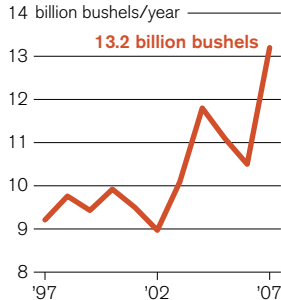


BOOM OR BUST?

Economics will determine the fate of biofuels.

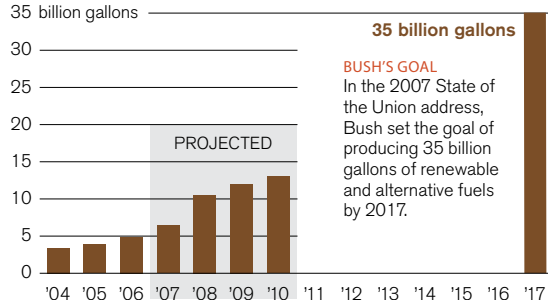
CORN GROWTH

Corn production rises ...



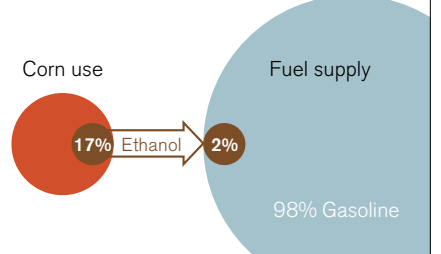
The increase in the production of ethanol has prompted farmers to grow record amounts of corn. In 2006, about 17 percent of the U.S. corn crop went into production of the biofuel.

... as ethanol production increases to meet lofty goals ...



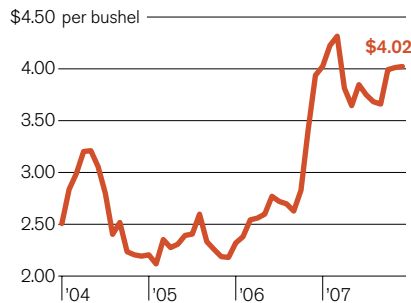
... though the impact is small.

In 2006, 17 percent of the corn crop was processed into ethanol. That ethanol accounted for 2 percent of the fuel supply.



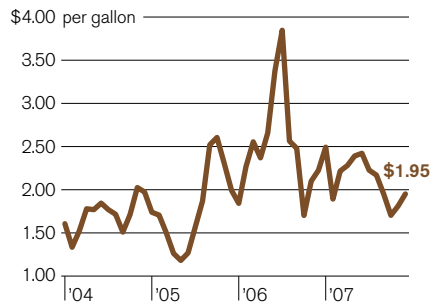
TIGHT MARGINS

Corn prices are up ...

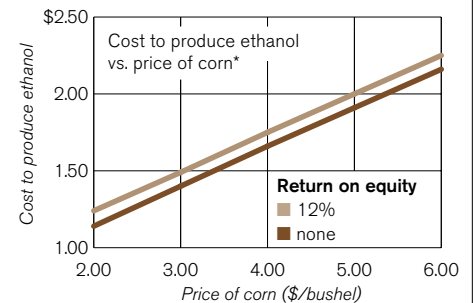


The combination of rising corn prices and falling ethanol prices means producers of corn-derived biofuels are facing tight margins and an uncertain economic future.

... but ethanol prices remain low ...



... making it difficult to produce profitably.



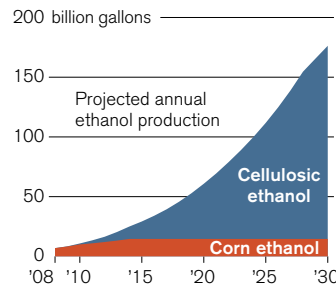
BIOFUEL FUTURE

Commercial production of biofuels from cellulosic biomass is at least four to five years away. But the technology has economic and environmental advantages over corn ethanol.

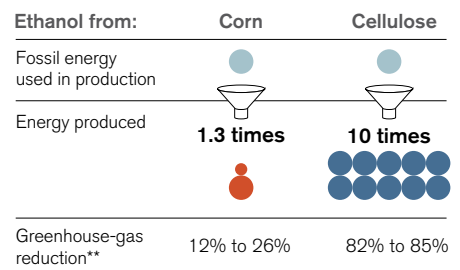
Commercial cellulosic facilities are being built ...

Company/Location	Technology used	
	Thermochemical	Biochemical
Abengoa Bioenergy/KS	●	●
Alico/FL	●	
BlueFire Ethanol/CA		●
Broin/IA		●
Iogen/ID		●
Range Fuels/GA	●	

... and may be the primary source ...



... of cleaner, more efficient ethanol.



*Cost of producing 120 million gallons of ethanol in a newly constructed plant **Versus gasoline

Sources from upper left to bottom right: USDA; Vernon Eidman; Stephan Polasky/Jason Hill; Bloomberg (as of 11/13); Bloomberg (as of 11/12); Eidman; DOE; Khosla Ventures; Eidman