
List of Contents of ecoinvent Data v2.0

Issued by ecoinvent Management
Date November 20, 2007

New and updated LCI datasets in ecoinvent Data v2.0

Electricity mixes:

- new country mixes: Brazil, China, Japan (including LNG supply), USA, EU 27, Bulgaria, Romania
- update of EU country, network and company mixes

Power plants:

- update of criteria pollutants' emissions of eastern European coal power plants (CZ, HU, PL, SK)
- China coal and nuclear fuel cycles
- US coal, nuclear and natural gas fuel cycles
- Brazil hydroelectric power plant
- Japanese natural gas power plant and LNG supply
- crystalline photovoltaic (PV) power plants update, extension to thin film PV (CIS, CdTe, amorphous silicon, ribbon-silicon) and country specific PV electricity production

Small scale heat and power production:

- stirling cogen unit
- fuel cells
- microturbines
- absorption chiller

Renewable fuels:

- ethanol from biomass (BR: sugar cane, CN: sweet sorghum, US: corn, RER: rye, CH: potatoes, sugar beets, grass, whey)
- biogas from agricultural (co-)digestion, bio-waste, grass, sewage sludge, whey
- synthetic gas and methanol, from wood (CH)
- plant oil methyl ether (XME) from palm oil (MY), soybean oil (BR), rape oil (RER, CH), vegetable oil
- heat and electricity from waste incineration and biogas
- transport services based on bio-fuels (lorries, private cars)

Renewable materials:

- several tropical wood species (of West-African, Southeast Asian, and South-American provenience)
- cotton (China), jute and others

Agricultural products and processes:

- cotton, potatoes, rape seed, rice, sheep husbandry, wheat in US
- several agricultural products grown in France, Germany and Spain

Transport services:

- Euro 3 Euro 4 and Euro 5 and current average performance of private cars (diesel and gasoline) and lorries

Electronics (manufacturing and use):

- devices (desktop computer, laptop computer, printer)
- screens (CRT, LCD)
- cables
- drives
- batteries
- toners
- printed wiring boards
- microchips
- further components

Electronics (recycling and waste management):

- dismantling
- waste treatment
- resource recovery

Chemicals:

- petrochemical solvents (ethanol, cyclohexane, heptane, 1-propanol, 2-butanol, formic acid, monochlorobenzene and others)
- chemicals used in electronics and photovoltaics manufacture (tetrachlorosilane, lithium, sodium tetrafluoroborate, sodium hypophosphite, trifluoromethane, trimethyl borate, and others)

Mechanical engineering, metals processing:

- chipping of steel, chromium steel, cast iron, aluminium and brass (drilling, milling, turning)
- chipless shaping (impact extrusion (cold, warm and hot) of steel and aluminium, deep drawing of steel, laser machining)
- compressed air generation and supply (small / large; three pressure levels)

Building materials and components:

- windows, doors, comfort ventilation systems (single and multiple family dwellings, centralised and decentralised systems)

New impact assessment method datasets in ecoinvent Data v2.0:

- Ecological footprint (Global)
- EDIP 2003
- Cumulative Exergy Demand (Global)
- TRACI (USA)

Most existing LCIA methods are extended to cover elementary flows newly introduced with ecoinvent data v2.0