The members in this Task compiled a list, including facts and figures, of the environmental benefits and impacts of EVs, with the goal to increase their overall acceptance. Thus, numerous advantages of EVs compared to conventional vehicles are shown. These results will help the industry and government to support the further development and employment of EVs in all transport modes. The results will document and summarise the state of current knowledge and future challenges (incl. methodologies and case studies) on:

- effects of electric vehicles on water,
- effects of electric vehicles on air,
- effects of electric vehicles on land use – resources – waste,
- overall environmental effects and their assessment of EVs, and
- R&D demand.

In addition to these technical and scientific results, a framework for communication strategies to stakeholders and dissemination activities (e.g. proceedings, reports, papers, notes, presentations) will also be made available.

Concluding on the environmental assessment of the global EV fleet, based on LCA compared to the substituted conventional ICE vehicles leads to the following key issues:

- The environmental effects depend on the national framework condition, e.g. national grid electricity generation mix.
- The broad ranges of possible environmental effects are caused by the:
  - emissions of the national electricity production and distribution,
  - electricity consumption of EVs at charging point, and
  - fuel consumption of substituted conventional ICE vehicles.
- The highest environmental benefits can be reached by using additional installed renewable electricity, which is synchronised with the charging of the EVs.
- The adequate loading strategies for EVs to integrate additional renewable electricity effectively will create further significant environmental benefits.