



Advanced Biofuels: Market Status

Mary Solecki
E2 Clean Fuels Program

July 31, 2013

Disclaimer



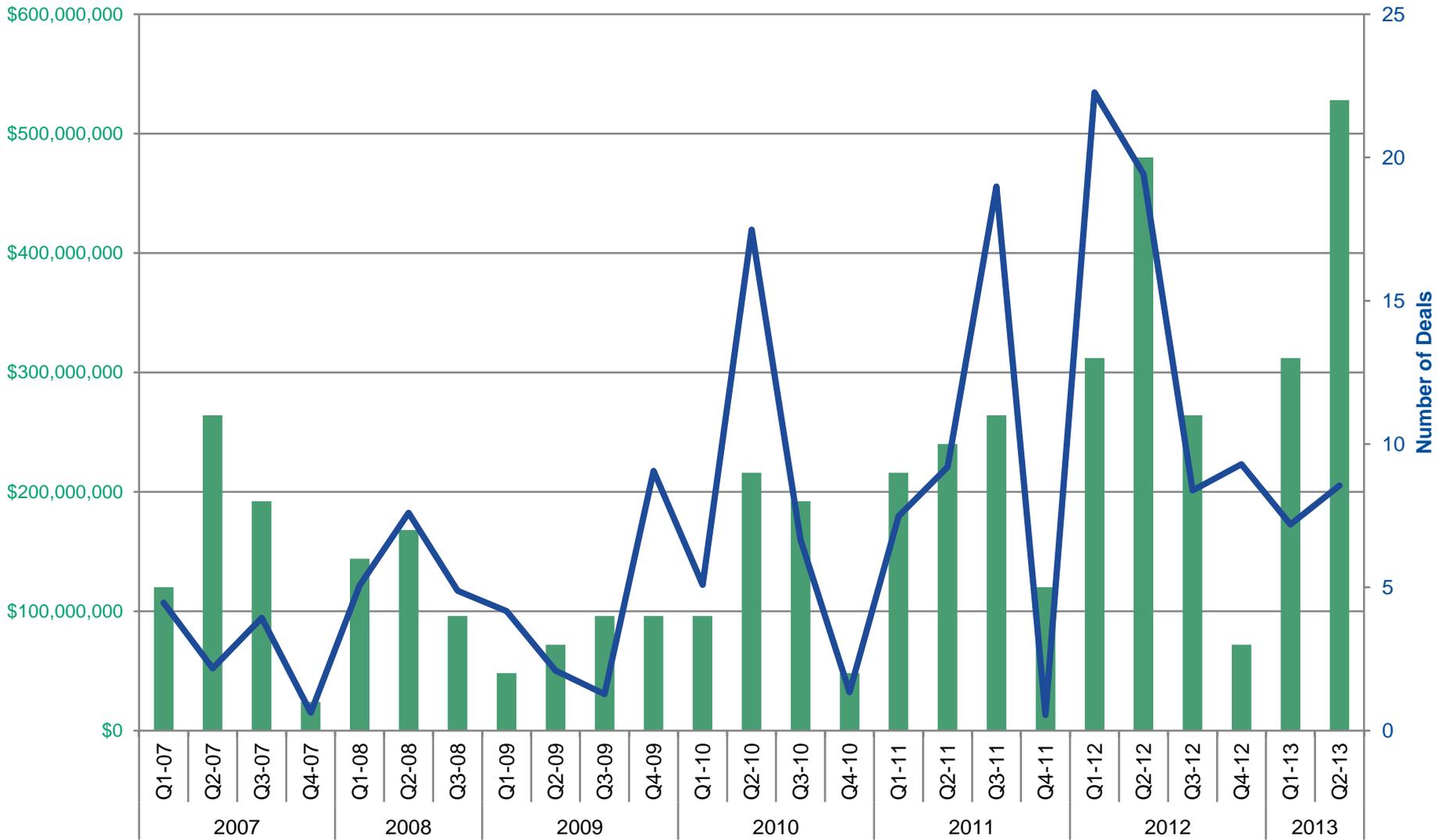
- This presentation is made in advance of final review & publication of E2's Biofuel Market Report 2013
- Some data herein is subject to change prior to publication
- This is preliminary analysis, and therefore generalized
 - There are exceptions to every generalization
 - Citations should be made from E2's final analysis, to be published August 27 2013 and publicly available at E2.org

E2 Biofuel Market Report 2013 Sneak Peek

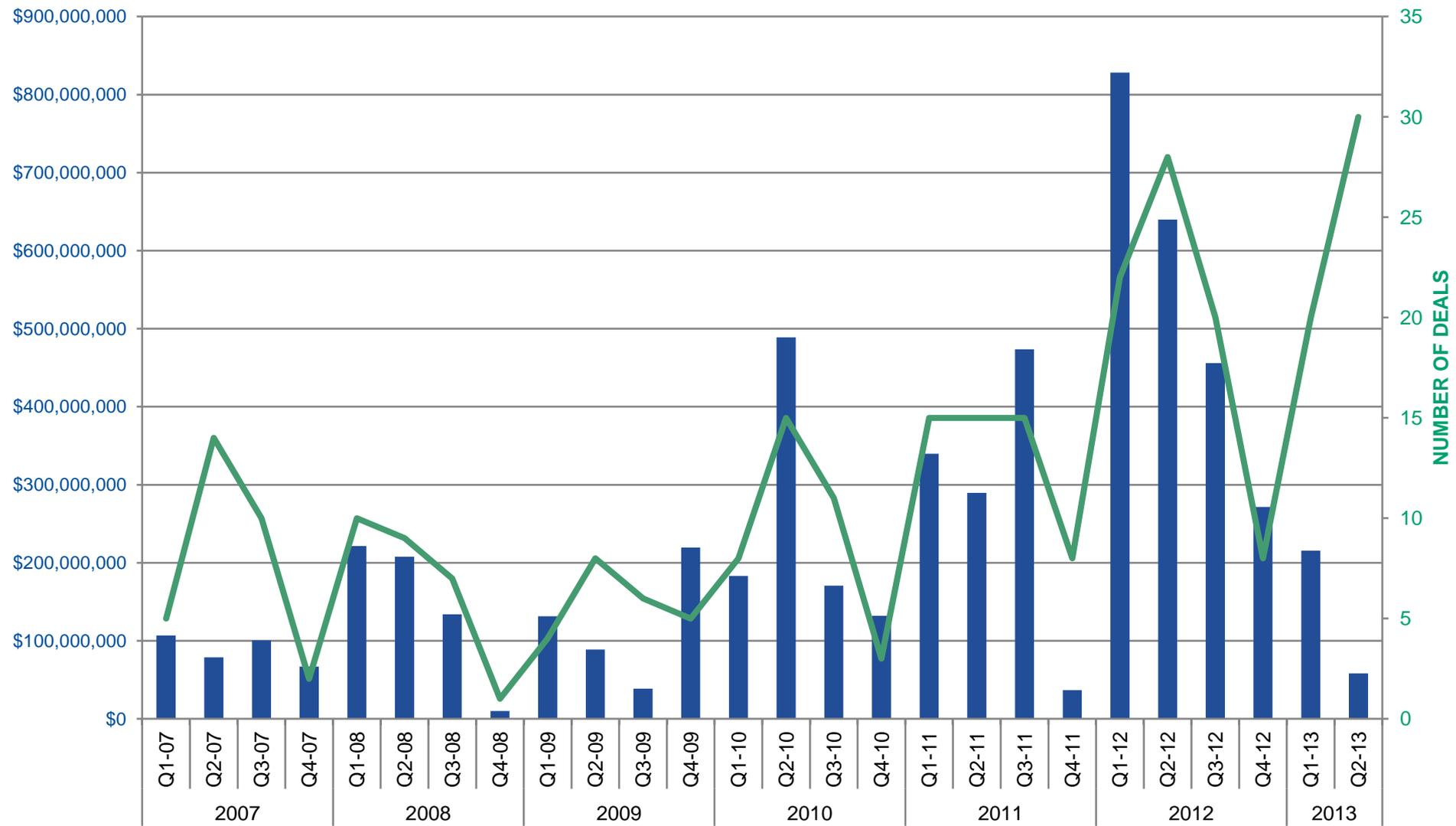


- Slow but steady growth
- Drivers
 - Policy-driven demand
 - RFS and LCFS
 - Customer demand
 - Military
 - Airlines
- Barriers
 - Significant capital needs
 - Regulatory Certainty
 - Repaid with interest
 - Feedstock Availability
 - Pricing
 - Commercial stage – require cash flows
 - Larger sums
 - Banks, government agencies

PRIVATE INVESTMENTS: ACTIVE BIOFUEL PRODUCERS



ACTIVE BIOFUEL RELATED INVESTMENTS NORTH AMERICA





2012 Report Review

	Number of Companies	2012		2015	
		LOW	HIGH	LOW	HIGH
Butanol	4	0.02	19.5	56	370.5
Ethanol	35	14.2	14.2	337.2	512.2
Hydrocarbon	35	88.5	91.9	336	877.5
Biodiesel	91	564	564	877	877
TOTAL	163	685.7	689.6	1,606.2	2,637.2



Companies Tracked

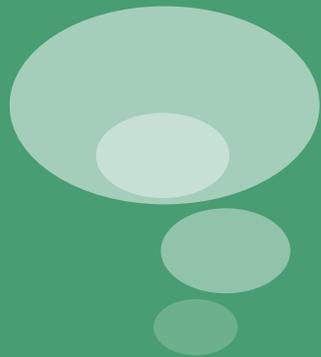
	2012	2013
Butanol	4	3
Ethanol	35	32
Hydrocarbon	35	33
Other	0	1
Biodiesel	91	133
TOTAL	163	202



2013 Report Preview

	Mill Gal	YOY Increases			
		2013	2014	2015	2016
Butanol	0.02	18%	0%	70%	0%
Ethanol	14.2	70%	90%	32%	30%
Hydrocarbon	88.5	61%	29%	16%	8%
Other	0	0%	0%	0%	90%
Biodiesel	1,052*	1%	11%	19%	19%
TOTAL	1,154.8	12%	20%	20%	19%

**Inclusion of soybean biodiesel increases biodiesel data*



Questions

(Thank you)



ENVIRONMENTAL
ENTREPRENEURS®