

# ACE155

## Tools and databases for CE

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RawMaterials

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## Tools and methods workshop preparation

- You will present in groups to your colleagues one of the following 3 tools and 5 databases
- In order to make your time during the workshop useful, we encourage you to check the links and make sure you are registered and downloaded any software that is needed
- Take a brief look in the webpages to check for video tutorials, and to identify which of the 8 webpages are more interesting for you to present.

# Tools and methods workshop webpages

|                   |  |   |
|-------------------|--|---|
| <b>Stan-Stan2</b> | STAN (short for subSTance flow ANalysis) is a freeware that helps to perform material flow analysis. After building a graphical model with predefined components (processes, flows, system boundary, text fields) you can enter or import known data (mass flows, stocks, concentrations, transfer coefficients) for different layers (good, substance, energy) and periods to calculate unknown quantities. All flows can be displayed in Sankey-style, i.e. the width of a flow is proportional to its value. The graphical picture of the model can be printed or exported. For data import and export Microsoft Excel is used as an interface. | <a href="http://www.stan2web.net/">http://www.stan2web.net/</a> |
| <b>Vensim</b>     | With Vensim you can perform dynamic material flow analysis (MFA)   | <a href="https://vensim.com/">https://vensim.com/</a>           |
| <b>openLCA</b>    | openLCA is an open source and free software for Sustainability and Life Cycle Assessment   | <a href="http://www.openlca.org/">http://www.openlca.org/</a>   |

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|--------------------------|--|--|
| EUROSTAT                 | Eurostat is the statistical office of the European Union. Its mission is to provide high quality statistics for Europe.  | <a href="https://ec.europa.eu/eurostat/data/database">https://ec.europa.eu/eurostat/data/database</a><br>Choose the Material flows and resource productivity theme, under the environment category |
| EXIOBASE                 | EXIOBASE is a global, detailed Multi-regional Environmentally Extended Supply and Use / Input Output (MR EE SUT/IOT) database.   | <a href="https://www.exiobase.eu/">https://www.exiobase.eu/</a>  |
| Global Footprint Network | Every year, Global Footprint Network publishes the National Footprint Accounts, including the Ecological Footprint and biocapacity for over 200 countries.   | <a href="http://data.footprintnetwork.org">http://data.footprintnetwork.org</a>  |
| Urban Data Platform      | European commission urban data platform.   | <a href="https://urban.jrc.ec.europa.eu">https://urban.jrc.ec.europa.eu</a>  |
| Urban Mine Platform      | This platform displays all readily available data on products put on the market, stocks, composition and waste flows for electrical and electronic equipment (EEE), vehicles and batteries for all EU 28 Member States plus Switzerland and Norway. Iceland is also included for vehicles. | <a href="http://www.urbanmineplatform.eu/homepage">http://www.urbanmineplatform.eu/homepage</a>  |

Circumat – Workshop

I. Prepare a 5-10-minute presentation on the tool to your peers that explains:

- what it is, what concept does it address?
  - how it works (what data is needed or provided? What type of analyses are provided, if any?)
  - who provides the tool/database
  - what kind of results one gets (discuss the detail of the data/results)
  - who should use it, why
  - an example
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Tools:

|            |  |   |
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Databases:

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If you are interested, more tools are available here: Visit: <https://cml.liacs.nl/cmat/> ; Scroll down to “Resources”, Click “Additional analytical & co-creation tools”

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