

Database notes – LCA commons database

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General notes (for any data pack from Nexus): This is a zolca file which is basically a compressed openLCA database. To use it in openLCA, either **restore** it (right-click in openLCA navigation panel → Restore database; main menu function: Database → Restore database); this will recreate the database in openLCA, as new database. **Or, import it into an existing** database which is already open in openLCA (then right-click on the open database → import → import entire database). This allows you to combine different databases and Nexus data packs.

Specific notes for this database: The LCA Commons is a database providing US representative LCA data. The >10,000 datasets have been developed by the different US governmental agencies such as USDA, National Renewable Energy Laboratory (NREL), National Agricultural Library (NAL) and US Forest service and have been created with varying modeling perspectives and nomenclature frameworks. The database is available for free on the LCA Collaboration Server (<https://www.lcacommons.gov/lca-collaboration/search>). The version described here is created by GreenDelta GmbH based on the public version, with the idea to better align the datasets with the openLCA LCIA methods and to create one integrated and more homogeneous database.

The LCA Commons linked to ecoinvent database can be combined with:

Inventory: None

Impact Assessment: compatible with openLCA LCIA method package

Data quality systems: ecoinvent data quality system

All other LCA Common databases:

Inventory: None

Impact Assessment: LCIA Method package included in the database

Data quality systems: -

Creating product systems: the setting “**auto-link processes**” should be used with caution when creating a product system due to:

- Presence of product and waste flows involved in waste treatments, recycling and energy recovery;
- When calculating the impact assessment, pay attention to the selected allocation method.

An allocation method should be set (e.g., physical), especially in case of presence of multioutput processes like “Petroleum refining, at refinery” and “Crude oil, in refinery”.