

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Data from energy transformation pathways as calculated by the IAMs.

File Name: Supplementary Data 2

Description: Result data on scenario and model specific environmental impacts.

File Name: Supplementary Data 3

Description: Technology-specific environmental impact coefficients aggregated to the midpoint and endpoint levels, based on the THEMIS model.

File Name: Supplementary Data 4

Description: Coefficients of bioenergy-related or bioenergy-induced cropland, land transformation, land-use-change emissions, non-CO<sub>2</sub>-GHG emissions, water withdrawal and fertilizer use derived from the MAgPIE model.