Most common validation errors: geography mismatch

- The geography you want to locate your data is not available, or you get an error referring to overlapping geographies.

  - ☐ WHY: Geographies cannot overlap in the ecoinvent v3 database.
  - ☐ SOLUTION:
    - Generate a new region, splitting existing ones (ie. split Brazil into states): talk to ecoinvent.
    - Generate a new region, smaller than an existing one (ie. Europe without Switzerland): talk to ecoinvent.
    - Change the region to an existing one.

TIPS: Verify carefully the geography of your data, considering the other local copies of the same activity in the database. Check the list of geographies available in ecoinvent, and the latest list of activities present in the database.

Most common validation errors: about GLO activities 1

- A GLO copy is missing.
  - WHY: Every new activity needs a GLO counterpart.
  - SOLUTION: Use the automatic function in the ecoEditor to generate a GLO copy as weighted average.

TIPS: If you are introducing new activities (technologies) to the database, remember to also collect PV for the GLO copy. They are needed for the automatic extrapolation.

Most common validation errors: about GLO activities 2

- A by-product/waste is missing in the GLO dataset
  - WHY: The GLO dataset has to match the local datasets at the level of Reference product and by-product/waste. You have created a new local dataset, with by-products that are not included in the existing GLO counterpart.
  - SOLUTION: Add the missing by-product to the GLO dataset, calculating the amount as a weighted average, using local and GLO PVs. Remeber to adjust the PV as well!

Most common validation errors: about new by-products/wastes

- You generated a new by-product/waste.
  - ⬚ WHY: When a by-product is new to the database, it's your role to make sure that it will have a market.
  - ⬚ SOLUTION: You can ensure the existence of a market for the new by-product/waste by:
    - Generating an alternative production route
    - Generating a <u>treatment activity</u>
    - Considering the option of a <u>constrained market</u> (with the support of ecoinvent)

Most common validation errors: about new inputs

- You have used inputs that are new products to the database. The datasets fail to get stored into the database

  - WHY: If you generate new products when modeling the inputs to your dataset, and you don't plan to submit the production route of those as well, the database will never be able to supply them.

  - SOLUTION:
    - Submit the production route for the demanded product (good data)
    - Submit a proxy of the production route for the demanded product (mark this accordingly)
    - Change the name of the product, to fit the available products in our database

TIPS: *If you provide a «proxy» for the activity, then you can «Tag» it accordingly.*

Most common validation errors: about PV

- Validation error referring to wrong Production volumes
  - ☐ WHY: Your local PV is bigger than the GLO or the sum of all local PV is bigger than GLO
  - ☐ SOLUTION: Check wheter PVs make sense, in the limits of your knowledge. If it was underestimated, GLO PV has to be corrected.

TIPS: Always express the PV of by-products with a mathematical formula!! This will avoid this error to pop-up for reference products and then again for by-products.

Most common validation errors: about comments

- Missing comments of exchanges.
    - ▢ WHY: If you add a Mathematical formula or an <u>Activity Link</u>, the system will ask you for a comment, if the flow does not yet have one
    - ▢ SOLUTION: Add a comment!

TIPS: Ensure you commented extensively your data ;)

Most common validation errors: technical

- Duplicated Master data
  - ⬚ WHAT?? This is a very tricky error that needs technical help from our side to be solved.
  - ⬚ SOLUTION: Contact us immediately.

TIPS: Try to avoid it as much as possible by generating new Master Data only once. If several authors will use the same new Master Data, then one author shall generate the new Master Data and the others shall import them using the function «Import User Master Data from File».

Warnings to be checked and addressed!

- Carbon, water, mass unbalances: they appear as «warnings» but can reflect errors in calculation of the UPR

  - WHY: They reflect an unbalance at the level of the <u>compulsory properties</u> (Dry mass, Wet mass, Water in Wet mass, Carbon content).

  - SOLUTION:
    - Check that all products have right properties
    - Check the amounts of your products (inputs and outputs)

TIPS: Always enter default values for the compulsory properties of the new products in the Master Data!! You could then adjust them further to specific conditions in the dataset itself.