

Conversion Sub-Committee

2009 Draft Recommendations
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The Sub-Committee has the same recommendations as submitted in 2008 and the following six additional recommendations:

Conversion Recommendation #1

Important research and development issues will likely emerge from pilot, demonstration, and even commercial-scale projects. Long delays have been encountered in moving forward on some existing pilot, demonstration, and commercial scale projects due to lengthy NEPA processes. The Committee recommends that the Departments seek expedited NEPA approval processes for pilot and demonstration scale projects.

[We suggest that this be a joint recommendation with the Sustainability Subcommittee.]

Conversion Recommendation #2

Cellulosic ethanol has been heavily funded for over two decades, and improvements have been made to the point where commercialization is well underway. It is appropriate to put greater emphasis on other (non-ethanol) biofuels, particularly those that are compatible with existing fuel supply and use infrastructures. The Committee recommends that system design studies be carried out to define cost/performance targets for non-ethanol biofuels, and that funding levels for non-ethanol biofuel RD&D be increased to reach parity with ethanol within the next 3 years.

Conversion Recommendation #3

There are important interactions between conversion and feedstock activities. For example, feedstock quality can impact a conversion process. The Committee recommends more active integration of conversion and feedstock activities, including a minimum of quarterly meetings of the chairs of the IWGs. The Committee also recommends a joint conversion/feedstock activity to assess the future willingness of different users to pay for biomass and the potential size of different biomass markets. For example, how much above production cost might biopower uses of wood pellets drive the price of woody biomass headed for a liquid biofuel plant?

Conversion Recommendation #4

Algae-based biofuels are getting increased attention. Given some of the unique characteristics of algae and algae processing relative to other biomass feedstocks and the relatively early stage of development of algae biofuels, the committee recommends the creation of an algae working group consisting of representatives from each of the IWGs. Also, because the system-level greenhouse gas emissions associated with algae produced using industrial fossil-derived CO₂ (e.g., coal powerplant flue gases) are non-trivial, the Committee recommends that supported algae-related activities be balanced between processes that rely on industrial (or other concentrated) CO₂ streams and those that utilize air CO₂.

Conversion Recommendation #5

The Interagency Conversion Working Group (ICWG) project database provides an effective means for understanding and communicating the full scope of government biomass conversion RD&D activities, including a cataloging of topics being addressed and relative funding levels. The Committee recommends that the ICWG database continue to be maintained at a high standard and be made available for public viewing and use.

Conversion Recommendation #6

ARPA-E is likely to fund some bioenergy-related activities. Coordination with the Interagency Working Group (IWG) would be beneficial. The Committee recommends that the Departments seek to have ARPA-E join the IWG.

[We suggest this be a recommendation from the Committee as a whole].