GloNZRA FAQs

What is GloNZRA?

GloNZRA is the acronym for the Global Net Zero Resources Assessment. We are making a global assessment of:

a. fossil energy resources driving climate change;
b. the renewable energy resources needed to substitute for fossil energy and meet new energy demand;
c. the minerals needed to produce renewable energy technologies and the technologies to use this energy; and,
d. the carbon sequestration potentials available to remove excess greenhouse gases from the atmosphere because were are going to overshoot our global emissions budget.

Who is behind the GloNZRA?

GloNZRA is a group of volunteers, working together to make the Global Net Zero Resources Assessment. Leading the programme is Jeremy Webb from the Tiaki Institute in New Zealand. The technology lead is Milan Poczik from Beat Cortex in Hungary. We also have half a dozen amazing volunteers from the Resources Management Young Members Group (RMYMG) who have given their time to help with a global literature review finding national resources estimates for fossil, renewable, mineral and sequestration resources.

What will GloNZRA produce?

From this assessment, you will be able to see what resources your country has available to support the global transition to net zero emissions. You will have access to a publicly available set of national resource estimates, and you will be able to explore these data via a map and an AI chatbot (GloNZRA Junior). See the QR code for more information.

Where did the idea for GloNZRA come from?

Back between 2001 and 2005, Jeremy Webb was working on New Zealand's energy and mineral environmental-economic accounts. At the time there was no method for evaluating the physical stock of renewable energy resources. While wondering how to improve the comparability of fossil and renewable energy data, Jeremy realised it was possible to classify renewable energy resources using the JORC Code, and the Modified McKelvey Box.

In 2006 Jeremy wrote to the UNECE suggesting that the United Nations Framework Classification (UNFC) could be applied to renewable energy resources (see the link below). The EGRM ended up looking into renewable energy in 2012 and Jeremy re-contacted the EGRM and became the Chair of the Solar Energy Subgroup in 2016, and Chair of the Renewable Energy Working Group from July 2020 to May 2022.

https://unece.org/DAM/energy/se/pdfs/UNFC/unfc2009_RE_Specs_publcomm_14/RERR_Modif_McKelvey_Box_Approach.pdf

While serving as Chair of the Group, Jeremy did a pilot study comparing renewable energy with fossil energy with public data and data from Dutch researchers, but this work did not get published. Jeremy had contemplated expanding the comparison to all resources available for a net zero transition, but had not pursued this, knowing it would be time consuming work that required a global literature review, volunteers, as well as software to manage the data so that data quality could be assured.

Then Jeremy was introduced to Milan Poczik by Matthias Hartung in 2024. Milan is a software developer from Hungary with strong interest in the UNFC. At that first meeting between Jeremy and Milan, GloNZRA was initiated. Milan had the technical skills to make the project viable and Jeremy set about finding volunteers to support the initiative.

More volunteers came from the Tiaki Institute, a small think tank that Jeremy runs in New Zealand. And then Jeremy was introduced to Bianca Neumann and Ghadi Sabra from the Resources Management Young Members Group (RMYMG). Jeremy was invited by Bianca to present at a RMYMG meeting in late October 2024, and over a half dozen volunteers from RMYMG joined GloNZRA… forming the GloNZRA team.

How much progress has GloNZRA made?

GloNZRA has made a literature review, processed some initial data from UNData and the Energy Institute and other sources. We are in the process of capturing data from the literature, finding data to fill gaps, while also developing the software to support GloNZRA and the classification of data using the United Nations Framework Classification for Resources (UNFC). Likewise, the software and user interface for looking at the data and asking questions of the data using the AI chatbot are also still under development. We have proof of principle that a global assessment of resources required for a net zero transition can be achieved, and will yield useful data, but we have a lot of work to do still.

What are next steps for GloNZRA?

We will be processing data identified from the global literature review, developing the software for classifying, managing and presenting the data, while also ensure the quality of the data we collect and compile. We aim to publish GloNZRA in October 2025, just prior to upcoming climate negotiations.

What do we hope to achieve?

We hope that some governments, investors and others will realise there is a lot to be gained from the global net zero transition, especially when it comes to renewable energy and the resources available to make these technologies. Furthermore, we hope people realise there are opportunities around carbon sequestration as well.

Hence, our aim is to:

- get governments, investors and others, more interested in the net zero transition
- have some of these government, investors and others, commit slightly sooner to projects that help with the net zero
- accelerating the net zero transition.

Why would anyone be interested in GloNZRA data?

We think governments, investors and others could be interested in GloNZRA for three reasons:

"Comparability creates interest" hypothesis: Creating a dataset that allows countries to see, and compare, all the resources they have, will create more interest in these resource estimates (i.e. relative to existing studies of the same resources that are not directly comparable).

"Data is a mirror" hypothesis: Country data is like a mirror. Diplomats and national delegates can't help but take a look, comparing themselves with their allies and competitors. Once they have taken a look, they then take a special interest in how the mirror was made (i.e. methods and frameworks), including how they can be made to look as good as possible.

"Seeing is believing" hypothesis: Governments will be more interested in the net zero transition, and the UNFC, after seeing the data. Note: This includes the possibility of governments being interested in using the UNFC to manage resource data, after they have seen the global net zero resource assessment and especially after seeing directly comparable numbers of resources in their country.

We need your feedback and support

Please contact us if you have any questions, suggestions or feedback.

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