

1 **Table 1 Recommended methods and their classification at midpoint**

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Recommendation at midpoint			
Impact category	Recommended default LCIA method	Indicator	Classification
Climate change	Baseline model of 100 years of the IPCC	Radiative forcing as Global Warming Potential (GWP100)	I
Ozone depletion	Steady-state ODPs 1999 as in WMO assessment	Ozone Depletion Potential (ODP)	I
Human toxicity, cancer effects	USEtox model (Rosenbaum et al, 2008)	Comparative Toxic Unit for humans (CTU _h)	II/III
Human toxicity, non-cancer effects	USEtox model (Rosenbaum et al, 2008)	Comparative Toxic Unit for humans (CTU _h)	II/III
Particulate matter/Respiratory inorganics	RiskPoll model (Rabl and Spadaro, 2004)	Intake fraction for fine particles (kg PM2.5-eq/kg)	I/II
Ionising radiation, human health	Human health effect model as developed by Dreicer et al. 1995 (Frischknecht et al, 2000)	Human exposure efficiency relative to U ²³⁵	II
Ionising radiation, ecosystems	No methods recommended		Interim
Photochemical ozone formation	LOTOS-EUROS (Van Zelm et al, 2008) as applied in ReCiPe	Tropospheric ozone concentration increase	II
Acidification	Accumulated Exceedance (Seppälä et al., 2006, Posch et al, 2008)	Accumulated Exceedance (AE)	II
Eutrophication, terrestrial	Accumulated Exceedance (Seppälä et al., 2006, Posch et al, 2008)	Accumulated Exceedance (AE)	II
Eutrophication, aquatic	EUTREND model (Struijs et al, 2009b) as implemented in ReCiPe	Fraction of nutrients reaching freshwater end compartment (P) or marine end compartment (N)	II
Ecotoxicity	USEtox model, (Rosenbaum et al, 2008)	Comparative Toxic Unit for ecosystems (CTU _e)	II/III
Land use	Model based on Soil Organic Matter (SOM) (Milà i Canals et al., 2007b)	Soil Organic Matter	III
Resource depletion, water	Model for water consumption as in the Swiss Ecoscarcity (Frischknecht et al, 2008)	Water use related to local scarcity of water	III
Resource depletion, mineral, fossil and renewable⁴	EDIP97 update 2004 (Hauschild and Wenzel, 1998a-update 2004) and CML 2002 (Guinée et al., 2002)	Scarcity	II

⁴ Depletion of renewable resources is included in the analysis but none of the analysed methods is mature for recommendation

1 **Table 2 Recommended models and their classification at endpoint**

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	Recommendation from midpoint to endpoint		
Impact category	Recommended default LCIA method	Indicator	Classification
Climate change	No methods recommended		interim
Ozone depletion	No methods recommended		interim
Human toxicity, cancer effects	DALY calculation applied to USEtox midpoint (Adapted from Huijbregts et al., 2005a)	Disability Adjusted Life Years (DALY)	II/interim
Human toxicity, non- cancer effects	No methods recommended		interim
Particulate matter/Respiratory inorganics	Adapted DALY calculation applied to midpoint (Adapted from van Zelm et al, 2008, Pope et al, 2002)	Disability Adjusted Life Years (DALY)	II
Ionising radiation, human health	No methods recommended		interim
Ionising radiation, ecosystems	No methods recommended		
Photochemical ozone formation	Model for damage to human health as developed for ReCiPe (Van Zelm et al, 2008)	Disability Adjusted Life Years (DALY)	II
Acidification	No methods recommended		interim
Eutrophication, terrestrial	No methods recommended		
Eutrophication, aquatic	No methods recommended		interim
Ecotoxicity	No methods recommended		
Land use	No methods recommended		interim
Resource depletion, water	No methods recommended		
Resource depletion, mineral, fossil and renewable	No methods recommended		interim

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