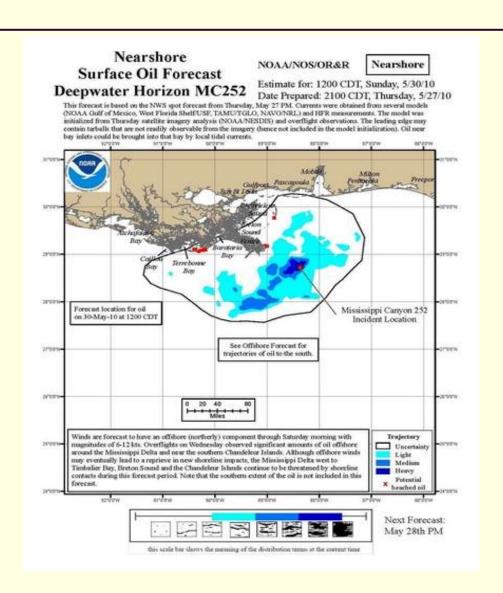
# Biofuels: The Current State of Play

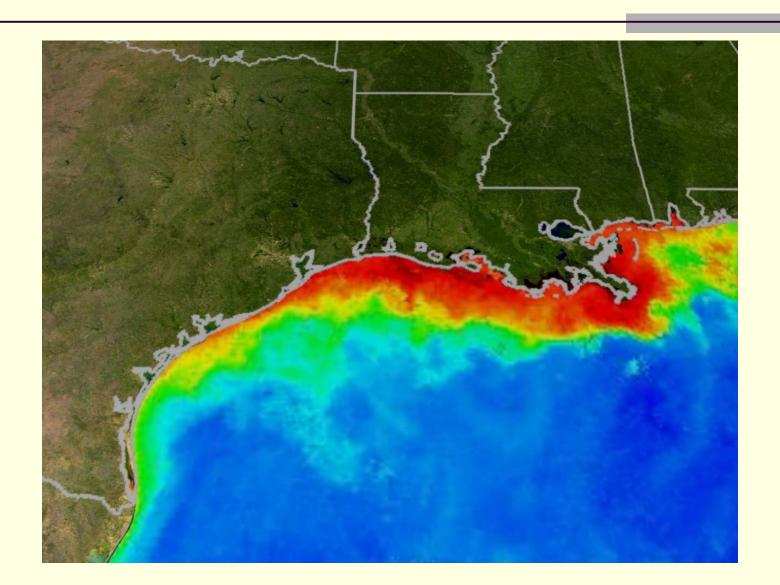
C. Ford Runge, Distinguished McKnight University Professor of Applied Economics and Law, University of Minnesota

Woodrow Wilson International Center for Scholars July 23, 2010

# Deepwater Horizon Oil Spill



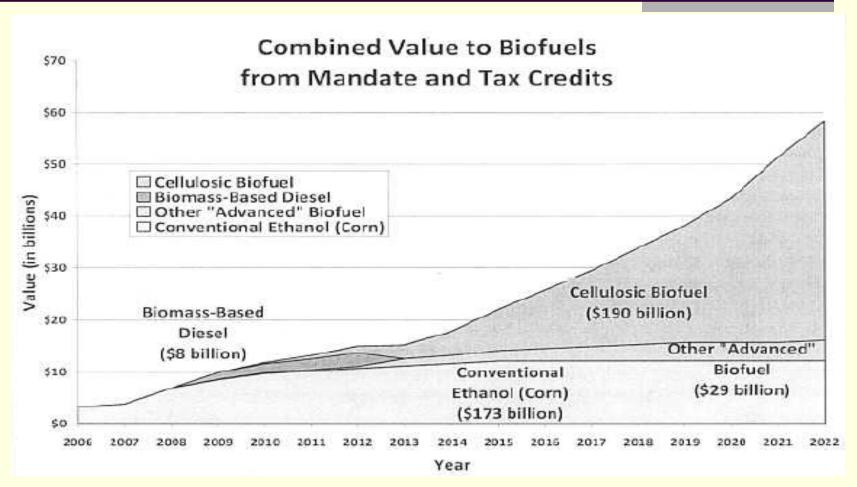
#### The "Dead Zone": 2010



# U.S. Biofuels Policy

- 45¢/gallon "blenders credit" passed through to producers (reduced from 51¢/gallon to 45¢/gallon in 2008 Farm Bill)
- 54¢/gallon tariff on imported ethanol (extended from 2010 to 2012 in 2008 Farm Bill)
- Obama has proposed raising mandate to 60 billion gallons by 2030.
- 36 billion gallon mandate by 2022, of which 21 billion "cellulosic"
- 385 million dollars in subsidies to cellulosic pilot plants (more subsidies in 2008 Farm Bill)

# U.S. Government Support in Dollars from Combined Subsidies to Biofuels



#### U.S. Subsidies to Biofuels

<b>Summary of Subsidy to Biofuel Industry through the Tax Credits and RFS</b>
(in billions)

In Year 2008	\$10
In Year 2022	\$60
Cumulative Between 2008 and 2022	\$420

# Summary of Subsidy to Biofuel Industry through the Tax Credits and RFS under "Obama Plan" (in billions)

In Year 2030	\$125
Cumulative Between 2008 and 2030	>\$1,000

Koplow, 2009

### Corn (C, CBOT)

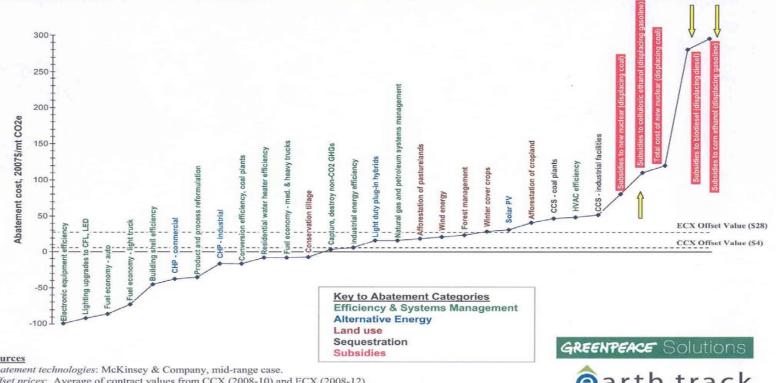


# Food Price Index (FAO)

2000	90	2009 - May	152
2001	92	- June	151
2002	90	- July	147
2003	98	- August	152
2004	111	- September	153
2005	115	- October	157
2006	122	- November	169
2007	154	- December	172
2008	191	2010 - January	174
2009	152	- February	170
		- March	163
		- April	165
		- May	164

#### Relative Cost of CO<sub>2</sub> Abatement **Options**





Abatement technologies: McKinsey & Company, mid-range case. Offset prices: Average of contract values from CCX (2008-10) and ECX (2008-12). Subsidy data: Earth Track, Inc.



#### **Policy Responses**

- (1) Replace fixed 45¢/gallon blender's credit with subsidy varying inversely with price of corn (e.g., at \$3.00/bushel, credit would be 45¢; at \$3.45, it would be zero).
- (2) Phase-out 54¢/gallon tariff on imported ethanol.
- (3) Impose 5 year moratorium on mandates, fix at 2010 level.

#### **Policy Responses (cont.)**

- (4) Introduce conservation-inducing "negative pollution taxes" and credits (e.g., rising taxes on horsepower, hybrid vehicle rebates, fees on housing spaces greater than 3,500 square feet).
- (5) Shift subsidies from cellulose plants to cellulosic R&D.