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Re: IEA Ministerial meeting in Pittsburgh must support transition to open data

Dear Ms Granholm, Mr Taylor, Ms Van der Straeten, Mr Jørgensen

This letter concerns the **national energy data** that the **International Energy Agency** (IEA) collects and distributes. Recent reports (Ritchie and Roser 2022) indicate that the IEA board have agreed in principle to publish that data as open — and it is now up to IEA member countries to endorse this board decision and match the consequent lost sales revenues.

I write to you each because you as individuals will be responsible for chairing the main and secondary sessions at the upcoming **IEA Ministerial meeting** in Pittsburgh, USA on 2–3 February 2022.

It is vital that all IEA data able to be made public emerge from behind its current paywall and become **freely available, usable, and re-usable** — so that it can be inspected and used, curated by researchers, combined with other data, and built upon for the benefit of all, including those in the global south.

The use of the Creative Commons CC-BY-NC-SA-3.0-IGO license — as was applied to the recent *Net zero by 2050 scenario datasets* — is wholly unsuitable for this purpose and effectively creates a license-bound data silo. A better choice of license for data would be the widely adopted and recommended CC-BY-4.0 license — with the CC0-1.0 waiver applied to any associated metadata and cataloging information.

As an example of the need for genuinely open data, two open energy system modeling teams have begun **work in Africa** and it is imperative that IEA data be both available and re-usable in this context. The two projects are U4RIA and PyPSA-meets-Africa. I contribute informally to both.

That same sentiment applies to analysis undertaken for **industrialized regions** too, be they in north America, Europe, Australia, or elsewhere.

The IEA should consider including the matter of data availability and open licensing as a standalone point in the **joint ministerial communiqué** that arises from the Pittsburgh meeting.

The IEA also needs to commit resources to establishing and maintaining a public-facing **primary data portal**. Energy analysts will naturally fold this facility into their own data ecosystems and workflows (Hoyer-Klick *et al* 2021), so the IEA portal need only concentrate on data provision.

I write as an energy system modeler and participant in the **Open Energy Modelling Initiative** (openmod) community. I have worked with open source energy system models since 2003. And in 2018, I published on the need for fully open energy system modeling for reasons of open science and transparent public policy (Morrison 2018). More recently, I have been promoting open data and open data standards — the latter being at least of equal importance.

I was also instrumental in helping organize the **open letter to the IEA** (Schäfer *et al* dated 8 December 2021) from the openmod community seeking open data — as recorded here (my forum handle is @robbie.morrison):

- https://forum.openmod.org/t/2949

yours sincerely, Robbie Morrison

References

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Morrison, Robbie (April 2018). "Energy system modeling: public transparency, scientific reproducibility, and open development". *Energy Strategy Reviews*. **20**: 49–63. ISSN 2211-467X. doi:10.1016/j.esr.2017.12.010. Open access.

Ritchie, Hannah and Max Roser (6 January 2022). The IEA wants to make their data available to the public — now it is on governments of the world's rich countries to make this happen. *Our World in Data*. Open access.

Schäfer, Malte *et al* (8 December 2021). *Open letter to the International Energy Agency and its member countries: please remove paywalls from global energy data and add appropriate open licenses*. Schäfer is the coordinating author. Online copy. Open access.

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