

Description of Additional Supplementary Data

Title: Supplementary Data 1 - Code and Data

Description: • Code folder: This folder includes the Python and R code of this study. The Python code is mainly used to import and analyze IMAGE raw data, develop and run the LCA model. R-code is used to post-process the IMAGE and LCA results and make figures. • Data folder: This folder includes the raw IMAGE raw data and the LCI data of some electricity generation technologies (wave, fossil fuel with CCS), biomethane heat supply, and amine-base sorbent.