

Introduction to Integrated Assessment of Technology Options

Integrated assessments of technology options are necessary to develop comprehensive analysis that estimates probable significance of technologies, explores options to speed up diffusion of technologies, and determines the magnitude of potential reductions in greenhouse gas emissions. GCEP currently has one active research program in this area.

Professor Christopher Field and Rosamond Naylor led a feasibility study on the potential of biomass to contribute to meeting global energy needs. Their research efforts focused on examining the total sustainable biomass resource that is available, and the costs (and possible ancillary benefits) of producing biomass for energy. In the project's first year, a paper was published on the approach and setting an upper level for energy obtainable from biomass energy, under relatively strict constraints (Field et al. 2008). This effort led to fully funded full-term program with an expanded scope. The progress is described Section 2.3.4.