

Operationalising sustainability in TOSSD

TOSSD Task Force Issues Paper¹ - Agenda item 6

11th meeting of the International TOSSD Task Force

Virtual meeting, 06-09 October 2020

I. BACKGROUND

1. The objective of the TOSSD statistical framework is to track officially supported resources to promote the sustainable development of developing countries. The focus on sustainability is one of the most distinctive characteristics of TOSSD. The TOSSD Reporting Instructions rely on the sustainable development definition first used in the Brundtland Report² and explicitly link the TOSSD framework with the support to the Sustainable Development Goals.

2. The Reporting Instructions approach the compliance with sustainability from three angles: i) adherence to global and regional standards; ii) contribution to SDG targets and identification of possible detrimental effects; and iii) adoption of mitigation measures. The Task Force has expressed desire to translate these principles into practical guidance on eligibility, also to ensure uniformity of the reported data. Indeed, the TOSSD data survey carried out in 20219 showed that reporters had made different interpretations of the existing Reporting Instructions, leading to some heterogeneity particularly in the treatment of activities in the energy sector.

3. A first discussion on how to operationalise the sustainability criteria took place at the Task Force meeting organised in Pretoria in February 2020. The Task Force agreed on the principle of public disclosure of the Environmental and Social Safeguards (ESS) applied by TOSSD reporters³, and asked the Secretariat to further develop the methodology to operationalise sustainability, taking also into account the "lessons learnt" from the 2019 data survey.

4. This note proposes approaches to operationalise the sustainability criteria for discussion at the 11th Task Force meeting, starting with activities affecting climate change and the environment. Section II recalls, for ease of reference, how sustainability is approached in the TOSSD Reporting Instructions. Section III takes the example of the energy sector to analyse additional possible sustainability criteria, first discussing the contribution of the energy sector to global greenhouse gases (GHG) emissions, and then analysing the sustainability of various energy technologies. Section IV proposes alternative ways to identify and treat activities that raise sustainability concerns.

¹ Jointly drafted by Giorgio Gualberti (<u>Giorgio.Gualberti@oecd.org</u>) and Julia Benn (<u>Julia.Benn@oecd.org</u>). ² See: TOSSD reporting instructions: <u>http://www.oecd.org/dac/tossd/TOSSD%20Reporting%20Instructions</u> <u>February%202020.pdf</u>

³ See: <u>http://www.oecd.org/dac/tossd/2020-04-20-10th-TOSSD-TF-Meeting-Action-Point.pdf</u>

II. CONCEPT OF SUSTAINABILITY IN THE TOSSD REPORTING INSTRUCTIONS

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5. The TOSSD Reporting Instructions approach compliance with sustainability from three angles: i) adherence to global and regional standards; ii) contribution to SDG targets and identification of possible detrimental effects; and iii) adoption of mitigation measures. The relevant sections of the preamble, the TOSSD definition and the eligibility criteria are shown below (underlining added).

5. In line with the inherent thrust of the SDGs – to promote a more sustainable, equitable and prosperous world for all people – this statistical framework assumes that <u>all resources</u> captured therein comply with prevailing global and regional, economic, environmental and social standards and disciplines, as well as development co-operation effectiveness principles. These safeguards ensure that TOSSD-eligible investments are sustainable, promote equal opportunities and rights, guard against negative environmental, social and climate impacts and risks, and – where necessary – limit damage through mitigation measures. [...] [Preamble]

10. The concept of "Sustainable Development" is defined as development that meets the needs of the present <u>without compromising the ability of future generations to meet their own needs</u>. [Section 1.1. definition of TOSSD]

11. "Sustainable Development" in the TOSSD context is inherently linked to the Sustainable Development Goals as agreed in the 2030 Agenda. Activities recorded as TOSSD support the implementation of the SDGs by generating sustainable economic growth, ensuring social inclusion, without compromising the environment. [...] [Section 1.1. definition of TOSSD]

47. In the context of TOSSD, an activity is deemed to support sustainable development if it directly contributes to at least one of the SDG targets as identified in the official list of SDG targets developed and maintained by the United Nations Statistical Commission (UNSC) and <u>if</u> no substantial detrimental effect is anticipated on one or more of the other targets. [Section 2.2.1 – Eligibility criteria regarding sustainable development]

III. ENVIRONMENTAL SUSTAINABILITY OF TOSSD ACTIVITIES

6. The TOSSD Task Force asked the Secretariat to operationalise the TOSSD sustainability criteria, focusing in particular on environmental sustainability⁴. Within the broader context of environmental sustainability, this note focuses on the contributions of TOSSD activities to climate change, for three sets of reasons: 1) climate change is a global challenge, which is a central to the 2030 Agenda, 2) there is a standardised metric to measure the contribution to climate change (GhGs emissions) and 3) all human activities have to a certain extent an impact on climate change.

7. The energy sector is the sector that most contributes to human-caused greenhouse gases. According to the World Resources Institute⁵, it accounted for 76% of the world emissions in 2016, including the energy for the production of electricity and heat (30%), transportation (16%),

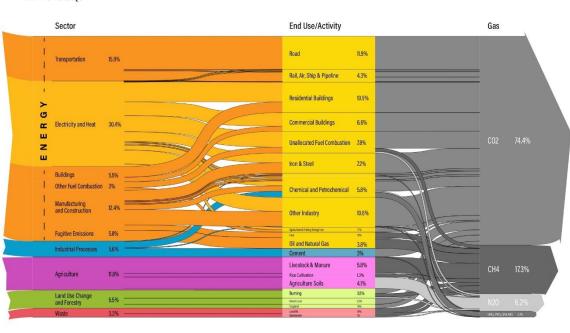
⁴ See: <u>http://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/9th-</u> <u>TOSSD-TF-Meeting-%20Action-Points.pdf</u>

⁵ See WRI - <u>https://www.wri.org/blog/2020/02/greenhouse-gas-emissions-by-country-sector</u>



manufacturing and construction (12%) and other subsectors. Other sectors with major GHGs emissions are agriculture (12%) and land use change and forestry (6%) (Fig 1.).

Figure 1 - World Greenhouse Gas emissions in 2016 by sector, end use and gas. Source WRI.



World Greenhouse Gas Emissions in 2016 $_{\rm Total:\ 49.4\ GtCO_2 e}$

♦ WORLD RESOURCES INSTITUTE

8. The sustainability of the energy sector activities is of fundamental importance to attain simultaneously SDG7 on sustainable energy for all and SDG13 on climate change. Developing countries are rapidly expanding both energy consumption and energy access, building infrastructures and energy systems that are destined to last for the next two-three decades. Rapid population expansion and rapid urbanisation, in particular in Africa, are creating new challenges and opportunities to achieve sustainable energy for all. Therefore, it is critical that new investments in developing countries simultaneously pursue SDG7 and SDG13, avoiding whenever possible a long-term commitment in carbon intensive infrastructures.

9. In their responses to the TOSSD data survey, data reporters made different interpretations of the sustainability criteria. Examples of activities considered non-sustainable by certain respondents to the survey, but not by others, included:

- Non-renewable energy (coal-fired, oil-fired and natural gas-fired electric power plants)
- Nuclear energy
- Mineral resources and mining gas and oil.

Source: Greenhouse gas emissions on Climate Watch. Available at: https://www.climatewatchdata.org

10. The TOSSD data survey captured large volumes of funding for non-renewable energy projects. Comparing the additional resources captured in TOSSD with those currently captured in international development finance statistics shows that the share of non-renewable sources is much higher in the former (67%) than the latter (18%)⁶. While the survey responses might not be representative of TOSSD flows (and pending the results of the first comprehensive data collection), such a high share of non-renewable energy projects is challenging to reconcile with the explicit focus on sustainability of TOSSD.

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11. While assessing the overall sustainability of a single project is a complex exercise, the contribution to climate change of the different energy technologies is well understood. A Lifecycle analysis of GHGs emissions (so including construction, decommissioning and supply chain emissions) clearly shows that the current commercial fossil fuel generation technologies are incompatible with the objective of taking urgent action to combat climate change and its impacts, contained in the SDG 13. Figure 2 compares lifecycle GHGs emissions and generation costs of different energy technologies. The figure showcases that there is sharp difference in the emission patterns between some common fossil fuels (FFs) technologies (the three at the top) and renewable energy sources (RES) (all the others), but also that generation costs were, at the time of the analysis (2014), comparable.

12. In the last decade, renewable energies experienced a sharp cost decline, and are today a costeffective alternative to fossil fuels generation. Between 2010 and 2019, solar photovoltaic (PV) generation costs decreased 83% and onshore wind 39% (Fig.3). In 2019, utility scale PV has been auctioned at prices up to 20% cheaper than coal-fired power plants⁷. Although local conditions, needs and prices vary, the overall market for renewable energies has been improving rapidly to a point where, in many cases, RES have become also the most affordable technology on a purely commercial basis. This makes official support to fossil fuels even less likely to be sustainable and justifiable.

⁶ See: Lessons learnt from the 2019 Total official support for sustainable development

⁽TOSSD) data survey - par. 5.1

⁷ See: IRENA – Renewable Power Generation Costs in 2019. <u>https://irena.org/-/media/Files/IRENA/Agency/</u> <u>Publication/2020/Jun/IRENA_Costs_2019_EN.pdf?la=en&hash=BFAAB4DD2A14EDA7329946F9C3BDA9CD806C</u> <u>1A8A</u>

Figure 2 - Specific direct and lifecycle emissions (gCO2eq / kWh) and levelised cost of electricity (LCOE in USD2010 / MWh) for various power-generating technologies. Source IPCC 2014 - Contribution of Working Group III to the Fifth Assessment Report⁸. (The red line represents the global energy intensity in 2010, the chart edited to include only commercial technologies).

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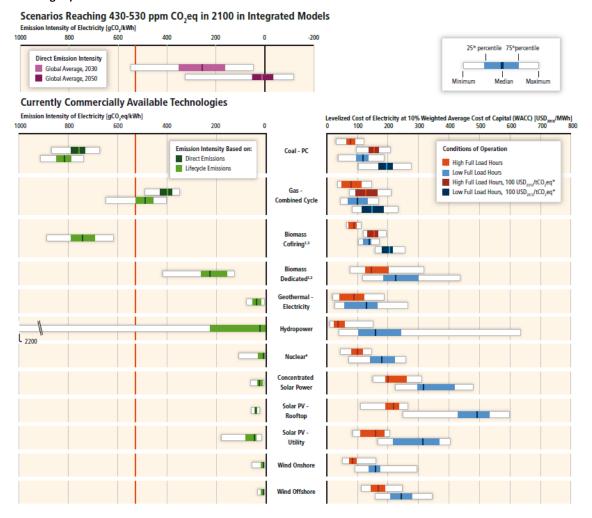
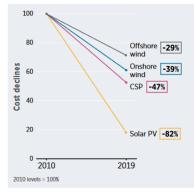


Figure 3 - Renewable power technologies. Costs reduction from 2010. Source IRENA – Renewable Power Generation Costs in 2019.



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13. When assessing the sustainability of energy projects, it is useful to distinguish between greenfield and brownfield operations. Greenfield investments in fossil-fuel technologies are

⁸ https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter7.pdf

investments in new energy infrastructure (e.g. a new power plant, a new gas pipeline etc.) which typically lead to an increase in GHGs emissions. Brownfield investments are investments in an existing infrastructure, which in certain cases could lead to measurable GHGs reductions (e.g. a retrofit of a power plant to lower-carbon fuel). Investments in lower-carbon technologies are considered "climate finance" by the Multilateral Development Banks common principles on climate mitigation finance tracking⁹ and also eligible to be marked with the Rio marker on climate change mitigation in the OECD-CRS statistical system¹⁰.

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14. Investments in energy infrastructure, can normally be directly linked to either positive or negative effects on SDG13. In practice, this means that while activities in other sectors (e.g. health or education) might be relatively "SDG13-neutral", activities in the energy sector either directly contribute to attaining SDG13, or are detrimental to SDG13.

15. In some cases, there are no viable alternatives to fossil fuel projects. For example, the transport sector is still almost completely powered by fossil fuels. While sustainable transport solutions are possible on land, for air transport and maritime transport there are no commercial alternatives to fossil fuels. Even for power and heat production, by far the sectors where renewable energies are more competitive, local circumstances may restrict the choice of technologies available. For example, in emergencies, the speed of deployment is often the primary concern, and diesel-fuelled emergency power units could be set up extremely quickly almost anywhere.

16. Often, both renewable and non-renewable energy technologies are viable options, in particular to generate electricity and heat. Technology choices result from thoughtful decisions by project developers, which take into account many factors such as fixed and recurring costs, environmental concerns, energy security issues, characteristics of the energy system (such as national grid, mini-grids or stand-alone systems), local factors including energy policies, regulations and political factors, and type of financing (such as commercial finance, domestic public finance or international development finance). Most International Financing Institutions developed sets of environmental and social safeguards (ESS), as well as internal procedures and guidelines that favour the development of environmentally sound technologies, when feasible. For example, the World Bank ESS states that:

[...] the Borrower will consider alternatives and implement technically and financially feasible and cost-effective options to avoid or minimize project-related air emissions [...]¹¹

In other words, if renewable energies are feasible (technically, financially and economically), then they should be favoured, even if they are not the least-cost option.

⁹ See: <u>https://www.eib.org/attachments/documents/mdb_idfc_mitigation_common_principles_en.pdf</u>. The document is currently under revision.

¹⁰ See: <u>https://www.oecd.org/dac/environment-development/Revised%20climate%20marker%20handbook_</u> <u>FINAL.pdf</u>

¹¹ See: The World Bank Environmental and Social Framework (2017), para.15: <u>http://pubdocs.worldbank.org/en/837721522762050108/Environmental-and-Social-Framework.pdf#page=53</u> <u>&zoom=80</u>

17. Summing up, in order to make further progress on the definition of environmental sustainability in TOSSD, it is advised to initially focus on how TOSSD activities are contributing to climate change, in particular energy-sector activities, which are responsible for over three quarters of the world emissions. Possible principles for including or excluding these activities in TOSSD are outlined below:

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- Make a distinction between greenfield and brownfield fossil-fuel investments.
- In principle, do not consider greenfield fossil-fuels activities sustainable, as they could have a substantially detrimental effect on SDG13, unless viable alternatives do not exist, which should be demonstrated.

- Brownfield fossil fuels investments could be considered sustainable if they aim at, and lead to, measurable emissions reductions.
- Renewable energy technology does not necessarily need to be the "least-cost" option to be considered viable. Rather, TOSSD activities should pursue the objective of avoiding or minimising project emissions, through viable technological choices, rather than pursuing immediate costs-savings at the expense of future generations.

IV. OPTIONS FOR DISCUSSION

- 18. Operationalising the concept of sustainability implies two steps:
 - a) Establishing a methodology to help identify which projects should be considered as potentially unsustainable.
 - b) Establishing what to do with the activities considered as such.

19. The Secretariat prepared a paper with the lessons learnt from the data survey that outlined the following four options to identify potentially unsustainable activities, commented here below.

- i. Option 1: Maintain a case-by-case assessment, by the providing institution. This option is the default method in TOSSD, which is a statistical framework that is based on the data reported by the provider institutions. Any further guidance on how to operationalise the sustainability concept in TOSSD does not substitute itself to the assessment made by data providers, but rather supports it with tools and guidelines.
- ii. Option 2: Compile a whitelist or a blacklist of activities.
 Activities included in the list would not need to be excluded by default, but rather would need a justification by the data provider that they respect the TOSSD eligibility criteria.
- iii. Option 3: Allow recipient countries to "flag" activities they consider unsustainable, for example linked to the contents of the Nationally Determined Contributions and Needs Assessment reported by these countries to the UNFCCC.

This option reverses the flow of information of TOSSD, asking recipient countries to provide feedback on the data reported by providing parties. Although the assessment of the recipient country is ultimately a crucial element in development finance activities, in principle the agreement of national authorities is assured at the project preparation stage. Large investments projects need to be approved by the national government and regulatory bodies.

Asking countries to flag unsustainable projects could represent a challenge, for several reasons that include the difficulty of setting up a comprehensive data collection of the feedback by developing countries, and the fact that countries might be reluctant to report approved activities as unsustainable.

- Option 4: Measure sustainability as progress by individual providers vis-à-vis a baseline (e.g. the first reporting year), taking the energy mix of providers' project portfolio as a yardstick. This option is interesting too from the point of view of data analysts, in particular when sufficiently long time-series will be available. However, on a year-to-year basis, the ratio between renewable and non-renewable energy investments could present large fluctuations due to few capital-intensive energy infrastructure being committed and disbursed. Thus the concrete implementation of this option as a statistical tool appears challenging.
- v. Option 5: A combination of option (i) case-by-case assessment and (ii) whitelist/blacklist.

This could work as follows:

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- Data providers are invited to consider greenfield activities in high GHGs emitting sectors (contained in the "greylist" in table 1) as unsustainable, if lower carbon-solutions are feasible and cost effective. Data providers could indicate in the notes field a justification to include these activities in TOSSD.

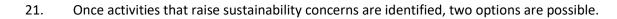
- Data providers are invited to consider eligible brownfield investments in activities in high GHGs emitting sectors (table 1) only if emissions reductions can be measured (emission reductions can usually come from increased energy efficiency, fuel switching or the implementation of stricter environmental standards).

233		Energy generation, non-renewable sources	
	23310	Energy generation, non-renewable sources, unspecified	
	23320	Coal-fired electric power plants	
	23330	Oil-fired electric power plants	
	23340	Natural gas-fired electric power plants	
	23350	Fossil fuel electric power plants with carbon capture and storage (CCS)	
	23360	Non-renewable waste-fired electric power plants	

Table 1 - provisional list of flagged high GHGs emitting sectors.

32261	Coal
32262	Oil and gas (upstream)

20. Nuclear energy is a low-carbon source but nevertheless is a technology that, in its current state, raises questions over its long-term sustainability, its safety and its possible role in the production of fuel for military uses. Task Force members could decide to add nuclear energy on the list of sectors that should be flagged for unsustainability.



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• Activities are excluded from TOSSD. These activities are deleted from the database and are not accessible to the public.

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• Activities are flagged and become part of a "grey" category, indicating transition activities. The "grey" TOSSD activities could be maintained in the database, so that they are documented and publicly available, but the amounts could be excluded from the total TOSSD figure.

Issues for discussion

- Do Task Force members have preferences among the various options indicated in paragraph 19 to identify potentially unsustainable activities?
- Do members agree with option 5, based on a combination of a "greylist" and case by case assessment?
- Do Task Force members agree with the distinction between greenfield and brownfield investments in the energy sector contained in option 5? Should nuclear energy (paragraph 20) be included in the "grey list"?
- Would Task Force members prefer to exclude potentially unsustainable activities, or rather continue to report them with a flag? In the latter case, should the sum of "grey" activities be subtracted from TOSSD totals?
- Does the Task Force have recommendations on other sectors beyond the energy sector where similar types of analysis could be carried out?