The research group "Global Resource Use" at the
Institute for Ecological Economics **at WU Vienna is advertising the following position:**

Student Assistant

in the area of data visualisation and web development

Extent of employment: 10-15 hours/week
Start of employment: May 2024
Duration: Provisionally limited until December 2024, longer-term perspective desired
Gross monthly salary: ~€650-1350 (depending on qualifications and extent of employment)

Background
The research group "Global Resource Use" at the Institute for Ecological Economics at WU Vienna is one of the leading European research groups in the modelling and analysis of resource use and resource efficiency. It develops indicators, particularly in the areas of raw materials, water, and land for use in the context of national and international policy measures.

In the field of raw material use, the research group plays an internationally recognized role in the development and application of material flow analysis (MFA) standards as well as the innovative visualisation of corresponding data. Together with CSIRO (Australia) and BOKU (Vienna), the group compiles and regularly updates the Global Material Flows Database for the International Resource Panel (IRP) of the UN Environment Program (UNEP).

The database serves as the basis for the online portal www.materialflows.net, funded by the Ministry for Climate, which provides a variety of visualisations of the data and explains the concepts of MFA and the importance of raw material use.

The research group is also leading the development of the online tool SCP-HAT (scp-hat.org), where, in addition to the IRP database, data on the use of other resources is compiled and visualised in order to provide a solid basis for policy development in the area of sustainable consumption and production.

Another flagship of the data visualisation work is the website www.fineprint.global, where data on global raw material use is compiled and visualised in high geographical resolution.

Responsibilities and incentives
The research group "Global Resource Use" understands science communication as more than just a buzzword – the preparation and visualisation of data on global resource use is therefore particularly important in the team's portfolio. As part of our research team, as a student assistant, you support the work on

(1) new and further development of RShiny applications, especially interactive visualisations via the R package "plotly",
(2) new and further development of databases (especially PostgreSQL),
(3) the conception, implementation and maintenance of server applications (especially via Docker) as well as
(4) the creation of new subpages of the various websites based on existing designs.

You will have the opportunity to work on state-of-the-art web applications with a wide reach and thereby contribute to sound policy development in the area of sustainable resource use.

On a technical level, you will become familiar with a variety of technologies and have the opportunity to follow the development of interactive data visualisation apps, from raw data through conception to finished websites. The research group is also always open to new technologies and tools that you are welcome to bring into the process. You will work with an experienced colleague who will also introduce you to the areas of activity with which you might have less experience.

Your profile
• Programming skills
       o In particular: R
       o Optional: Experience with RShiny and (interactive) visualisations (R package plotly)
• Experience with server management
       o Linux (Ubuntu Server) with Docker
• Experience with database management
       o PostgreSQL
       o Database modelling
• Web development/design
       o In particular: Wordpress
       o Optional: JavaScript, CSS, etc.

End of application period: 20.04.2024

Please send your application documents (letter of motivation including a description of the relevant expertise and a tabular CV) to Dr. Stephan Lutter (stephan.lutter@wu.ac.at).