Supporting information: ILCD midpoints

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\carcinogenic effects\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\carcinogenic effects\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\carcinogenic effects\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\carcinogenic effects\EM_T_BE_T.png  (**d**) |

**Figure SI 1.** Carcinogenic effects related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\fossils\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\fossils\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\fossils\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\fossils\EM_T_BE_T.png  (**d**) |

**Figure SI 2.** Fossil depletion related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater and terrestrial acidification\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater and terrestrial acidification\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater and terrestrial acidification\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater and terrestrial acidification\EM_T_BE_T.png  (**d**) |

**Figure SI 3.** Freshwater and terrestrial acidification related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater ecotoxicity\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater ecotoxicity\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater ecotoxicity\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater ecotoxicity\EM_T_BE_T.png  (**d**) |

**Figure SI 4.** Freshwater ecotoxicity related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\ionising radiation\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\ionising radiation\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\ionising radiation\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\ionising radiation\EM_T_BE_T.png  (**d**) |

**Figure SI 5.** Ionising radiation related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\land use\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\land use\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\land use\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\land use\EM_T_BE_T.png  (**d**) |

**Figure SI 6.** Land use related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\marine eutrophication\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\marine eutrophication\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\marine eutrophication\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\marine eutrophication\EM_T_BE_T.png  (**d**) |

**Figure SI 7.** Marine eutrophication related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater eutrophication\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater eutrophication\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater eutrophication\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\freshwater eutrophication\EM_T_BE_T.png  (**d**) |

**Figure SI 8.** Freshwater eutrophication related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\non-carcinogenic effects\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\non-carcinogenic effects\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\non-carcinogenic effects\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\non-carcinogenic effects\EM_T_BE_T.png  (**d**) |

**Figure SI 9.** Non-carcinogenic effects related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\ozone layer depletion\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\ozone layer depletion\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\ozone layer depletion\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\ozone layer depletion\EM_T_BE_T.png  (**d**) |

**Figure SI 10.** Ozone layer depletion related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\photochemical ozone creation\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\photochemical ozone creation\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\photochemical ozone creation\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\photochemical ozone creation\EM_T_BE_T.png  (**d**) |

**Figure SI 11.** Photochemical ozone creation related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.

|  |  |
| --- | --- |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\terrestrial eutrophication\EM_F_BE_F.png  (**a**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\terrestrial eutrophication\EM_T_BE_F.png  (**b**) |
| C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\terrestrial eutrophication\EM_F_BE_T.png  (**c**) | C:\Users\baustert\Downloads\ilcd_plots\ilcd_plots\terrestrial eutrophication\EM_T_BE_T.png  (**d**) |

**Figure SI 11.** Terrestrial eutrophication related impact for a single work day over the course of the study period. d. (**a**) ADEME-inspired EV scenario and fixed parameters; (**b**) TIR-inspired EV scenario and fixed parameters; (**c**) ADEME-inspired EV scenario and evolving parameters; (**d**) TIR-inspired EV scenario and evolving parameters.