

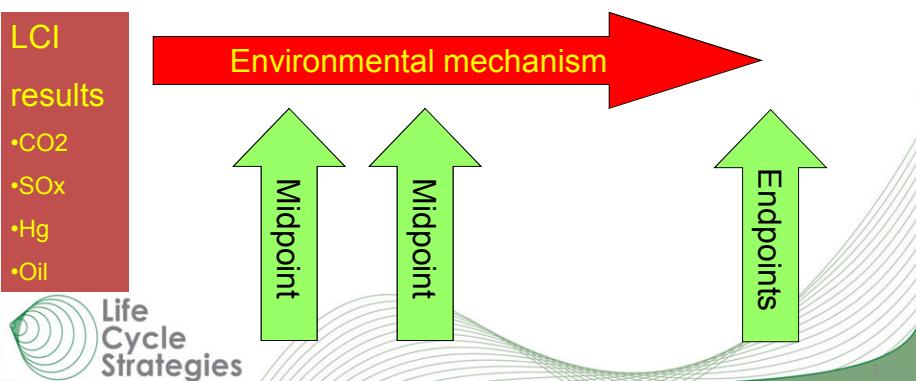
Status of Impact Assessment

Impact Assessment & Weightings
Roundtable
Tim Grant



Midpoint and endpoint methods

- The generic term for methods like discussed so far are “midpoint” methods; The results are relatively robust, but interpretation (weighting) can be difficult.



Midpoint method examples

- CML 1992 updated 2001,
 - Well documented, and many optional impact categories
 - Problem: ecotox in oceans always dominate
 - Stops at normalisation – which has options for Europe and world.
- EDIP 2003, Danish method
 - Midpoint method but with policy target used for weighting procedure.
- Ecological scarcity – Swiss
 - distance to target 1997, updated in 2006
- Traci 2005
 - Developed for USA, by US-EPA – not weighting provided as USEPA believed it there was still very much under debate and because of possible misinterpretation and misuse.



End point methods

- EPS – Environmental Product Strategies
 - Swedish model using damage cost to achieve weighting step.
- Ecoindicator 95 and 99
 - Based on damage modelling for to reach endpoints.
 - Final weighting step informed by panel weighting
 - Use to produce – guide for designers – ecopoints guide as well as series of other eco design tools
 - Sponsored by companies (including Phillips) and dutch government.

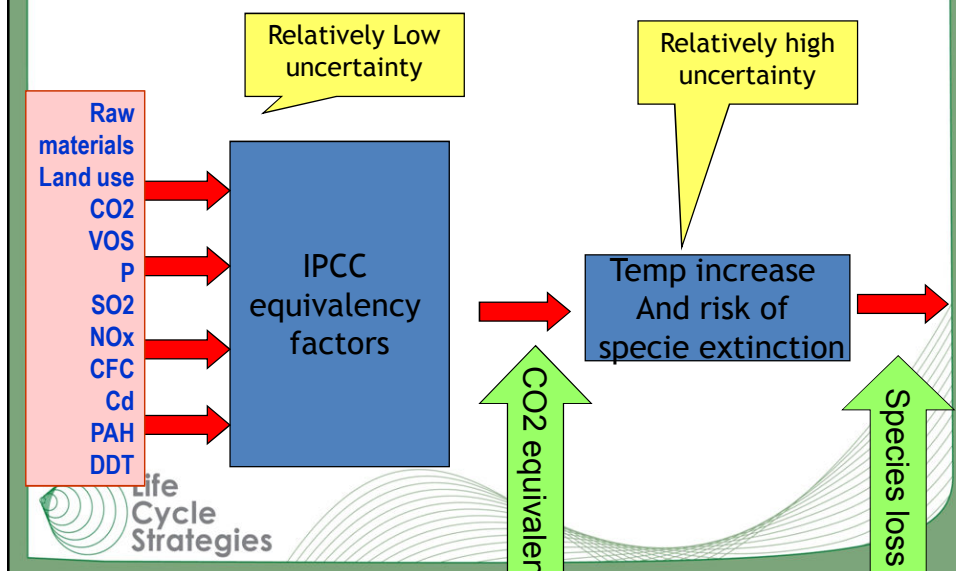


Derivatives of Ecoindicator

- Impact 2002 – Swiss -
 - Different toxicity modelling and climate change made as its own endpoint due to deficiencies in EI99 treatment of this.
- LIME (Japan- Lca Impact Method using Endpoints)
 - Improved and localised many of the EI99 models.
 - Contingent valuation used for final weighting step of four endpoints

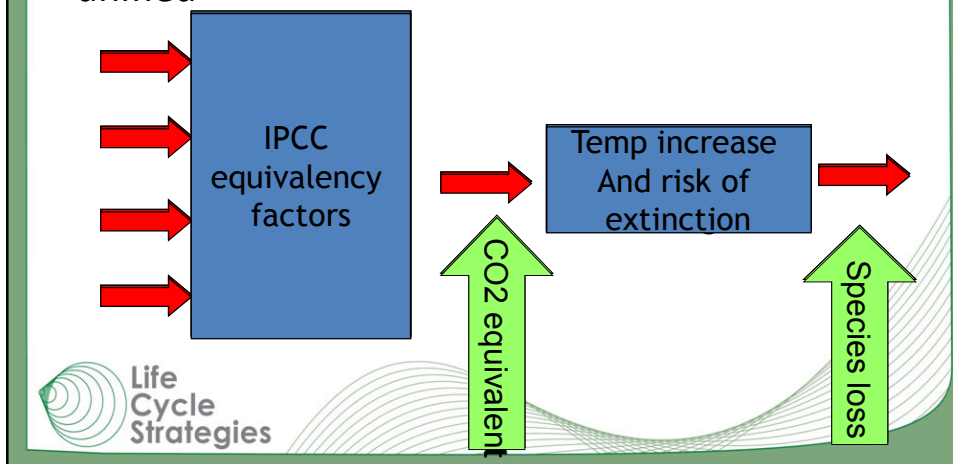


Midpoints and endpoints

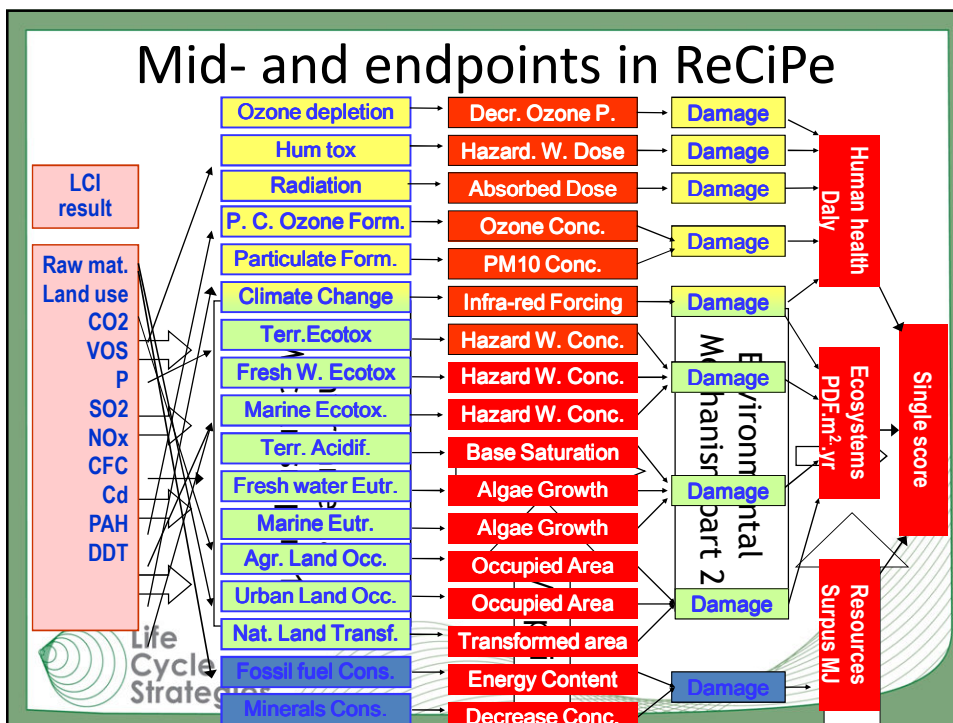


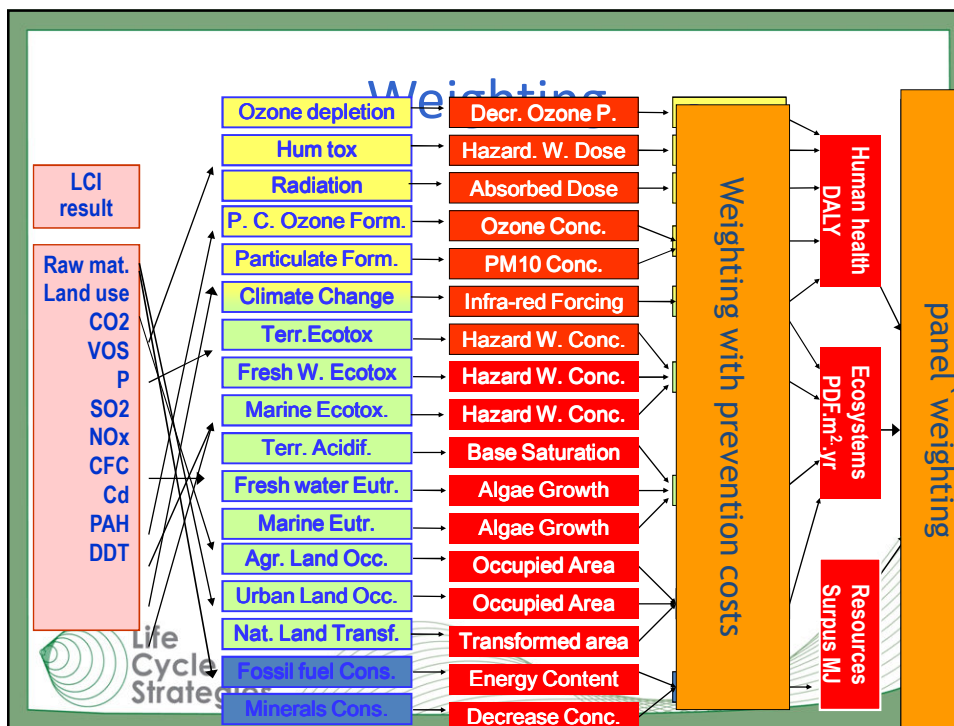
Midpoints in ReCiPe

- Midpoint taken at first point where impacts are unified



Mid- and endpoints in ReCiPe

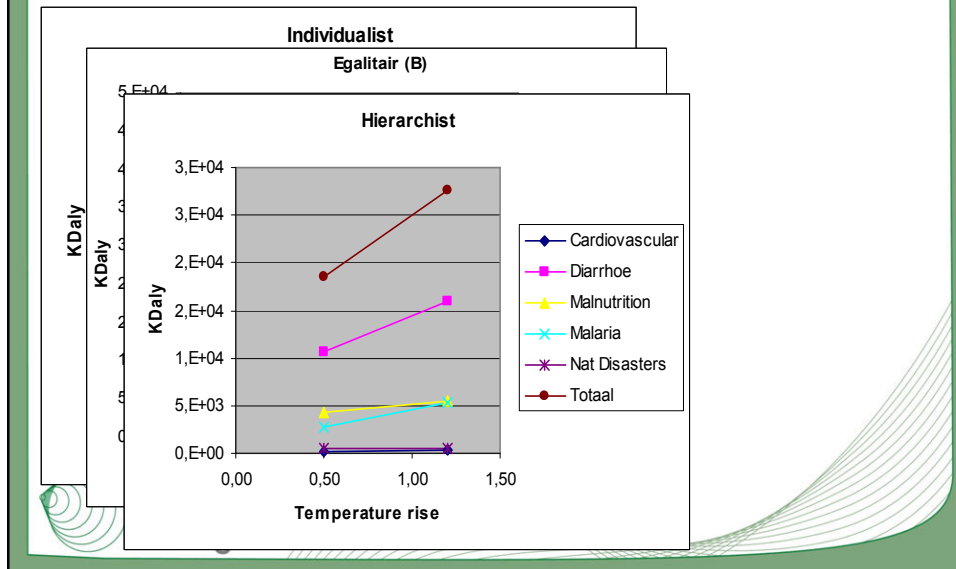




Cultural perspectives

	Time perspective	Manageability	Required level of evidence
H (Hierarchist):	Balance between short and long term	Proper policy can avoid many problems	Inclusion based on consensus
I (Individualist):	Short time	Technology can avoid many problems	Only proven effects
E (Egalitarian):	Very long term	Problems can lead to catastrophe	All possible effects

Example: endpoint climate change Relation Human Health and temperature



Australia

- Most popular methods are Greenhouse gases, embodied energy and evolving embodied water.
- Best Practice Guide by ALCAS
 - Not an impact method but a guide to how to select characterisation models from existing sources.

Australia

- Ecological footprints
 - A endpoint method based on land use – not used extensively in LCA more for populations
- Monetisation
 - Used extensively in transport and water sectors
 - Used in Packaging study in 2003 by Nolan based on mix of Australian and overseas (ExternE) values and continues to be used in waste sector on occasions.
- Multi- Criteria Analysis
 - Used extensively in water sector with other non environmental criteria.

