big data and how organisations can be engaged with these for indicator purposes.

**IEA** mentioned that since there is no IRES on indicators, they would be happy to share their material and respectively to use other's material, so that we can use first what is available and then go forward. The **Chair** commented on certain issues related to the use of materials (i.e. attributions).

#### **Conclusions:**

Measurement of renewables – challenges Auto production/off grid, Estimation (turning numbers and official data into official energy statistics), Measurement – new fuels NCVs

District cooling: APEC to continue to explore data needs and availability with members and keep all informed. But strategic questions on treatment of cooling in energy balances to be addressed collectively

Countries requests for estimation techniques: IEA to take forward reflecting the requests from countries and the importance to stress that in absence of proper data, estimation is OK as a short term solution. IRENA and others happy to contribute – possible a short manual/database of practices

Data challenges from Eurostat: very interesting review of issues around energy data, all raising own challenges. General view, work needed to embed IRES globally, whilst work should proceed on looking at issues surrounding new energy technologies

Hydrogen – recognition that use is developing, but how much energy. IEA report being produced for G20 should help understand likely take up for energy use and thus need to develop methodology. Could introduction lead to mis-reporting of non-energy use of H. Benefit in monitoring take up and common approach.

Energy Efficiency – agreement to promote maximum use of existing help to countries, sharing manuals and training

Update on Oslo group – city groups being reformed, and OG has adapted with new plans. Participation is falling and lacking longer-term chair. Partners agreed to help push with members and distribute survey on behalf of the group

IRES – a request to update to IRES needs to be approved by the UNSC and proposed by countries (OG). But work can start to look at possible updates, as discussed in the session. IEA and UNSD would take forward, others keen to be updated with progress.

#### Session: 5 Training and capacity building cooperation update

#### Chair: David Delgado (OLADE)

1) Axelle Julin (IEA) presented the work undertaken on training and capacity building with countries all over the world. This has been intensified after 2015 with the decision for further cooperation between organisations. Training activities have also contributed to the building of trust between the countries statistical authorities and the organisations.

#### Discussion

**Chair (OLADE)** felt that capacity building was the way to put knowledge in a dynamic framework, especially in the context of high turnover of staff in countries. Face to face training - and having resources for it - is important. **IPCC** informed about their contribution to UNFCCC training events, which focus primarily on emission estimation of CO<sub>2</sub> and other greenhouse

gases (not on energy statistics *per se*); however the training promotes the idea of compilation and use of energy balances by countries, as good emissions statistics need good energy statistics as a basis. **IAEA** mentioned that they use IEA and Eurostat's material and social media and **GECF** queried about social media use and interaction. **Eurostat** made a distinction between the expert and broader audience, and prefers to focus on expert audience. In social media interactions, competition is broader with a lot of different content, whilst training material is more focused to expert audience. **IEF** disagreed about the distinction between expert and wider audience, as the number of downloads seems to indicate that the general public, not only the expert community, is interested. They also commented that in the Chinese translation of webinars made by IEA, traditional Chinese characters - which are used mainly in Chinese Taipeihad been used. This would be checked by the **IEA** with their Chinese translator. **IEA** had carried out an evaluation of training studies and are happy to share the measurements.

2) Claire Morel (IEA) presented the work carried out in the context of EU4Energy, which brings together statisticians, energy users and policy divisions. Training events have been focused on elements that will exceed the program's lifetime (like JODI). Infographics and other material created in the context of the program was presented, as well as efforts to convince policy makers on the usefulness of surveys and data collections.

#### Discussion

**Chair (OLADE)** commented that it would be interesting also to provide training to data journalists, as they had problems with media interpretation of energy data. **Claire (IEA)** answered that this region is very specific, as it has a strong statistical background, so the training needed is less on data but more on energy. In general, the challenge of training people outside of offices to understand data is important.

**IAEA** stated its good experience of working together with the IEA, and the useful loop between statisticians and policy makers. **IEF** expressed some concerns about the long-term effect of the workshops, namely how much of the capacity gradually disappears after trainings and that for that reason it is very important to convince governments on why to collect data, and to share it with organisations. **GECF** mentioned that they have participated in the meetings in Odessa and that helped them with their networking. "Seizing the hype" created by workshops and trainings is important for the long-term duration of the positive cooperation.

**Chair (OLADE)** raised the importance of these workshops/meetings because there is also exchange of ideas, peer review, and peer pressure between the participating countries to improve. Capacity building is a way to self-regulate the way countries submit data.

#### **Conclusions:**

All welcomed process to enhance cooperation and coordination since 2015.

Planning timetable now established and would be updated quarterly via request from IEA/IRENA.

IEA impact report of training to be redone just to focus on stats and sent to all.

Strong support for work on EU4E data project – real evidence of the impact of capacity building and benefits of material in own country language.

#### Session 6: Engaging countries to provide data

*Chair:* Leonardo Souza (UNSD)

**Fuad AlZayer (IEF) presented** on how they had worked with JODI reporting countries to provide good data. He explained that countries provide monthly data to the JODI Partner organization, which are then transferred to IEF to fill in the data base. This leads to an engagement with policy makers, data providers and data users. Extensive engagement is maintained through meeting, events (during G20 for example), conferences, trainings and capacity building, and an online platform. The workshops are organized as much as possible in conjunction with other events happening at the same place, to make the travel worth it for participants.

The challenges identified were:

- Confidentiality, political pressure.
- Lack of human and financial resources to submit on time for the countries.
- Lack of regulatory framework.

**OLADE's** presentation highlighted the difficulties faced in organizing meetings with focal points from 27 member states. Those members have a lot of diversity in term of statistical means. Publications have been made on SDG and Energy efficiency, and events organized to promote energy planning, with hope to put pressure on data providers.

The biggest issue faced was staff turnover; new teams need to start again from scratch for their energy data collection system. There is a need for strong policy makers engagement for good data. For example, in Bolivia, the ministry was split into two, but OLADE has only one focal point for all the data, when sectoral focal points seem more effective. One good point is the start of National Information Systems to enhance data collection in several countries.

#### Discussion

**IEA** mentioned re-commitment of countries to harmonize with IRES as a ministerial decision. **GECF** commented on the importance of knowing how the data is used to convince countries to send data and asked **IEF** if they have access to this data. **IEF** agreed on this and mentioned they have an infographic brochure and downloadable manuals available. They are happy to share with JODI partners and InterEnerStat members.

**IEF** asked OLADE about ways to help member countries to introduce a legal framework for data collection, as they face these issues too. **OLADE** answered that they have started their project in five Caribbean countries. The first workshop was held in August with all stakeholders (utilities, refineries, and customs) and OLADE presented the importance of having an energy information committee. This is not legally binding but aims are that the group will help exchange on information each stakeholder can provide to authorities, and in which timeframe. Also encourage countries to hold one meeting per year with these stakeholders.

**IEA** commented that they have the same situation with many countries they work with where limited legal framework and poor connections between ministries, and raised the question on how international organizations can do more to raise the importance of energy data. **APEC** commented that they do not have mandatory data reporting which causes problems, so they try to engage and discuss in various meetings, at various levels. **UNSD** face similar issues with focal points being in statistical offices but statistics compiled in ministries poor communication between these stakeholders.

#### **Conclusions:**

Whilst challenging in many countries (due to lack of statistical framework, poor interaction between ministries, no legislation, high turn-over of staff, etc), organizations should work to enhance visibility and use of data, seek ministerial mandates to produce data (as OLADE plan to achieve), briefing senior officials and showcasing the value of data. These can all help countries to see the value in having comprehensive energy data.

### Session 7: Enhancing data timeliness through Digitalization and achieving access to data

#### Chair: Duncan Millard (IEA)

The chair started the session by emphasizing the importance of digitalization of energy statistics which was highlighted in the recent *Energy Transition in G20 Countries* report, that had been sent to all partners <u>https://webstore.iea.org/energy-transitions-in-g20-countries-energy-data-transparency-and-markets-digitalisation</u>

Julian Prime (IEA) gave a presentation on the impacts of digitalization on data flows.

The chair commented it was important to engage countries to make them realize the importance of digitalization, but recognized this task is challenging. He mentioned digitalization technology, such as smart-meters, will certainly benefit energy statistics.

**Energy Community Secretariat** commented that all data on High Voltage (HV) level from EU and Energy Community countries are available for small time intervals, and also accessible by the public on the "ENTSO-E transparency platform". All Transmission system operators (TSOs) obliged to publish aggregated forecast and actual commercial and physical flows, generation, load and peak demand data. She put an emphasis that all the data is out there and available.

**IRENA** mentioned that Bangladesh had introduced a solar home system with digital wallets to enable people to sell electricity to neighbors by using block-chain technology. IRENA expressed interest in big data in the hope that it will solve problems such as net metering from solar panels.

**IEF** mentioned introducing block-chain technology into the energy sector is straightforward and doable as long as the money is involved. He stressed the role of organizations in setting the rules before countries establish local technologies and approaches.

**Eurostat** expressed interest in the digitalization of energy statistics, mentioning China as a good example of digitalization, since China more or less started energy data collection with computers from the beginning, whereas many countries that have used "pen and pencil" from a long time ago can be resistant to the new change. He then stressed the role of international organizations, which we should put more efforts to convince those countries in regards to how to disseminate and process data on a digital basis.

**GECF** agreed that digitalization is important. The issue of "how" and "when" this change should be made was raised, recognizing that time is short. The possibility of replacing current regular questionnaires was suggested, together with action from International organizations.

**Julian Prime (IEA)** suggested that as international organizations, we should constantly encourage countries, rather than forcing them to do so. He also pointed out that we need to ensure the same quality and accuracy of the data when digitalization is introduced. With respect to replacing the regular questionnaires, he agreed with the idea but it still requires data validation process through the data expert before publication.

As a closing comment, the chair added that the real challenge is how we make countries be aware of what's going on, and benefit from digitalization. He then highlighted the necessity of international organizations' continuous efforts on the digitalization.

#### **Conclusions:**

There was considerable interest in the topic, with awareness of the potential benefits and risks (as energy data was likely to become more dispersed). Concern was expressed at the lack of awareness in countries where systems are not being adapted. Organizations need to continue to raise awareness and ensure that official energy data remain complete, relevant and timely.

### Session 8: Work by organizations to reduce burden on countries whilst ensuring international data comparability

Chair: Dr. Roberto Arenas Lara (GECF)

The chair started the session with a concern that not all questionnaires have the same definitions or collect the same figures.

1) OLADE gave a presentation on strengthening cooperation, and shared its experience on implementing a harmonized methodology to Latin America Countries (LAC), with the support of the IEA. In addition to working with 5 Caribbean countries, OLADE now works with another 10 islands that didn't have their own energy information structure due to its simple energy flow. OLADE supports them in providing a national energy information system based on the harmonized methodology. OLADE find it easier to start from the scratch as it is more difficult to convince countries to modify their old methodology. He said that after political mandate to adopt new methodology is achieved, OLADE expects to work with more countries in the future. The pilot countries will help OLADE to understand how to manage this transition more efficiently.

In response to the chair's question of whether block-chain technology is introduced into the harmonized methodology, **OLADE** answered that this new platform is not related to the block-chain yet but will be included as a certification process in the future.

**IPCC** asked if the information on the presented energy matrixes is publically available. **OLADE** answered it is 'work in progress', but were willing to share it as an unofficial product. OLADE aims to harmonize the different methodologies used in each country and welcomes advice from other organizations.

**UNSD** welcomed the new initiative by OLADE and asked OLADE to disseminate IRES to LAC.

#### 2) Edito Barcelona (APERC) gave a presentation on reducing burdens.

**GECF** commented that measures APEC were taking had made good progress for Chile and Mexico, who used to have some issues submitting energy statistics.

3) Leonardo Souza (UNSD) presented on the UNSD perspective to reduce burdens on countries and a proposal that can be summarized as involving all the international organizations collecting energy data from particular groups of countries in any joint questionnaires and data collection initiatives targeting such groups. This way, countries will have fewer energy questionnaires to fill. GECF wanted to clarify from which side of burden is dealt with and added that it is not only the burden to the countries that submit the data but also the burden to the international organizations (e.g. Different people filling the form, managing workshop, capacity building, etc)

**IEA** mentioned that despite the effort that international organizations are making, problems in dealing with some countries still exist. In this context, he suggested promoting IRES even further at international meetings. **Eurostat** noted that harmonization and comparability was a focus for them. They requested other organizations commitment and involvement in data compilation and collection processes.

#### **Conclusions:**

There was significant on going collaboration and cooperation between partners to enhance comparability of data based around IRES. However challenges remained, with different formats of data collection templates, linked to countries own data systems which were not updated. Work could proceed on looking at a global common standard, which needs to be balanced with work to ensure that countries are all reporting harmonised data.

### Session 9: SDMX – update on work by IEA and Eurostat and steps towards an international agreed specification

Chair: Adrian Whiteman (IRENA)

**Marek Sturc (Eurostat)** and **Stève Gervais (IEA)** presented on the potential of SDMX for collecting Energy Statistics. They discussed the first version of Data Structure Definition and invited peer organizations to contribute to the SDMX implementation strategy.

#### Discussion

The participants appreciated the work presented by the Eurostat and IEA and enquired about slowing down implementation to avoid future inconsistencies that could arise; examples given included the range of country codes (UNSD) and building a global Energy Statistics SDMX standard only around a limited set of questionnaires currently in use (IAEA). The desire to be more closely involved was also expressed (GECF).

The chair and presenters reminded participants that Eurostat/IEA had followed the plan set out in the previous two IES meetings.

The presenters clarified that the SDMX version should be treated as a first draft. IES members were asked to comment and review the Data Structure Definition and participate in elaborating an SDMX implementation strategy. **EUROSTAT** presented some of their ideas implementation strategy would; for example, include deadlines of when to start accepting SDMX submissions by countries but also when these would then become compulsory.

SDMX for dissemination is a lower priority, which required additional elements and a new Data Structure Definition for dissemination; however these did not seem to pose any issues.

#### **Conclusions:**

There had been good progress towards a new standard. To be global, a broader consultation was needed (e.g. use of M49 country classification) Eurostat invited organizations wanting to participate in future work in this area to indicate it (by end January). An indicative date of March 2019 was given for comments on the draft DSD. EUROSTAT would share the headings for the idea of the implementation strategy by the same time, to allow much further discussion to identify which, if any areas organisations would be able to work on. Potential links with broader areas beyond energy statistics needed to be investigated.

#### Session 10: Data sharing of published data with other organizations and redissemination rules (copyright) Chair: Duncan Millard (IEA)

Chair: Duncan Millard (IEA)

**Marek Sturc (Eurostat)** and **Yuichiro Torikata (IEF)** made presentations covering comparability, data user needs, and whether republishing data was desirable.

#### Discussion

The roundtable showcased the great variety of practices in terms of free or sold data, rights to re-use and make profits, etc. There are issues with visibility (credit for the work) but also accountability, especially with private data redistributors and enforcement of copyrights. In particular there is a value of being able to identify the origin of a given data. Digitalisation (blockchain) can be a solution to issues of data sharing. Simple copyright rules and republishing significant indexed aggregates e.g. TPES, TFC and very specialized unambiguous series would be beneficial. Eurostat proposed to conduct a survey to assess whether organisations are ready to share and how.

#### **Conclusions:**

There are different practices in terms of free or sold data, rights to re-use and make profits, etc. Particular issues with visibility and accountability, especially with private data redistributors; there is a value of being able to identify the origin of a given data. Digitalisation (blockchain) can be solution to issues of data sharing. Proposed survey to see if organisations are ready to share and how.

#### Session 11: AoB and Discussion and Conclusions

Chair: Duncan Millard (IEA)

1) Elvira Sumalinog (IEA) presented the world prices database and invited members to contribute in expanding the coverage.

#### Discussion

Partner organisations appreciated the work on IEA's prices database and offered to exchange data or contacts' information offline.

#### **Conclusions:**

All were reminded of actions from the 2015 and 2016 meetings to compare their energy balance with IRES and document differences. The need to redesign the IRES webpage is on the to-do list. The Chair went through initial conclusions of the meeting, now elaborated in these minutes.

The meeting ended with closing remarks from Paul **Simons (IEA Deputy Executive Director)** who thanked the participants and stressed the importance and progress made via the IES platform.

#### Organisations priorities for enhancing energy statistics

#### APEC

1 – Improving historical consistency and accuracy for annual energy balance.

2 – Improving the collection of energy efficiency indicators in non-OECD member countries.

3 – Collecting district cooling data and inclusion of those data in annual energy balance.

#### Eurostat

1 – Improving all dimensions of quality (Relevance, Accessibility, timeliness & punctuality, Accuracy & coherence).

2 – Improving efficiency of statistics production (SDMX, ESS-VIP, Automation).

#### GECF

- 1 Work on capacity building.
- 2 Improve the process.
- 3 Statistical techniques.
- 4 Superior decisions.

#### IEA

1 – Raise the importance and need of energy statistics and monitoring as a means of securing in country resources.

2 – Quality (consistency comprehensiveness, comparability, accuracy).

- 3 Timeliness.
- 4 Timely adaptability and modernisation

#### OLADE

- 1 Harmonisation of energy balance methodologies.
- 2 Development of energy prices consolidation.
- 3 Support countries to reinforce its institutional and legal framework.
- 4 Support countries to enhance their data processing environment.
- 5 Development of new modules in OLADE's energy data collection system (sieLAC).

#### UNSD

1 – Strengthen and support countries energy data collection systems.

2 – Increase international data comparability.

3 – Compile and disseminate global energy statistics (note, on December 9<sup>th</sup>: review of the new recommendations open online).

#### IPCC

1 – Methodological improvement in terms of Greenhouse gases emission in Energy Sector.

2 – Improvement of default emission factors for fugitive emissions and methane emissions.

#### IRENA

1 – Capturing data (improving data collection beyond the grid, which is not recorded now).

- 2 Measure renewable (conversion factors).
- 3 Estimations improvement (especially in non-member countries)

#### **REN21**

1 – Get data on renewable energy access distribution.

2 - Tracking RES data

#### **UN Climate change**

1 - Quality of data (new set of guidelines coming for transparency in COP24).

2 – Tracking NDCs.