Department of Energy Energy Efficiency & Renewable Energy

Department of Energy, Biomass Program: Sustainable Biofuels, Biopower, and Bioproducts



The Biomass Program is working to advance biomass technologies in support of DOE's mission to strengthen America's energy security, environmental quality, and economic vitality through:













Feedstocks

Conversion technologies

Integrated biorefineries

Infrastructure

Biopower

Advanced biofuels

Developing lower cost feedstock logistics systems

Improving conversion efficiencies and costs

Systematically validating and deploying technology at first-of-a-kind facilities

Evaluating
vehicle
emissions,
performance,
and
deployment
options

Providing a clean, domestic, dispatchable renewable source of power

Expanding portfolio beyond cellulosic ethanol to hydrocarbon fuels

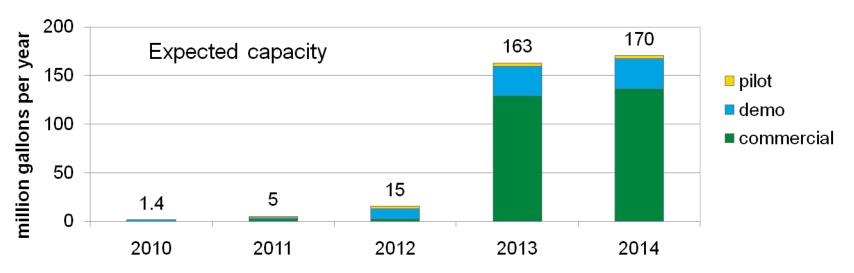
Department of Energy: Integrated Biorefinery Status



 Investments broadened to include more hydrocarbon fuels, diverse biomass feedstocks, and geographical diversity:

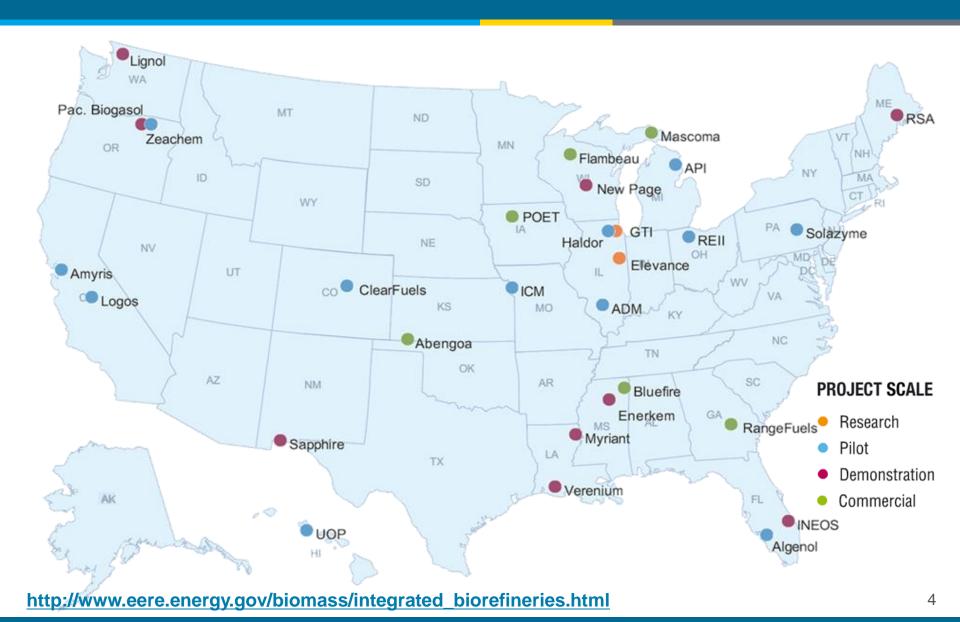
Over \$1B in DOE investments in 29 IBR projects

- » 11 hydrocarbon fuels \$326M
- » 16 cellulosic ethanol \$703M
- » 1 butanol \$30M
- » 1 succinic acid \$50M
- These projects represent up to 170 million gallons in planned capacity of biofuels and products by 2014, with an industry cost share of about \$2.5B, including loan guarantees



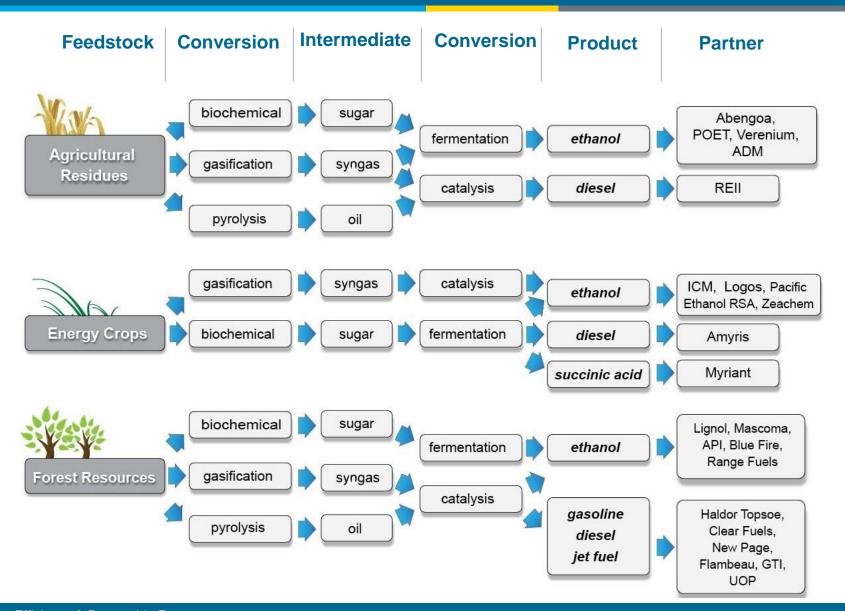
Department of Energy: Integrated Biorefineries Locations and Scales





Integrated Biorefinery Pathways





Integrated Biorefinery Pathways



