Toppling the Regulatory Pillars Of Sustainable Development

Steve Goreham
Executive Director, Climate Science Coalition
Four Pillars to Be Toppled

- Regulations on Greenhouse Gas Emissions
- Vehicle Mandates
- Renewable Energy Mandates and Subsidies
- Rolling Back Hydrocarbon Bans
Budget Proposal Slashes Climate Programs

“Regarding the question as to climate change…we’re not spending money on that anymore.”
—Mick Mulvaney, Director of Office of Management and Budget, March 16, 2017

- EPA Budget Cut from $8.2 to $5.7 Billion
- “Clean Energy” Cuts from Department of Energy
- Climate Programs Cut at NASA, NOAA, and the State Department
2009 Endangerment Finding—The Core Issue

“…greenhouse gas pollution which threatens public health and welfare.”

Basis for GHG Rules:

Power Plant Emissions
Clean Power Plan
CAFE Standards
Social Cost of Carbon
Massachusetts v. EPA, 2007

- Massachusetts and Ten Other States Sued Claiming EPA Should Regulate GHG Under the Clean Air Act

“Under the clear terms of the Clean Air Act, EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do.”

— US Supreme Court
5–4 Majority Opinion, April 2, 2007
“...the Administrator has an important role when it comes to the regulation of carbon dioxide, which I will fulfill consistent with Massachusetts v. EPA and the agency’s Endangerment Finding on Greenhouse Gases respective of the applicable statutory framework established by Congress.”

—EPA Administrator Scott Pruitt, Written Congressional Testimony, January 18, 2017
Endangerment Rule Rescindment—Path Through a Legal Minefield?

Will Face:

- A New Public Comment Period
- A Multi-Year Court Battle by States and NGOs
- Risk of Defeat as “Arbitrary” or “Against Scientific Opinion”
A More Direct Path?—Clarify the Clean Air Act

Congressional Action to Exclude GHG from the CAA:

- Will Remove Legal Basis for GHG Laws
- Would Face a Senate Filibuster
Roll Back Sustainable Vehicle Statutes

Corporate Average Fuel Economy (CAFE)

- Automobiles: 54.5 mpg by 2025
- Heavy Trucks:
  - “Lower CO2 Emissions by 1.1 Million Tons”
  - Adds $15,000 to Cost of New Heavy-Duty Truck
- Problem: California and Other State Regulations
Electric Cars—Created by Sustainable Ideology

“We can break our dependence on oil…and become the first country to have one million electric vehicles on the road by 2015.” —President Barack Obama, Jan. 2011

● American Clean Energy and Security Act of 2009
  - $7,500 Purchase Tax Credit
● Over $5 Billion in Grants and Loan Guarantees
  “EV Everywhere Challenge”
  “Workplace Charging Challenge”

Germany Wants All Europe to Ban Non-Electric Cars by 2030 —ItechPost, October 31, 2016
Most Americans Don’t Want Plug-in Electrics

- Ford F-Series Pickup Truck—Sales 5 Times Total PHEVs
- 63% of 2016 US Sales Were Small Trucks and SUVs
Roll Back the Green Energy Subsidy Regime

- Wind Production Tax Credit
- Solar Net Metering Subsidies
- State Renewable Portfolio Standards Laws

Texas Windfarm

Ivanpah Solar, California
Why is Wind Such a Hit in Iowa?

Federal Production Tax Credit: 2.3 cents per kW-hr
(Now 1.84 cents per kW-hr)

Iowa Renewable Energy Production Tax Credit: 1.5 cents per kW-hr

Windfarm, Cerro Gordo, IA
Why is Wind Such a Hit in Iowa?

Federal Production Tax Credit: 2.3 cents per kW-hr
(Now 1.84 cents per kW-hr)

Iowa Renewable Energy Production Tax Credit: 1.5 cents per kW-hr

Market Price: 3.5 cents/kW-hr!
Prices Increasing Faster in Wind States

Electricity Price Change in Leading Wind States (2008-2016)
Average Retail Price (All Sectors)

- Texas 1
- Iowa 2
- Okla 3
- Kansas 4
- Calif 5
- Minn 6
- Illinois 7
- CO 8
- ND 9
- Wash 10
- Oregon 11
- Indiana 12

National Average Increase 4.8%

EIA 2008, 2016
Massachusetts: Enormous Solar Subsidies

“We have a solar revolution underway here in the Commonwealth…Solar is a key part of our clean energy future.” —Deval Patrick, Massachusetts Governor (2014)

Solar Farms Paid 30 cents/kW-hr vs. Market Price of 5 cents/kW-hr

Plympton Solar Farm, MA
Does Solar Provide Net Energy Gain?

Ferroni and Hopkirk 2016 Germany/Switzerland Photovoltaic Solar Analysis (ERoEI):

Energy Returned over 25-Year Life = 2,203 kW-hr/m²

<table>
<thead>
<tr>
<th>Energy Returned</th>
<th>kW-hr/m²</th>
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<tbody>
<tr>
<td>Energy Invested</td>
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<tr>
<td>PV System Production</td>
<td>1,300</td>
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<td>Grid Buffering</td>
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<tr>
<td>Installation, Maintenance, Capital</td>
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<tr>
<td>TOTAL</td>
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Returned Only 82% of Energy Invested!
Most States—Negative Solar Energy Gain

Solar ERoEI Less than 1
Breakeven Solar ERoEI

35° North Latitude
Change Net-Metering to Wholesale Price

- Net-Metering Laws **Subsidize** Solar
  - Pays Retail Price (8-20 cents/kW-hr)
  - Value (3-5 cents/kW-hr)

- In 2015, Nevada Changed Solar Credit from Net-Metering to Wholesale Price
  - Solar Installations Dropped 90 Percent

Can You Feel the Solar Power?
Europe’s Lesson—The More Wind and Solar...

Wind, Solar, and Electricity Prices in Europe

- Germany
- Denmark
- Austria
- Spain
- Portugal
- Sweden
- Italy
- Greece
- Ireland
- Czech Republic
- Bulgaria
- US
- Romania
- Poland
- Hungary
- Netherlands
- UK
- France

Push-Back on RPS Laws

- **West Virginia**: Repealed RPS Target
- **North Carolina**: Target to be Halved
- **Kansas**: Changed to Voluntary RPS
- **Ohio**: Froze RPS Target
Hydrocarbon Bans—Age of NOPE

Confirmed: Oklahoma Earthquakes Caused by Fracking

EcoWatch
April 23, 2015

Explosive Debate Over a New Natural gas Pipeline Through the Northeast

CLIMATE PROGRESS
September 30, 2014

Oregon Becomes the First US State to Go Coal Free

New Scientist
March 3, 2016

Fossil Free
Melbourne University
NOPE (Not On Planet Earth)

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FOSSIL FREE MELBOURNE UNIVERSITY

FOSSIL FREE BERLIN X
Roll Back Hydrocarbon Bans

- Pipeline Bans (Keystone XL, Dakota Access) ✔
- Coal Mining Ban on Federal Lands (Federal, 2016)
- Eastern US Offshore Drilling Ban (Federal, 2016)
- Arctic Drilling Ban (Federal, 2016)
- Hydraulic Fracturing Bans (NY, 2010; VT, 2012)
Summary—The Effect of Climate Regulation
Summary—The Effect of Climate Regulation

Why Do You Want to Raise Our Energy Prices??
Summary—Toppling Sustainable Regulations

1. Amend the Clean Air Act to Exclude GHG (Congress)
2. Remove CAFE Standards (Executive Branch)
3. Eliminate PHEV Subsidies (Congress and Executive)
4. Phase Out Wind and Solar Subsidies (Congress, States)
5. Rescind State RPS Laws (State Legislatures)
6. Rescind Hydrocarbon Bans (Congress, Executive)
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