



# Renewable Energy: Observations

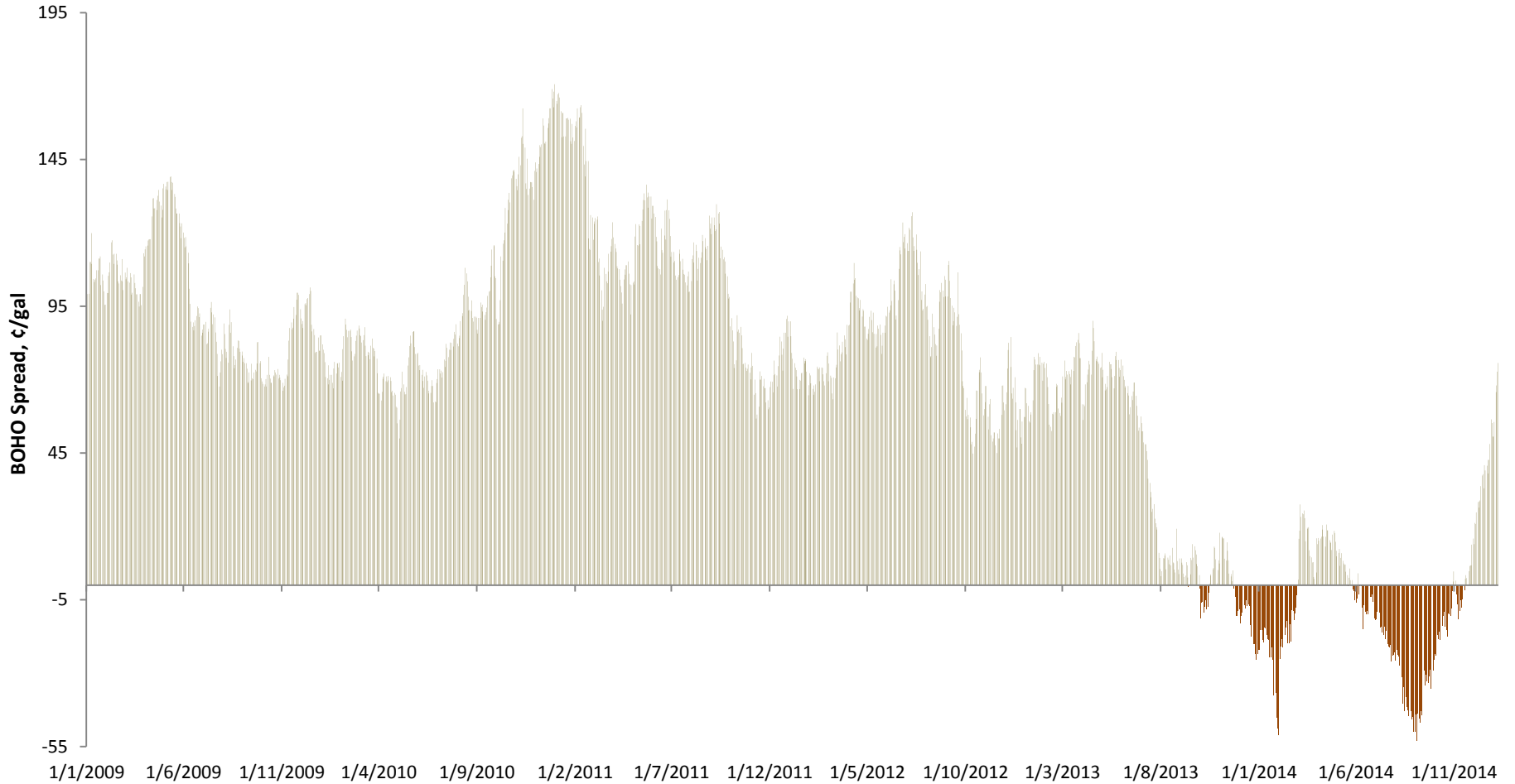
*NBB Jan 2015*

Presented by

**Kevin  
McGeeney**

# BOHO (CBOT Soybean Oil/NYH ULSD)

BOHO Spread



# Renewable Energy

- What is the purpose?

GHG emission reduction

Energy Security

Employment

- I define the problem as how to reduce the world's GHG emissions from energy use without negative impact on development



# Renewable Energy

- Reduce the world's GHG emissions from energy use without negative impact on development

A) Through firm Governmental leadership



# Renewable Energy

- Reduce the world's GHG emissions from energy use without negative impact on development
  - A) Through firm Governmental leadership

Do you approve or disapprove of the job the US Congress is doing?

Approve .....	8%
Disapprove.....	86%
Not sure .....	6%

What do you have a higher opinion of: the US Congress or witches?

Congress .....	32%
Witches.....	46%
Not sure .....	21%

What do you have a higher opinion of: The US Congress or hemorrhoids?

Congress .....	31%
Hemorrhoids .....	53%
Not sure .....	16%

What do you have a higher opinion of: the US Congress or Wall Street?

Congress .....	15%
Wall Street .....	46%
Not sure .....	39%

- Public Policy Polling LLC. PPP surveyed 502 registered US voters between October 4-6, 2013. The margin of error for the overall survey is +/- 4.4%. This poll was not authorized or paid for by any campaign or political organization

# Renewable Energy

- Reduce the world's GHG emissions from energy use without negative impact on development
  - A) Through firm Governmental leadership

“Only a small minority of Europeans trust their national institutions: 25% of Europeans “tend to trust” their government, a decrease of two percentage points since autumn 2012, while distrust has gained three percentage points to 71%. This situation is mirrored for trust in the national parliament (26%, -2 versus 68%, +2).”

- European Commission: Standard Eurobarometer 79, Spring 2013

# Renewable Energy

- Reduce the world's GHG emissions from energy use without negative impact on development.
  - A) Through firm Governmental leadership
  - B) Mass public protest



# Renewable Energy

- Reduce the world's GHG emissions from energy use without negative impact on development

## B) Mass public protest

Q. What do you think are the two most important issues facing (OUR COUNTRY) at the moment?

Unemployment	51%	Pensions	9%
Economic Situation	33%	Taxation	9%
Rising Prices	20%	Education system	8%
Government Debt	15%	Housing	5%
Crime	12%	<b>Environment, climate and energy</b>	<b>4%</b>
Health and social security	11%	Terrorism	3%
Immigration	10%	Other	1%

- European Commission: Standard Eurobarometer 79, Spring 2013



# Renewable Energy

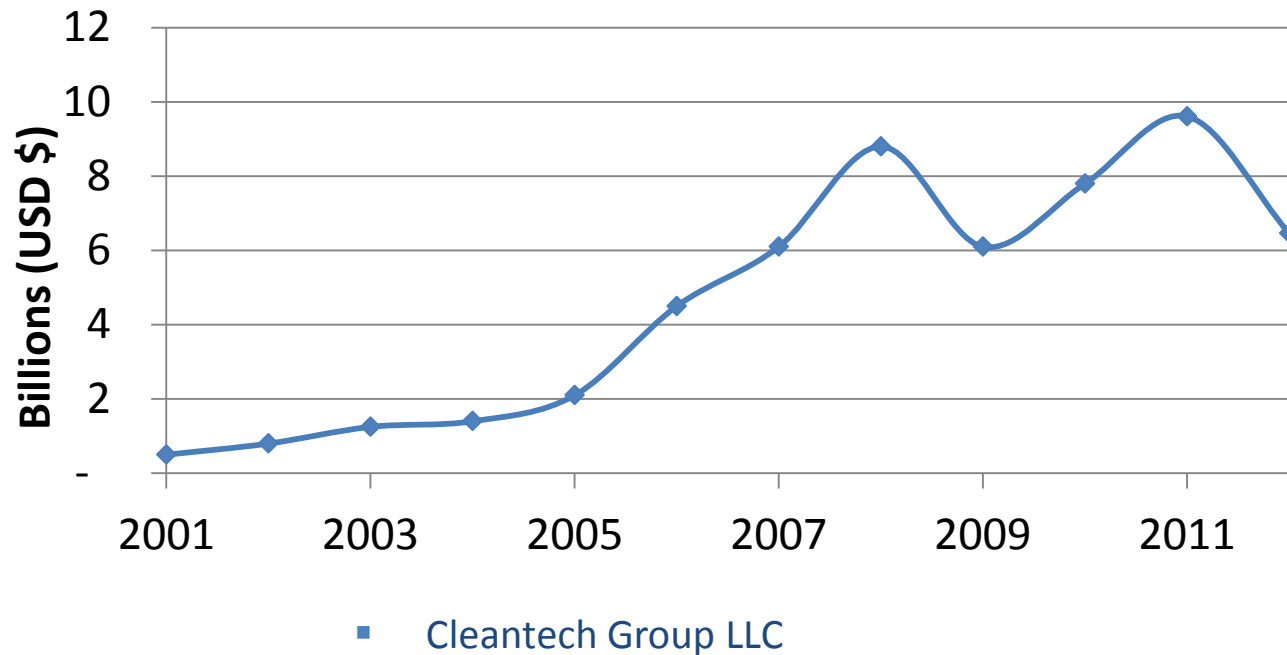
- Reduce the world's GHG emissions from energy use without negative impact on development
  - A) Through firm Governmental leadership
  - B) Mass public protest
  - C) Private Sector
    - For Profit Enterprise
    - Private Charity
    - Civil Society Organization



# Renewable Energy

- Reduce the world's GHG emissions from energy use without negative impact on development
  - C) Private Sector

## Cleantech Venture Investing



# Renewable Energy

- Reduce the world's GHG emissions from energy use without negative impact on development
  - A) Through firm Governmental leadership
  - B) Mass public protest
  - C) Private Sector
    - For Profit Enterprise
    - Private Charity
    - Civil Society Organization
  - D) Local Government



# Renewable Energy

- Reduce the world's GHG emissions from energy use without negative impact on development
  - A) Through firm Governmental leadership
  - B) Mass public protest
  - C) Private Sector
    - For Profit Enterprise
    - Private Charity
    - Civil Society Organization
  - D) Local Government
  - E) All of the Above



# Renewable Energy: What is worth focus?



Geneva

Rotterdam

London

Chicago

New York

Lisbon

Singapore

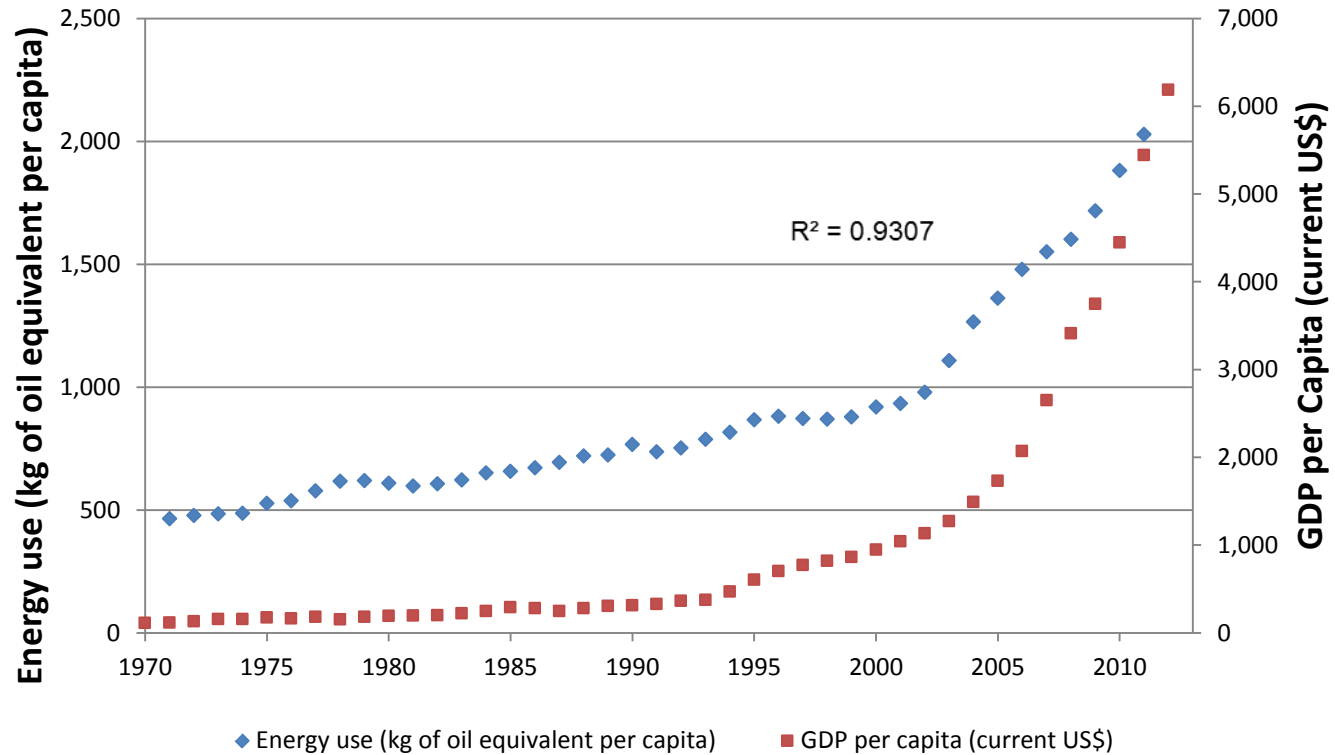
San Francisco

# Renewable Energy: What is material?

- Reduce the world's GHG emissions from energy use **without negative impact on development**
  - Is energy use correlated with economic development?

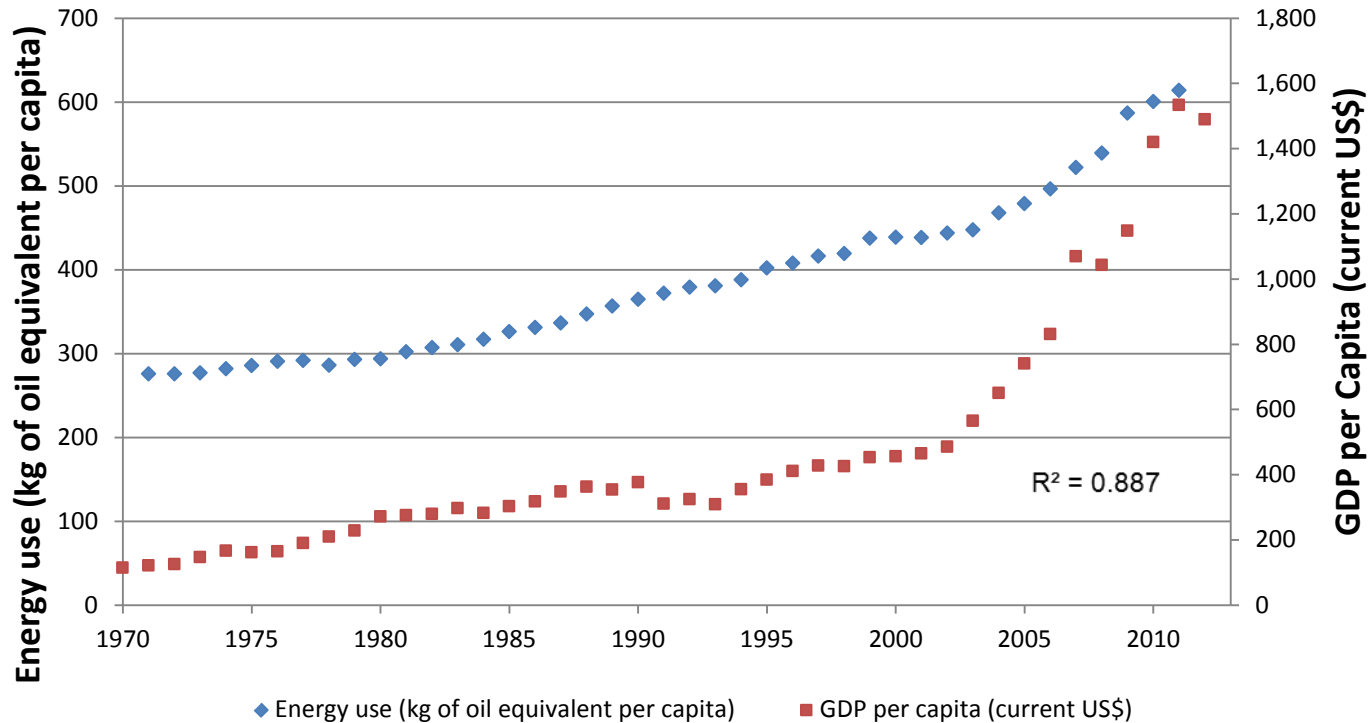


## China



■ World Bank Open Data 1960-2012

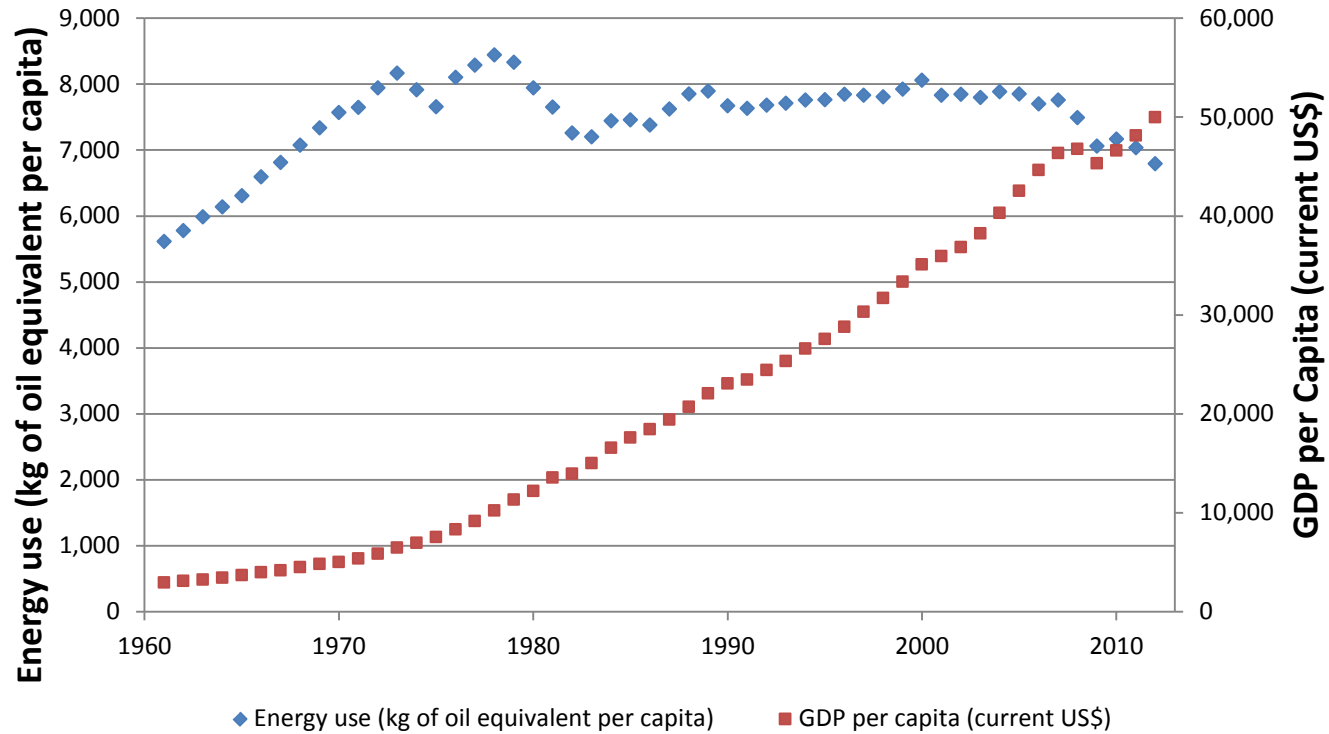
## India



■ World Bank Open Data 1960-2012

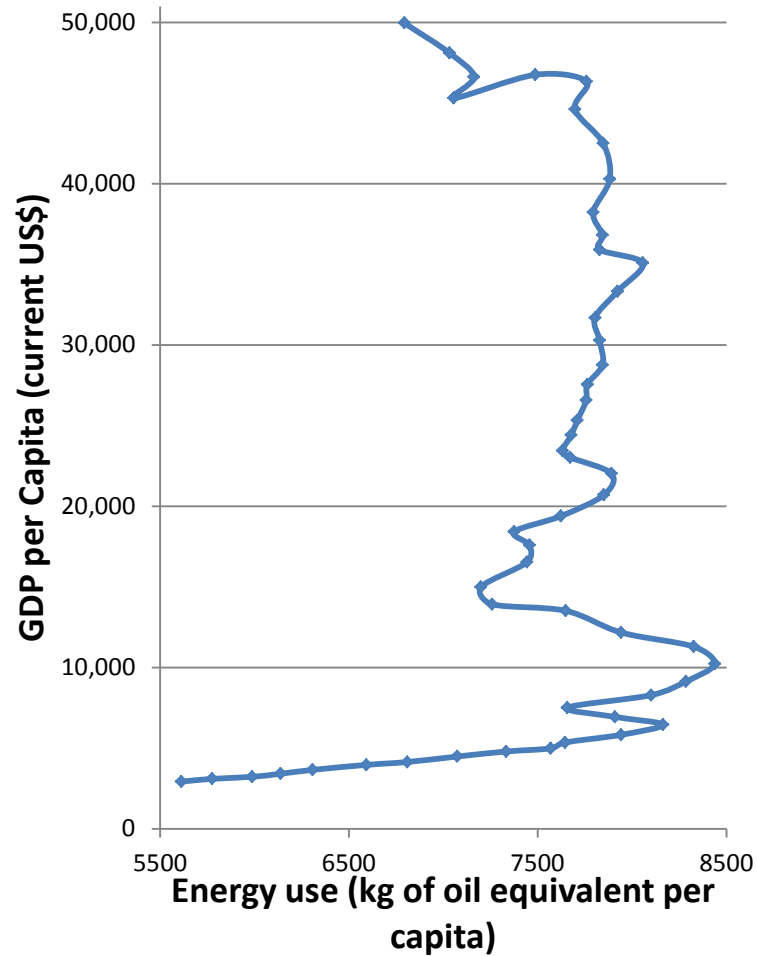


## USA



World Bank Open Data 1960-2012

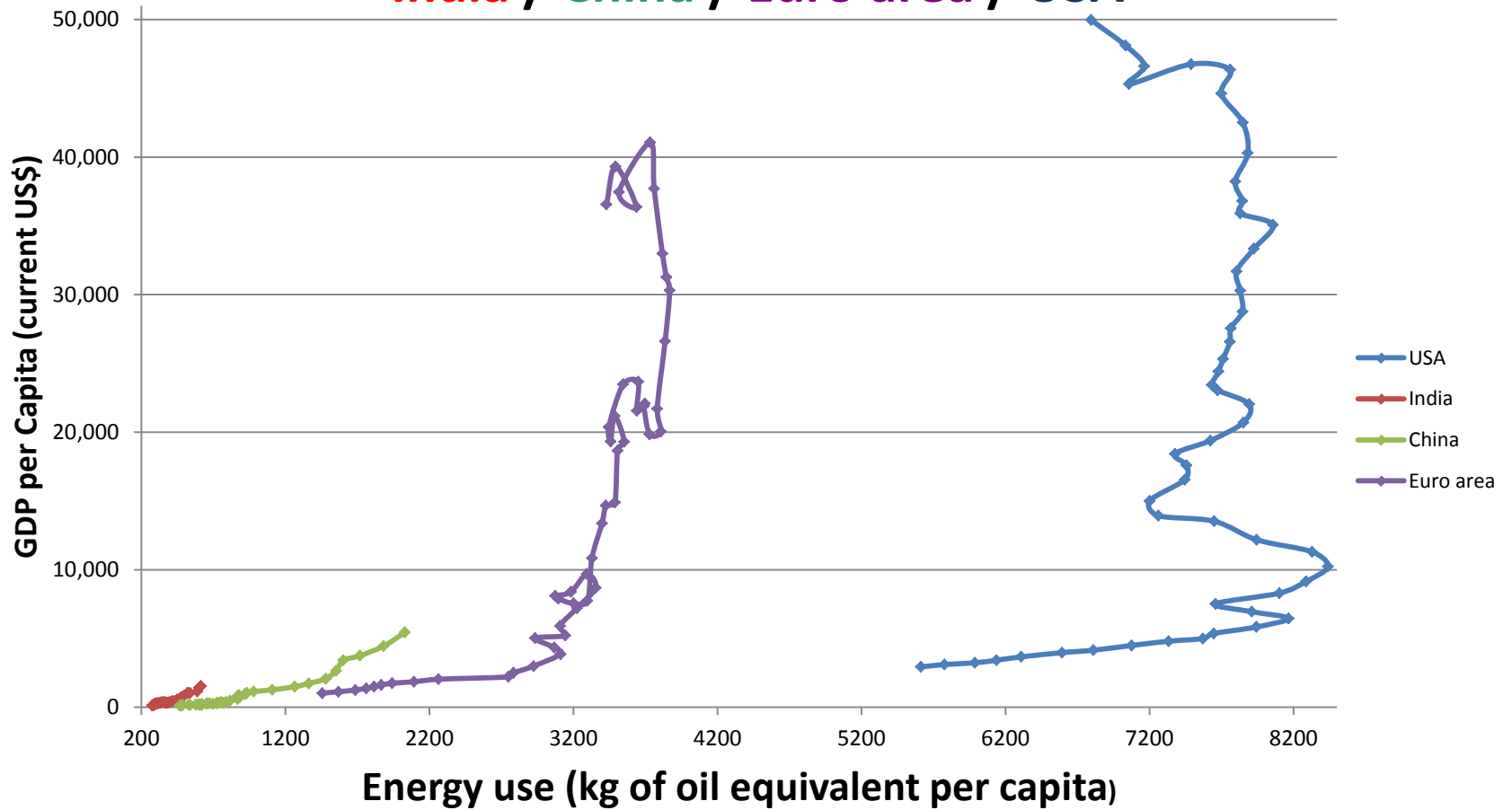
## USA



World Bank  
Open Data  
1960-2012

# Energy

India / China / Euro area / USA



World Bank Open Data 1960-2012

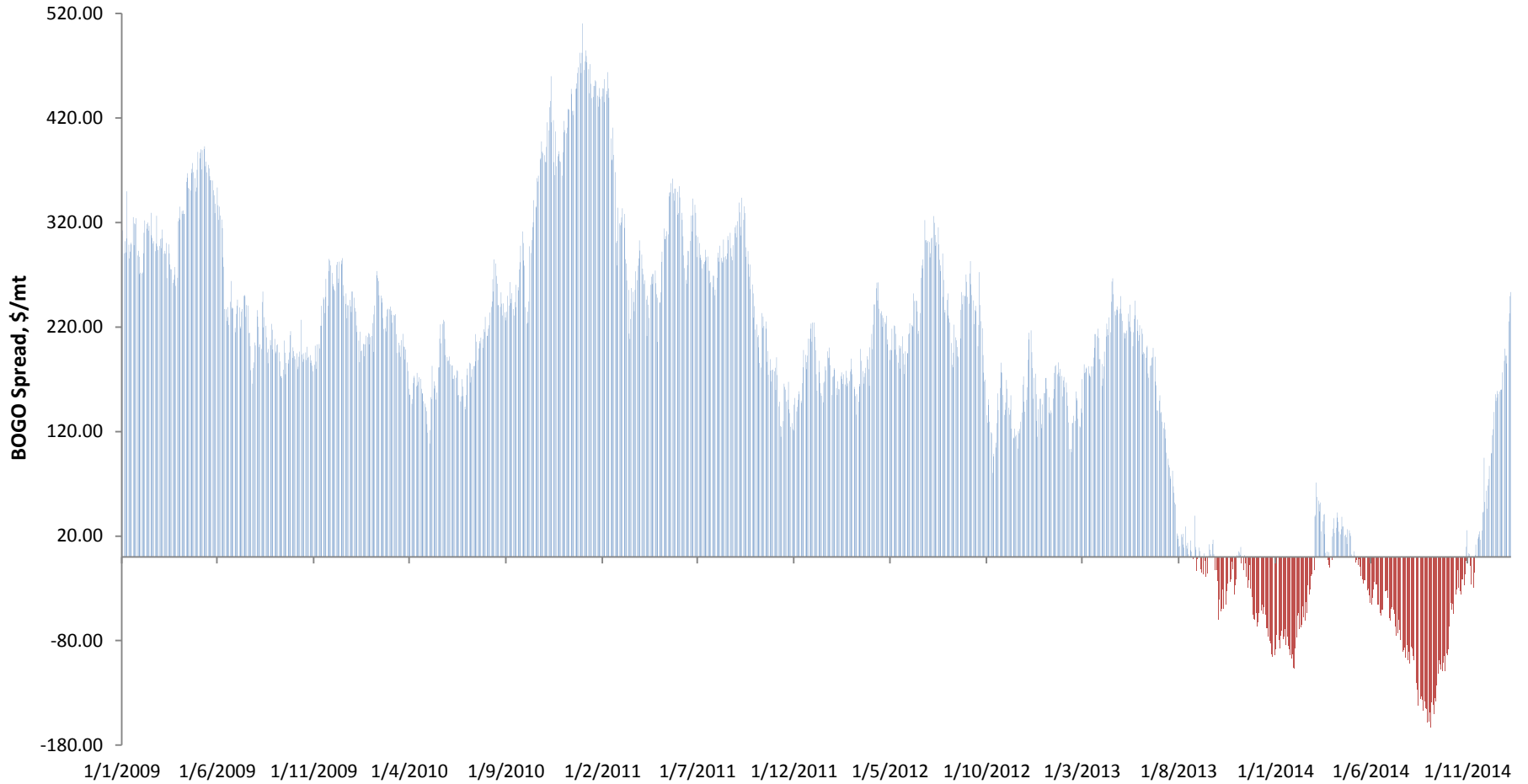
# Renewable Energy:

- Government has competing goals which makes firm leadership on climate change difficult
- No significant population see climate change as pressing
- Any suggestion developing countries cut emissions growth is seen as and is a request to cut population or economic development
- Higher energy prices lead to reduced emissions and improved technologies



# BOGO (CBOT Soybean Oil/ICE Gasoil)

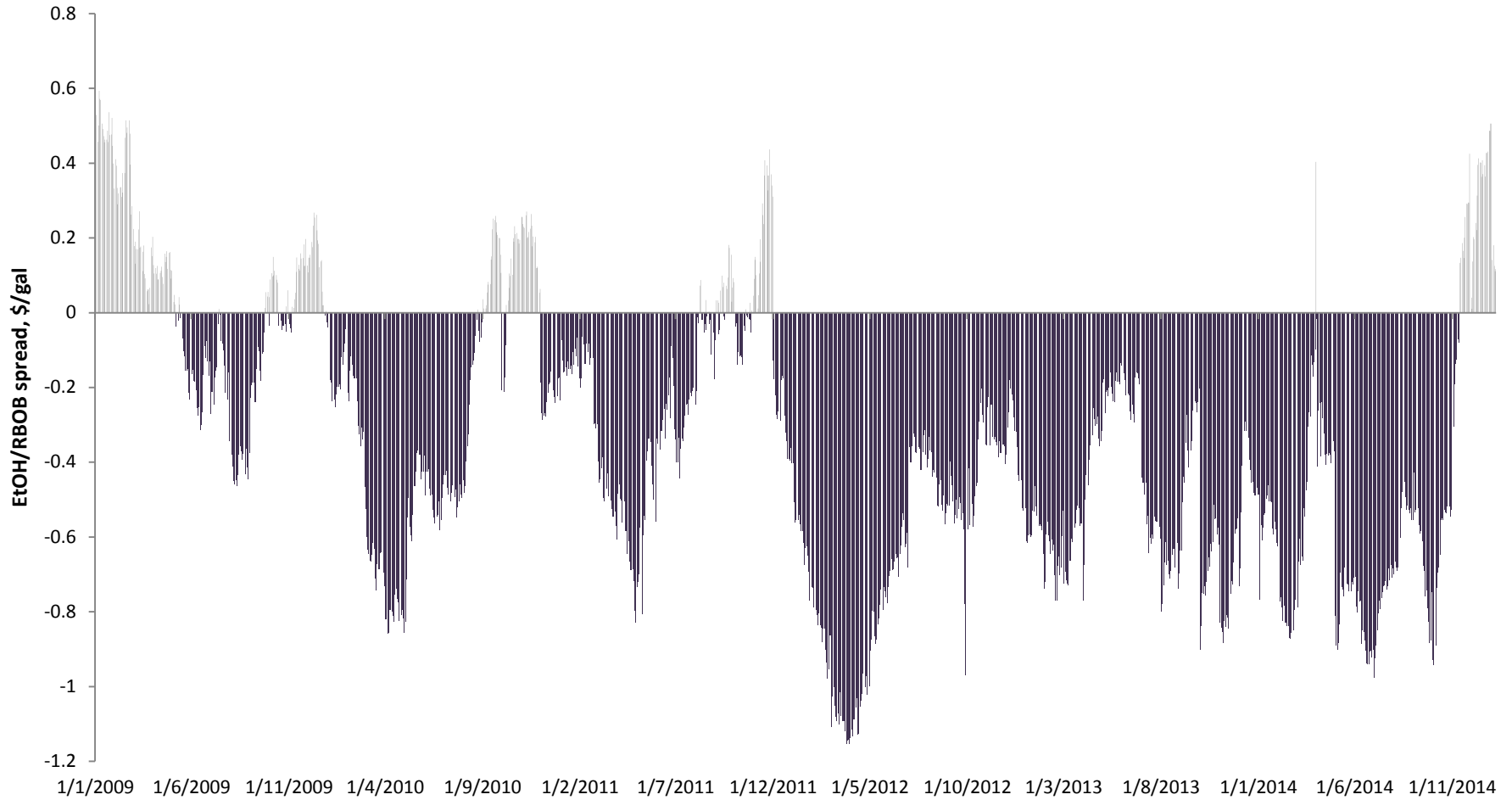
BOGO Spread



Source: Bloomberg

# US Ethanol/Gasoline spread (Chi Platts/RBOB)

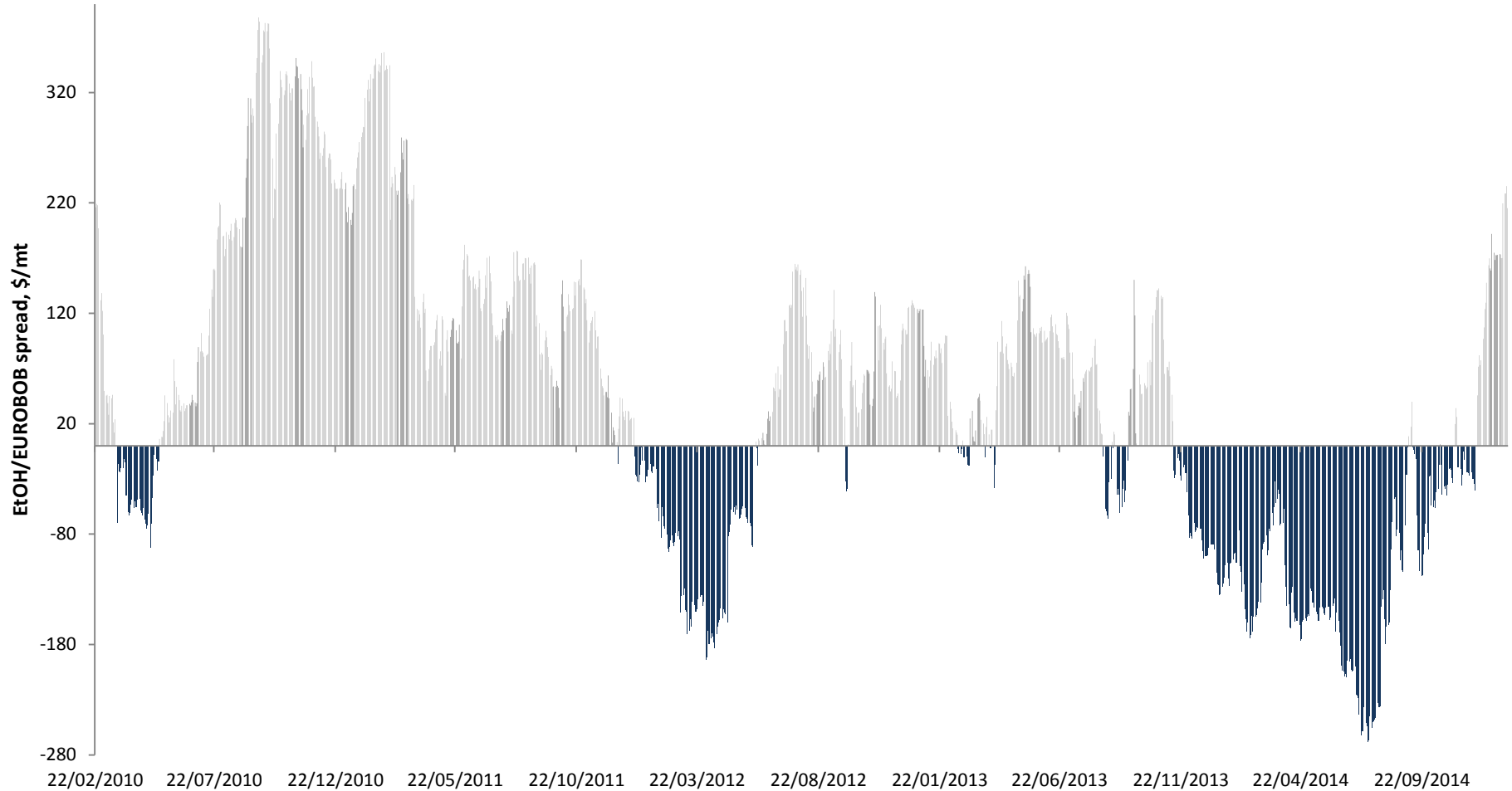
US Ethanol/Gasoline Spread



Source: Bloomberg

# EU Ethanol/Gasoline spread (SCB T2 FOB Rott/EUROBOB)

## European Ethanol/Gasoline spread



Source: SCB proprietary data, Bloomberg