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## Achieving the global potential for biofuels: The technological and policy path forward

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There has been considerable interest in expanding use of biofuels for transportation to reduce dependence on imports of oil, to expand markets for agricultural products and mitigate climate change. Brazil and the US have emerged as leading producers of biofuels in the last decade. Concerns about biofuels competing for land and water with food crops and its implications for food prices and about the potential for indirect land use change that could offset the savings in greenhouse gas emissions achieved by displacing fossil fuels with biofuels have raised barriers to policy support for biofuels. It has also led to growing attention to the next generation of biofuels from cellulosic biomass in both US and Brazil. Cellulosic biofuels from dedicated energy crops that can be grown productively on marginal lands have the potential to significantly increase greenhouse gas savings and reduce nutrient run-off without negative impacts on food production. However, production has stalled in both countries due to technological challenges, barriers to market penetration for ethanol and policy choices that have limited incentives for expanding production. This presentation will explore the technological and policy factors in the US and Brazil that have created barriers to the expansion of low carbon biofuels. It will also discuss the political economy factors that affect choice of policies to support biofuels in both countries and the policies needed to achieve economically viable and environmentally sustainable biofuel production in the future.

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