Changelog openLCA Methods Package from 2.4.0 to 2.4.2

- Revised water use impact category for the EF 3.1 method, specifically:
    - Expanded flow mapping, adding, for example, water emitted in specific freshwater compartments (river, lakes, etc.),
    - Changed characterisation factors (CFs) of those flows with locations other than country locations, e.g. Europe, according to AWARE (link from page; file: AWARE_other_indicators_country_regions-world_20230113-1). E.g., 36.53 for Europe instead of the world average 42.95,
    - Fixed the CFs of some of the location-based regionalized flows that still had the global value of 42.95 instead of the regionalized one
    - Every impact factor that is regionalized with the location shown in the name (hence, flow-based regionalized) is now given twice in the characterisation tables: with and without the new location field in openLCA being used. This makes it compatible with both calculation methods.

- Changed the normalization values of all recipe methods according to: https://www.rivm.nl/en/documenten/normalization-scores-recipe-2016

Changelog openLCA Methods Package from 2.4.2 to 2.4.3

- Revised land use impact category for the EF 3.1 method, specifically:
    - Added regionalized impact factors (e.g. “Occupation, industrial area” is now location-based regionalized)
    - Corrected regionalized impact factors that previously displayed the global value instead of regional ones (e.g., "Transformation, from forest, extensive, NL" with value -181.28 instead of -484.11)
    - Updated the reference flow for certain regionalized impact factors from “Transformation, from forest, intensive, US” to “Transformation, from forest, intensive”: changed reference flow to "Transformation, from forest, intensive" (e717f3cc-ac70-4c9b-be56-1614239b917e) except when the location is correctly set to "US" + add "Transformation, from forest, intensive" (e717f3cc-ac70-4c9b-be56-1614239b917e) with US as location
    - Introduced additional flows

Changelog openLCA Methods Package from 2.4.3 to 2.4.5

- IPCC 2021:

  - Corrected CFs for Methane flows in IPCC 2021 GWP 100:
  - From 27.9 to 29.8 for fossil Methane flows.
  - From 27.9 to 27.0 for non-fossil Methane flows.
  - Added the category “IPCC 2021 GWP 100 (non-fossil CO2 uptake and emission)” to account for biogenic carbon using the -1/+1 approach.

- EF 3.1:

  - Removed “Phosphorus” and “Phosphate” flows from Eutrophication marine.
  - Corrected “Phosphorous acid” to “Phosphoric acid” in Eutrophication freshwater.
  - Added missing factors in Eutrophication freshwater.
  - Corrected CF for “Methane” flows in “Climate change” from 27 to 29.8
  - Added “Metane” flows in Climate change (fossil)

- TRACI 2.1:

  - Corrected Methyl Chloride CFs in the ozone depletion category from 0.2 to 0.02.

- Impact Directions:

  - Set for all IPCC 2021 categories and for EF 3.1 “Human toxicity non-cancer (inorganics)” and “Ecotoxicity freshwater (organics)”.

- ReCiPe Normalization Values:

  - Updated to unrounded values.

- Gereral:

  - Corrected flow name of biogenic Carbon and Methane from “biogenic” to “non-fossil” Carbon and Methane.

Changelog openLCA Methods Package from 2.4.5 to 2.5.0

- TRACI 2.2 newly added with novelties:

  - Fossil fuel characterization factors (CFs) have been removed.
  - Eutrophication CFs have been replaced with updated, spatially resolved CFs for both freshwater and marine eutrophication.

- EF 3.1

    - Added groundwater flows to "Water use" category (Water, groundwater consumption - Water, thermoelectric groundwater consumption - Water, thermoelectric surface water consumption - Water, ground)

Changelog openLCA Methods Package from 2.5.0 to 2.6.0

- AWARE 2.1 newly added (with extension files also available on Nexus)