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**To: Minister Eamon Ryan TD**

Department of the Environment, Climate  
and Communications  
29-31 Adelaide Road  
Dublin 2

**8th December 2021**

**Re: Open Access to IEA Data**

A Aire,

The **International Energy Agency (IEA)** assembles and collates **national energy sector data** for internal use and for policy development by its member countries and affiliates. But for all other parties, this data is, for the most part, paywalled and under proprietary licensing and not available for independent public good research. Ireland is a long-serving member of the IEA and contributes national energy sector statistics.

For this reason, 40 researchers who participate in the [Open Energy Modelling Initiative](#) community just wrote to IEA executive director Dr Fatih Birol on 8 December 2021 requesting that the data it collects be **made generally available and licensed for open science**. That letter (Schäfer *et al* 2021) is appended and provides the background and rationale for my personal appeal to the Irish government presented in this covering letter.

As you know, I am an engineering academic based in Dublin City University, actively working on the development of decarbonisation pathways for Ireland, aligned with the goals and responsibilities that Ireland has undertaken as a signatory to the Paris Agreement. I specifically work on open energy system models that are used to evaluate and compare scenarios that seek rapid and complete decarbonization consistent with those goals.

One problem that modelers face is sourcing public interest information under suitable open licenses. The generally preferred data license is the **Creative Commons CC-BY-4.0 license** which facilitates the tracking of provenance while retaining good interoperability. The accompanying metadata should be made public under the **Creative Commons**

**CC0-1.0 public domain waiver** to limit legal friction and allow for the widest possible downstream use cases.<sup>1</sup>

The IEA is essentially required to sell the data it collects under non-disclosure to provide the agency with **operational revenues**. That situation could be easily remedied by the 29 member countries agreeing to cover this licensing income directly — which amounts to a total of around €5 million per annum. On the other side of that ledger, the damage that occurs through inhibited research will run to many times that sum. On this theme, I strongly suggest the Irish government reviews the Ritchie (2021) opinion piece in the journal *Nature*.

This current legal status is debilitating. For just one example, independent researchers cannot replicate the **groundbreaking 2050 IEA study** (IEA 2021) and generally circulate their revised analysis for appraisal and improvement by colleagues or indeed any other not-necessarily-known independent party.<sup>2</sup>

I am imploring the Irish government to help fix this problem and enable key public interest energy sector datasets managed by the IEA to become usable and reusable. The solution is simple, the benefits high, and the downsides nonexistent (unless one prefers that the analytical outcomes be dictated in advance).<sup>3</sup> Please seek to match the lost IEA data licensing revenues by providing equivalent direct support for the IEA — a sum which amounts to less than **€200k per annum each** when shared equally across the member countries.

I am personally terrified at the prospect of a climate breakdown. And this prospect has drawn steadily closer over my years of climate research and advocacy. Please push for this simple measure which can offer — as indicated in the accompanying open letter — numerous benefits, some foreseeable and others potentially serendipitous.

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<sup>1</sup> [SPDX identifiers](#) are used to denote the public licenses under discussion. For example, CC-BY-4.0 is shorthand for the Creative Commons Attribution 4.0 International License.

<sup>2</sup> Those particular datasets, atypically, are available and do carry public licenses — but **not** data-capable open licenses. Hence the problem described is not solved by this practice. The legal details are technical, related to the particular version of the CC-BY-NC-SA-3.0-IGO license used in this case, how the terms of that license intersect with intellectual property law in different legal jurisdictions, and why the non-commercial or “NC” restriction is essentially untenable. Readers are instead referred to the open letter itself for a broader discussion and footnote 2 in particular.

<sup>3</sup> I do not make that last remark in jest. There are credible indications of “policy-based evidence making” occurring in diverse jurisdictions. Energy system modelers argue strongly that policy making should be evidence-based and not *vice versa*.

To finish with a quote from Hannah Ritchie (2021) from Oxford University: “To tackle global problems, the world must create open data”.

I am, of course, happy to assist in any way I can. That could be by providing additional background and analysis on the issues surrounding this request.

Le gach dea-ghuí,



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**Cited resources:**

IEA (May 2021). *Net zero by 2050: a roadmap for the global energy sector*. Paris, France: IEA Publications.

Ritchie, Hannah (5 October 2021). “Covid’s lessons for climate, sustainability and more from our World in Data”. *Nature*. **598** (7879): 9–9. ISSN 1476-4687. doi:10.1038/d41586-021-02691-4.

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. (Copy appended.)