



E2 Advanced Biofuel Market Report 2014 Executive Summary

E2’s fourth annual Advanced Biofuel Market Report catalogs the growths and challenges in the advanced biofuel industry. The scope of this project includes advanced biofuel producers and related companies in the United States and Canada. Each project included in this report achieves at least a 50% reduction in carbon emissions.

Key Figures

- Capacity in 2014 is approximately 800 million gallons gasoline equivalent
- Capacity in 2017 may reach over 1.7 billion gallons gasoline equivalent
- 165 facilities planned, under construction, or operating from 180 companies
- Nearly \$4 billion in private investment into active advanced biofuel producers and value-chain companies since 2007 and
- \$200 million in new private investments since our last report
- Over \$848 million in grants to advanced biofuel producers since 2007

Our analysis reveals a decrease in capacity over previous years and downward trends in financial metrics. Biodiesel remains the dominant biofuel through 2017, but we project increasing contributions from other fuels, in particular drop-in hydrocarbons and cellulosic ethanol. As the industry matures, some companies have ceased operations or shifted their focus to other markets. Many companies, however, continue to move steadily towards commercialization, with a number of firms expecting to begin production at commercial scale by the end of this year.

	2014		2015		2016		2017		Companies	
	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH
Biodiesel	512	619	512	748	512	904	512	1,094	123	123
Drop-in	214	216	214	216	309	326	319	347	15	27
Ethanol	58	57	97	97	115	170	182	215	26	27
Other	2	2	2	2	20	20	60	60	1	3
TOTAL (volume)	784	893	824	1,063	955	1,421	1,072	1,716	165	180
TOTAL (gge)	819	933	846	1,095	878	1,444	1,056	1,719		

E2 advanced biofuel capacity projections, rounded to nearest million gallons, 2014-2017

Policies like the federal Renewable Fuel Standard and California’s Low Carbon Fuel Standard continue to be the primary drivers for market development, although there remain industry challenges related to regulatory uncertainty. Most notably, the EPA was delayed this year in its annual announcement for the Renewable Fuel Standard volumes. This regulatory instability leads to decreased investment, which further exacerbates other challenges associated with commercialization. In addition, in 2014 the LCFS was frozen at 2013 compliance volumes during a re-adoption period following a court decision. A number of promising plants have been delayed or idled because of difficulties in production or financing within this new industry.

This report continues to see valuable potential for advanced biofuels to have a substantial impact on the transportation sector in the United States. Despite some setbacks, there are many companies moving steadily towards commercialization.

A full copy of the report will be released January 6, 2015 at www.e2.org