

What is the role of a background database in the framework of the amended EN15804?

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The ecoinvent database and EPDs

- The ecoinvent database has been successfully used in EPDs based on EN15804
- Next steps
 - Assess the amended EN15804 requirements
 - Increase ease of use to access already available data

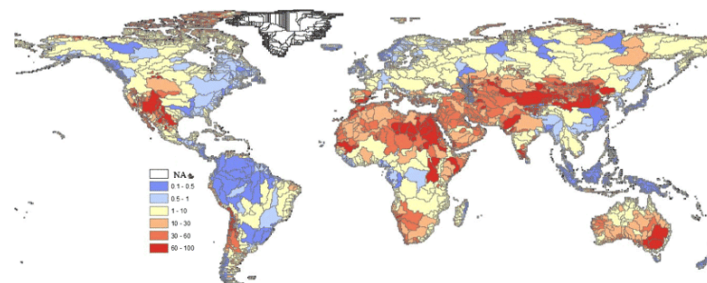
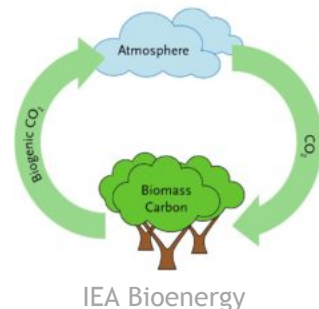
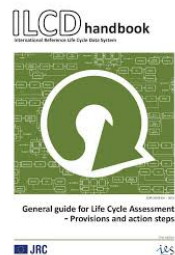
What is our goal?

- Support EPD practitioners
 - Format of datasets compliant with EN15804
 - Information necessary to calculate the required indicators
- Contribute to a harmonization in the calculation of the indicators
 - Provide default European / national values for the resource, waste and output indicators

Challenges encountered - amended EN15804

1. Compliance with a different dataset format
2. Support for Life Cycle Inventory indicators
3. Support for new Life Cycle Impact Assessment categories
4. New information included in the datasets

How the ecoinvent database addresses the challenges



Boulay, A.M. et al. 2018, The WULCA consensus characterization model for water scarcity footprints: assessing impacts of water consumption based on available water remaining (AWARE), Int J LCA



<https://laboratoryinfo.com/>

1. Compliance to a different dataset format

sand quarry operation,
extraction from river



UN environment


- Datasets should use the current ILCD format and nomenclature
- Data quality criteria related to
 - ↓ Geography
 - ↓ Technology
 - ↓ Time

1. Compliance to a different dataset format

sand quarry operation,
extraction from river

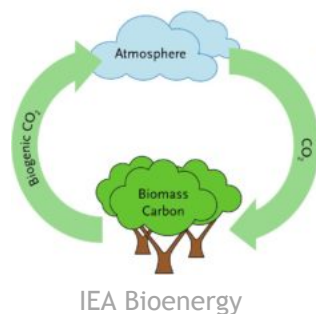


UN environment

- Working on specifications for converting ecospold to ILCD files
- Collaborating with  to achieve harmonized results
- Criteria in pedigree matrix compliant with amended EN15804

2. Support for Life Cycle Inventory indicators

- Biogenic carbon content in product
- Biogenic carbon content in accompanying packaging
- Information already exists in the ecoinvent datasets, as carbon content, non-fossil in ecoQuery
- We will tag packaging used as input



We will create two additional indicators to more easily access this information

2. Support for Life Cycle Inventory indicators

Indicators about

- Resource use
- Waste
- Output flows



Use of net fresh water

2. Support for Life Cycle Inventory indicators

Use of net fresh water

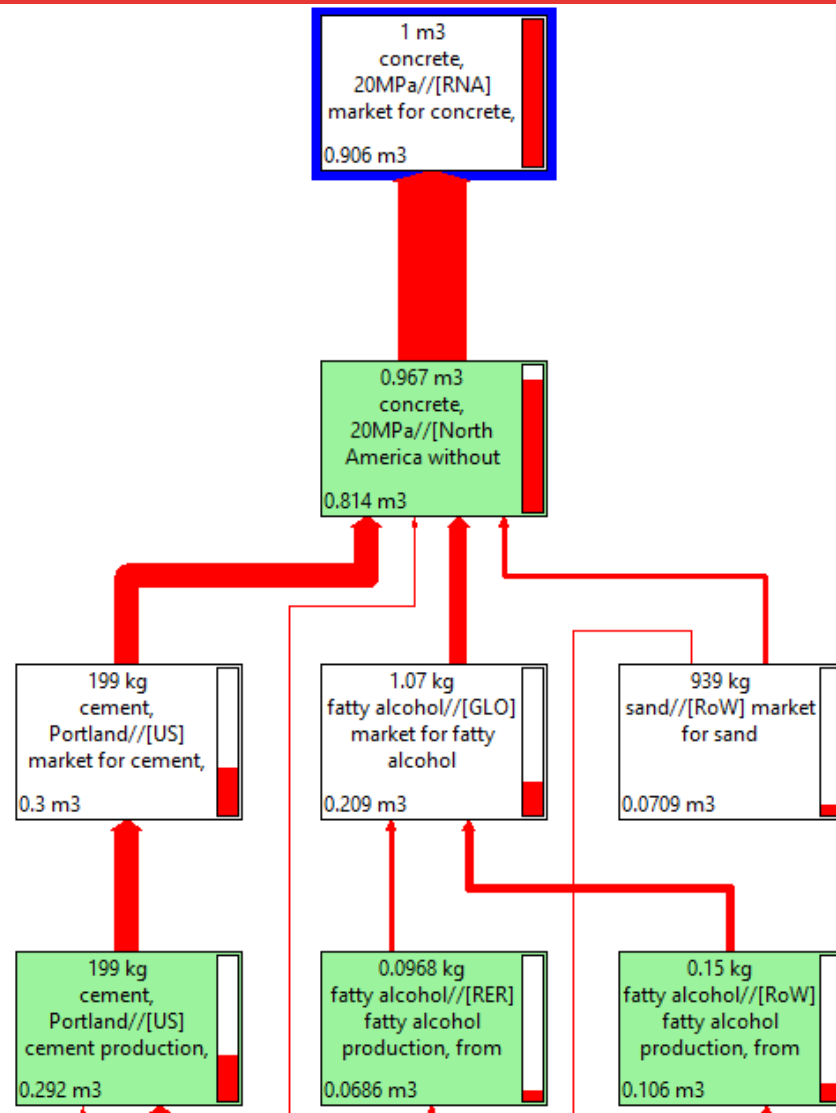


<https://www.usbr.gov/>



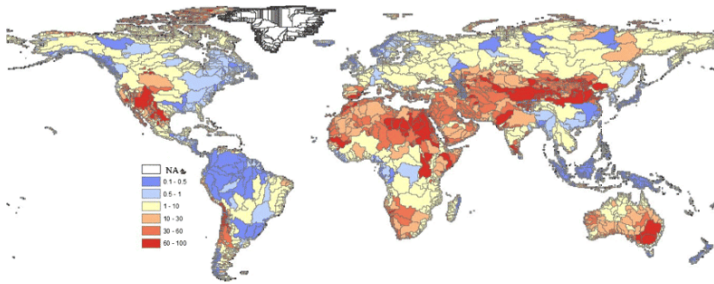
<https://www.quora.com>

2. Support for Life Cycle Inventory indicators



3. Support for new Life Cycle Impact Assessment categories


- Water use - AWARE



- Soil quality - LANCA



<https://www.agriculture.com>

- Method available in software tools, will be also available directly in the ecoinvent datasets
- Collaboration with  Fraunhofer for ensuring the appropriate application of LANCA in the ecoinvent datasets

3. Support for new Life Cycle Impact Assessment categories



- Global Warming Potential
 - ↓ Fossil
 - ↓ Biogenic
 - ↓ Land use and land use change
- Depletion of abiotic resources
 - ↓ Elements
 - ↓ Fossil fuels
- Already available
- Will become available

4. New information included in the datasets as properties



<https://laboratoryinfo.com/>

European Waste catalogue
for classification to

- hazardous
- Non-hazardous



<https://www.worldofchemicals.com/>

Lower Heating Value



Recycled content

Can I use the ecoinvent database for the amended EN15804?



- Yes!
- The ecoinvent database will fulfil the requirements
 - ↓ Working prototype internally
 - ↓ Will provide the database ready for the amended standard, with ease of use and amended features

Thank you for your attention

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<https://www.empa.ch>