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Economic Newsletter for the New Millennium

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Editor

Donald R. Byrne, Ph.D.
dbyrne5628@aol.com

Associate Editor

Edward T. Derbin, MA, MBA
edtitan@aol.com

Declaration of Energy Independence

This newsletter has two parts. The first is a Declaration of Energy Independence and the second part is a survey of existing energy resources and references to the sources and relevant literature for each of the fossil fuels and a selective but brief glance at the alternative renewable energy resources both actual and potential.

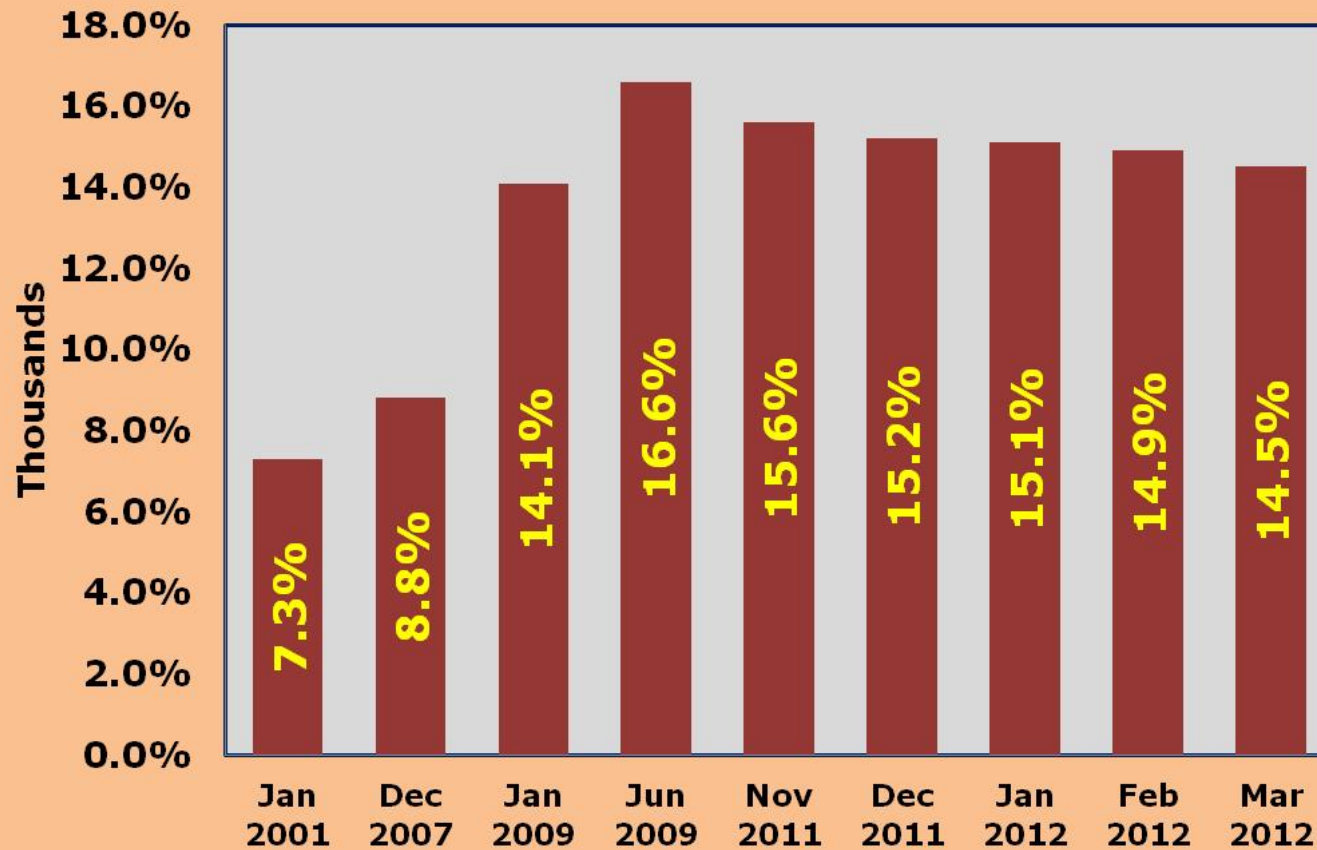
A DECLARATION OF ENERGY INDEPENDENCE

Mr. President, members of both houses of the Congress of the United States of America, elected officials of all State and Local governments in this nation and its territories and all appointed bureaucrats:

TEAR DOWN THIS WALL OF RESTRICTIONS ON THE EXPLOITATION OF OUR ENERGY RESOURCES!!

-Free this great nation from the grip of the GREAT RECESSION. Bring back the jobs of the 14.5 million women and men unemployed according to the realistic U-6 measure, wanting to work but cannot find jobs, many having given up looking, out of frustration.

U-6 Unemployment Rate
Current Population Survey
U.S. Dept of Labor Bureau of Labor Statistics
April 6, 2012



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-Eliminate the persistently high foreclosure rate on homes.

Home Prices Seen Dropping 10% in U.S. on Foreclosures: Mortgages

Bloomberg

By Kathleen M. Howley

April 03, 2012

<http://www.bloomberg.com/news/2012-04-03/home-prices-seen-dropping-10-in-u-s-on-foreclosures-mortgages.html>

"As many as 1.25 million of America's least cared for homes are headed for auction after a year-long probe into foreclosure practices kept them off the market."

Howley noted that the added supply, as reflected in a 25 percent increase in foreclosures, could cause housing prices to drop up to 10 percent in 2012.

-Bring back oil prices from their current crippling level of around \$100 a barrel to range of \$30-60 per barrel and derivative petroleum products such as gasoline currently around \$4.00 a gallon to it pre-crisis level of \$1.30 or so by eliminating the monopoly power over crude oil prices and downstream petroleum products of the now re-cartelized U.S. oil industry. It claims that it is just going along with market prices – prices heavily influenced by OPEC, we must add. It is acting like it is an informal part of the OPEC cartel.

-Free up the permitting process so that petroleum refineries can be expanded, modernized, and built to avoid impending shortages caused by approaching lack of refining capacity.

-Similarly, free up the permitting process for pipelines needed to take advantage of newly exploitable gas and oil shale fields (Marcellus, Bakken, Eagle Ford, and others) and the oil sands of Canada.

This is the nation that undertook the Manhattan Project bringing the end to the War in the Pacific and launched us into the nuclear fission age and is helping propel us along to the age of nuclear fusion, the virtually unlimited energy resource.

This is the nation that took us from horse and buggies and landed us on the moon.

This is the nation that forced the collapse of the Iron Curtain and the Soviet Empire.

We do not need to have our president bowing and scraping to the royalty of nations limiting our sovereignty by orchestrating the contrived scarcity of crude oil nor trying to emulate the leaders of Europe floundering with the problems of sovereign risk having brought it on by seducing a large portion of their populations into a state of dependency on government handouts.

What we need is an energy policy that will take advantage of the abundant currently technologically exploitable energy resources as indicated in the remainder of this article.

...a review of fossil fuel sources of energy

Coal Reserves

http://www.eia.gov/energyexplained/index.cfm?page=coal_reserves

"Based on U.S. coal production for 2010, the U.S. recoverable coal reserves represent enough coal to last 239 years. However, EIA projects in the most recent Annual Energy Outlook (January 2012) that U.S. coal production will increase at about 0.4% per year for the period 2009-2035. If that growth rate continues into the future, U.S. recoverable coal reserves would be exhausted in about 168 years if no new reserves are added."

Crude Oil

U.S. Department of Energy, Energy Information Administration

Review of Emerging Resources U.S. Shale Gas and Shale Oil Plays
July 2011

<ftp://ftp.eia.doe.gov/natgas/usshaleplays.pdf>

INTEK shale report's assessment of technically recoverable shale oil resources, which amount to 23.9 billion barrels in the onshore Lower 48 States. The largest shale oil formation is the Monterey/Santos play in southern California, which is estimated to hold 15.4 billion barrels or 64 percent of the total shale oil resources shown in Table 1. The Monterey shale play is the primary source rock for the conventional oil reservoirs found in

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the Santa Maria and San Joaquin Basins in southern California. The next largest shale oil plays are the Bakken and Eagle Ford, which are assessed to hold approximately 3.6 billion barrels and 3.4 billion barrels of oil, respectively.

New U.S. Geological Survey Method for the Assessment of Reserve Growth

USGS – United States Geological Survey

<http://pubs.usgs.gov/sir/2011/5163/>

Office of Oil and Natural Gas/Office of Fossil Energy U.S. Department of Energy

April 17-20, 2005

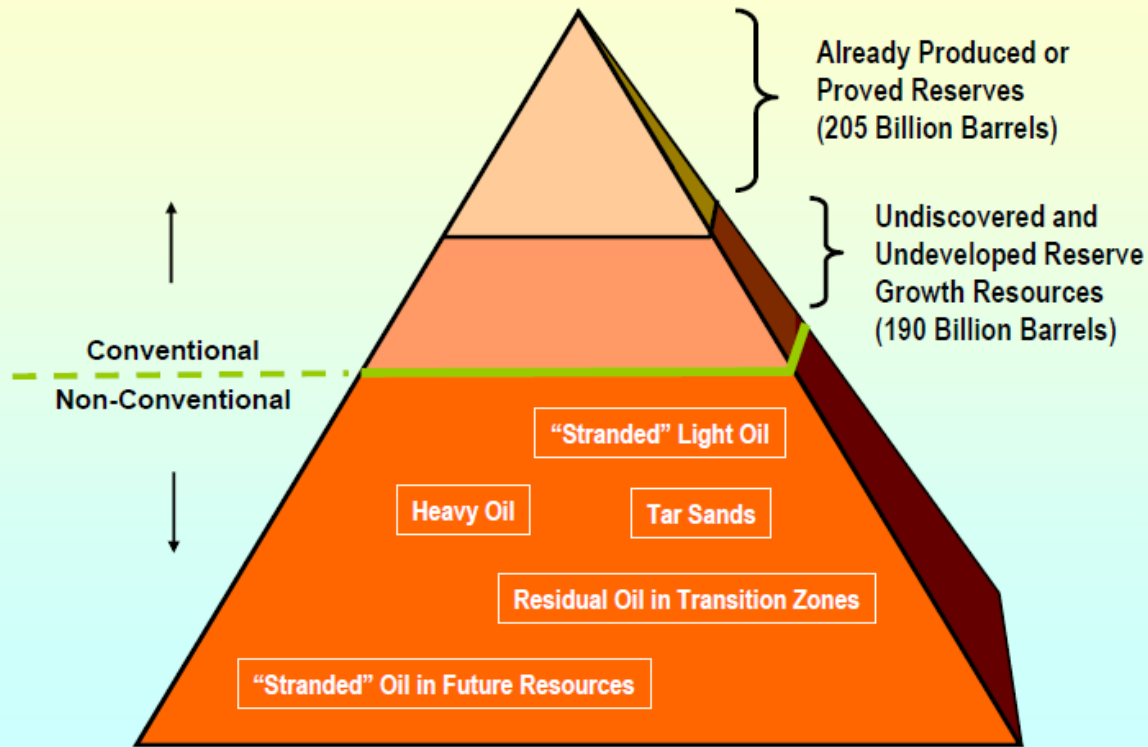
Opportunities for Increasing Revenues from State and Federal Lands:
Pursuing the “Stranded Oil” Prize

<http://www.netl.doe.gov/KMD/cds/disk22/F-ARI%20Basin%20Oriented%20Strategies%20for%20CO2/presentation%20ARI%20CO2%20Basin%20Oriented%20Strategy%20CO2.pdf>

The Domestic Oil Resource Pyramid

Original Resource in Place: 1,335 Billion Barrels

Undeveloped Oil In Place: 1,130 Billion Barrels



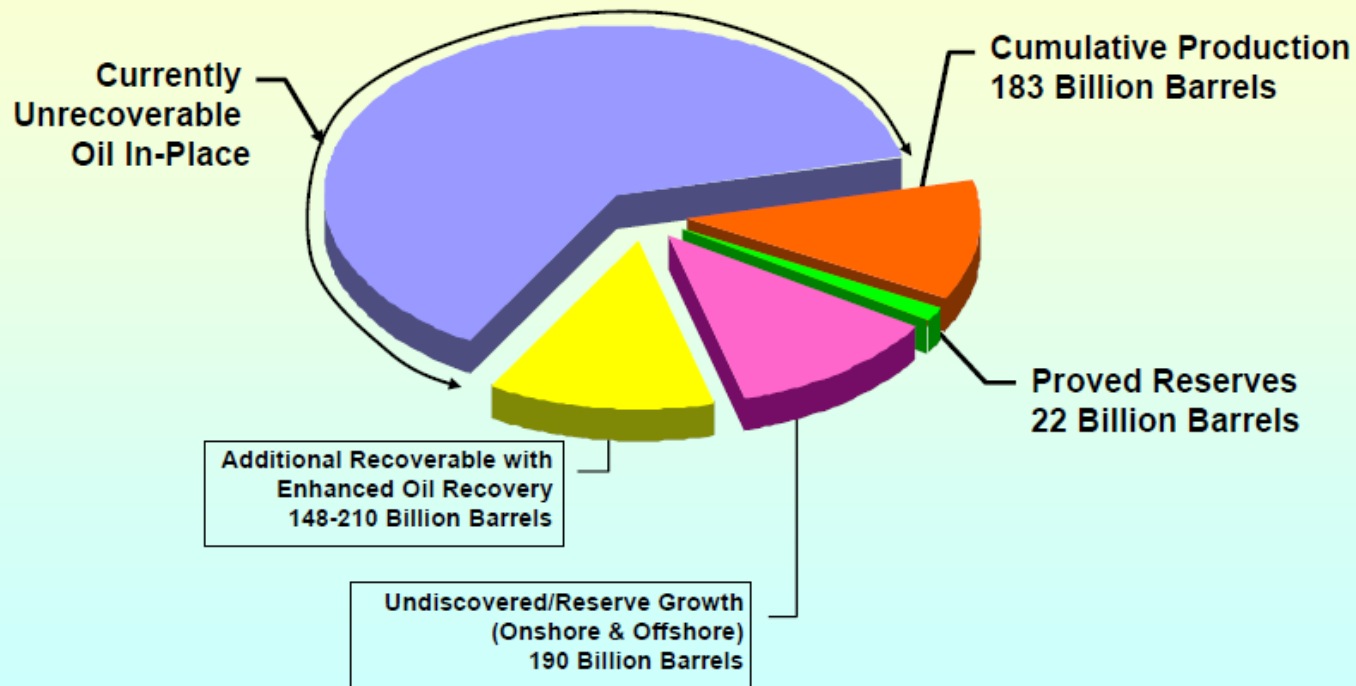
Source: Advanced Resources International, Inc. 2005

USGS – United States Geological Survey – April 2005

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Domestic Oil Resources

Original Oil In Place: 1,335 Billion Barrels*



**Includes light oil, heavy oil, tar sands and residual oil in transition zones.*

Source: Advanced Resources International, 2004

JAF2005021.XLS

USGS – United States Geological Survey – April 2005

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Assessment of Undiscovered Technically Recoverable Oil and Gas Resources of the Nation's Outer Continental Shelf, 2006

U.S. Department of the Interior, Bureau of Ocean Energy Management, Regulation and Enforcement (formerly, Minerals Management Service)

<http://www.boemre.gov/revaldiv/PDFs/2006NationalAssessmentBrochure.pdf>

"Using a play-based assessment methodology, the Minerals Management Service estimated a mean of 85.9 billion barrels of undiscovered recoverable oil and a mean of 419.9 trillion cubic feet of undiscovered recoverable natural gas in the Federal Outer Continental Shelf of the United States."

1995 National Estimate of United States Oil and Gas Resources
U.S. Department of the Interior, United States Geological Survey
<http://greenwood.cr.usgs.gov/energy/circ1118.pdf>

Estimates of national totals for technically recoverable conventional oil, gas, and natural gas liquids (NGL):

Total onshore areas and State waters of the United States:
Crude Oil (billions of barrels) = 112.6
Gas (trillions of cubic feet) = 1,073.8
NGL (billions of barrels) = 29.3

U.S. Department of Energy, Office of Fossil Energy - Office of Oil and Natural Gas
Prepared by Advanced Resources International
February 2006
http://www.fossil.energy.gov/programs/oilgas/publications/eor_co2/Undeveloped_Oil_Document.pdf

"Large volumes of technically recoverable domestic oil resources remain undeveloped and are yet to be discovered, estimated at 400 billion barrels, from an undeveloped remaining oil in-place of over a trillion (1,124 billion) barrels."

U.S. oil resources: President Obama's 'non sequitur facts'

Posted by Glenn Kesslerat – Washington Post
03/15/2012

http://www.washingtonpost.com/blogs/fact-checker/post/us-oil-resources-president-obamas-non-sequitur-facts/2012/03/14/gIQAAP14CS_blog.html

"This oil resource figure is based on technical estimates made by two arms of the Interior Department — the U.S. Geological Survey (for onshore estimates) and the Bureau of Ocean Energy Management, Regulation and Enforcement (for offshore estimates). These estimates add at least 140 billion barrels to what is known as the U.S. endowment of oil, for a total of more than 160 billion barrels."

Official Oil and Natural Gas Reserves

http://www.eia.gov/oil_gas/natural_gas/data_publications/crude_oil_natural_gas_reserves/cr.html

<http://www.eia.gov/analysis/studies/usshalegas/pdf/usshaleplays.pdf>

Table 1. INTEK estimates of undeveloped technically recoverable shale gas and shale oil resources remaining in discovered shale plays as of January 1, 2009

Onshore Lower-48 Oil and Gas Supply Submodule region	Shale play	Shale gas resources (trillion cubic feet)	Shale oil resources (billion barrels)
Northeast	Marcellus	410	--
	Antrim	20	--
	Devonian Low Thermal Maturity	14	--
	New Albany	11	--
	Greater Siltstone	8	--
	Big Sandy	7	--
	Cincinnati Arch*	1	--
Subtotal		472	--
Percent of total		63%	--
Gulf Coast	Haynesville	75	--
	Eagle Ford	21	3
	Floyd-Neal & Conasauga	4	--
Subtotal		100	3
Percent of total		13%	14%
Mid-Continent	Fayetteville	32	--
	Woodford	22	--
	Cana Woodford	6	--
Subtotal		60	--
Percent of total		8%	--
Southwest	Barnett	43	--
	Barnett-Woodford	32	--
	Avalon & Bone Springs	--	2
Subtotal		76	2
Percent of total		10%	7%
Rocky Mountain	Mancos	21	--
	Lewis	12	--
	Williston-Shallow Niobrara*	7	--
	Hilliard-Baxter-Mancos	4	--
	Bakken	--	4
Subtotal		43	4
Percent of total		6%	15%
West Coast	Monterey/Santos	--	15
Subtotal		--	15
Percent of total		--	64%
Total onshore Lower-48 States		750	24

*Note: From previous EIA estimates and thus not assessed in the INTEK shale report. Subtotals and total may not equal sum of components due to independent rounding.

Natural Gas

http://www.eia.doe.gov/energyexplained/index.cfm?page=natural_gas_reserves

Do you know that the U.S. has over one-hundred years of reserves of natural gas?

According to the EIA Annual Energy Outlook 2011, the United States possesses 2,543 trillion cubic feet (Tcf) of potential natural gas resources. Natural gas from shale resources, considered uneconomical just a few years ago, accounts for 862 Tcf of this resource estimate. At the 2010 rate of U.S. consumption (about 24.1 Tcf per year), 2,543 Tcf of natural gas is enough to supply over 100 years of use.

Do you know that 'peakers' are used to meet peak load needs of electric utilities when electricity cannot be purchased from the grid from other electric utilities off peak? They use the gas to generate electricity from jet-like turbines. With the substantial drop in natural gas prices in recent years, it is becoming a growing source of power to generate electricity even at off peak times.

Why not something like a [Manhattan Project](#) or [Man on the Moon Project](#) for the advancement of technology to expand alternative renewable resources as well as the detoxifying of pollution from the use of fossil fuels?

It's clear that while we will be tied to coal for electricity production for many years to come, we are making some strides in terms of alternative energy production as well as increasing our use of cheap and relatively cleaner natural gas. In spite of that, the Environmental Protection Agency, the EPA, recently published standards that will effectively restrict the use of our most abundant resource, coal, in the future production of electricity.

Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units

March 27, 2012

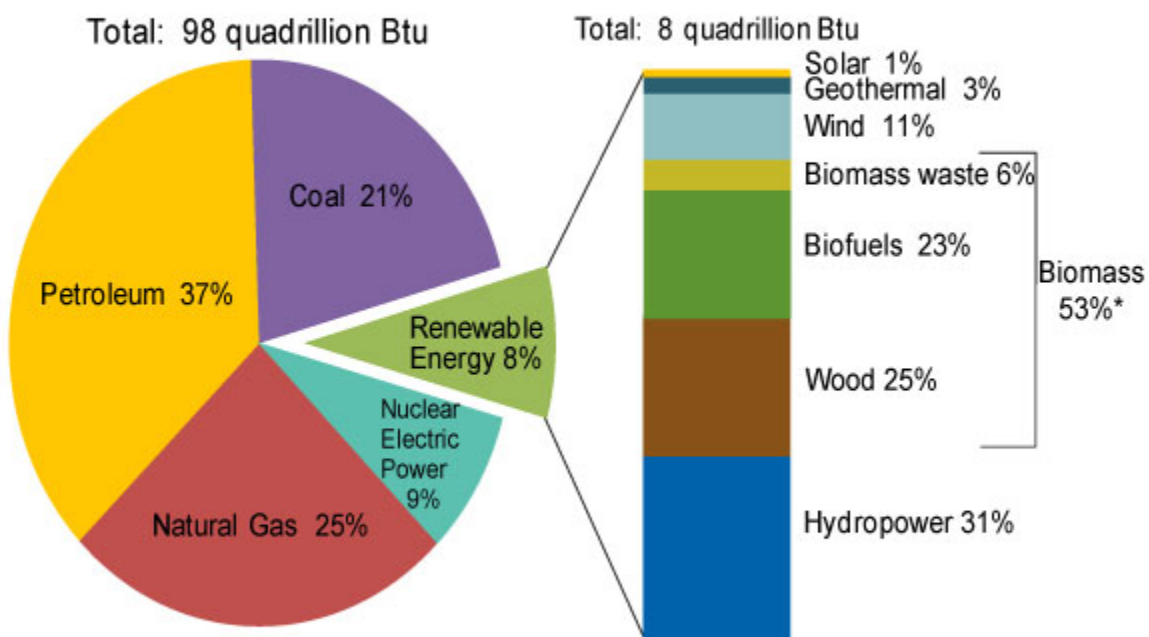
<http://epa.gov/carbonpollutionstandard/pdfs/20120327proposal.pdf>

The proposed requirements, which are strictly limited to new sources, would require new fossil fuel-fired EGUs greater than 25 megawatt electric (MWe)

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to meet an output-based standard of 1,000 pounds of CO₂ per megawatt-hour (lb CO₂/MWh), based on the performance of widely used natural gas combined cycle (NGCC) technology.

U.S. Primary Energy Consumption by Energy Source, 2010

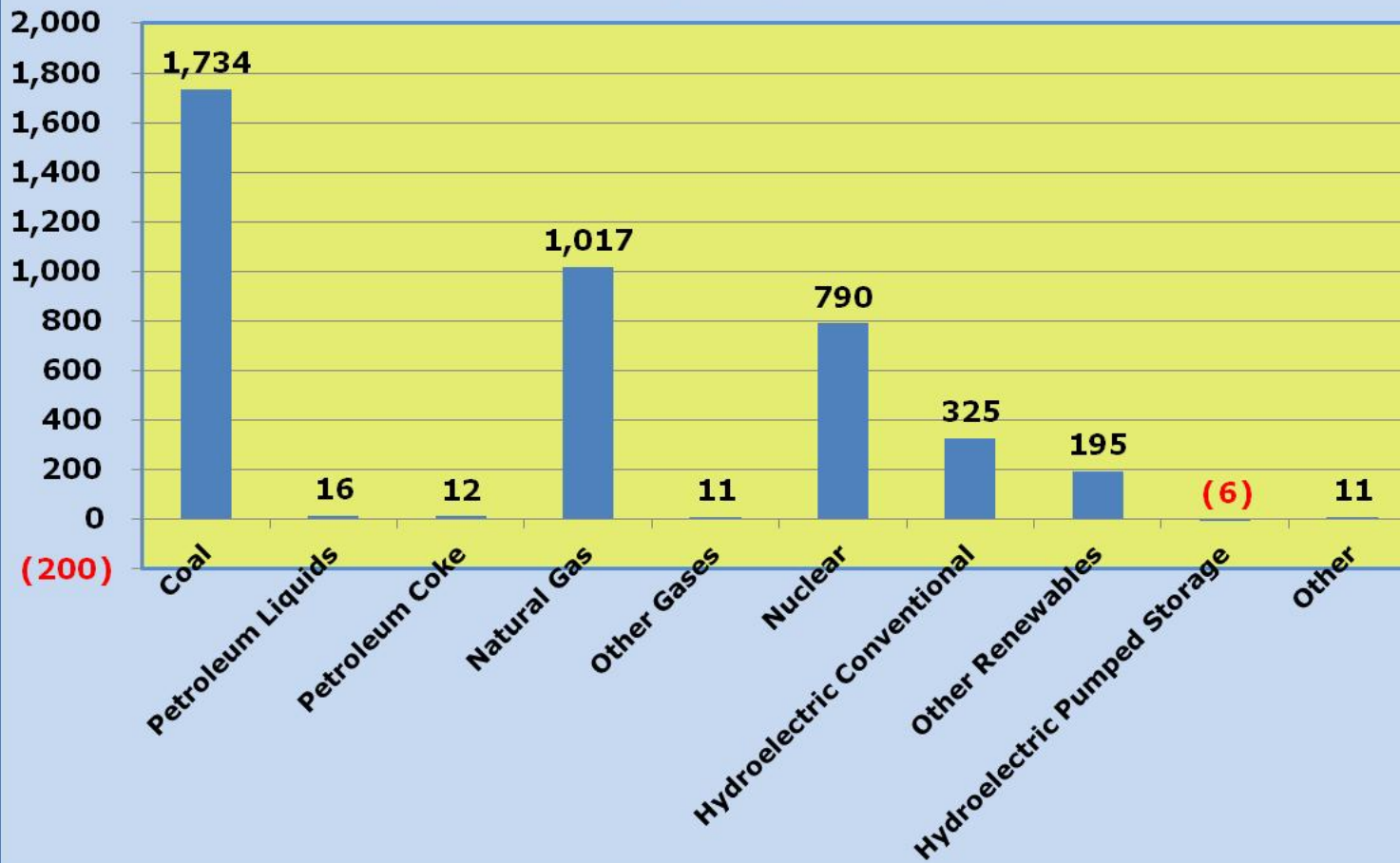


Note: Sum of biomass components does not equal 53% due to independent rounding.

Source: U.S. Energy Information Administration, *Annual Energy Review 2010*.

Net Electricity Generation 2011 4,106 Million Megawatt Hours

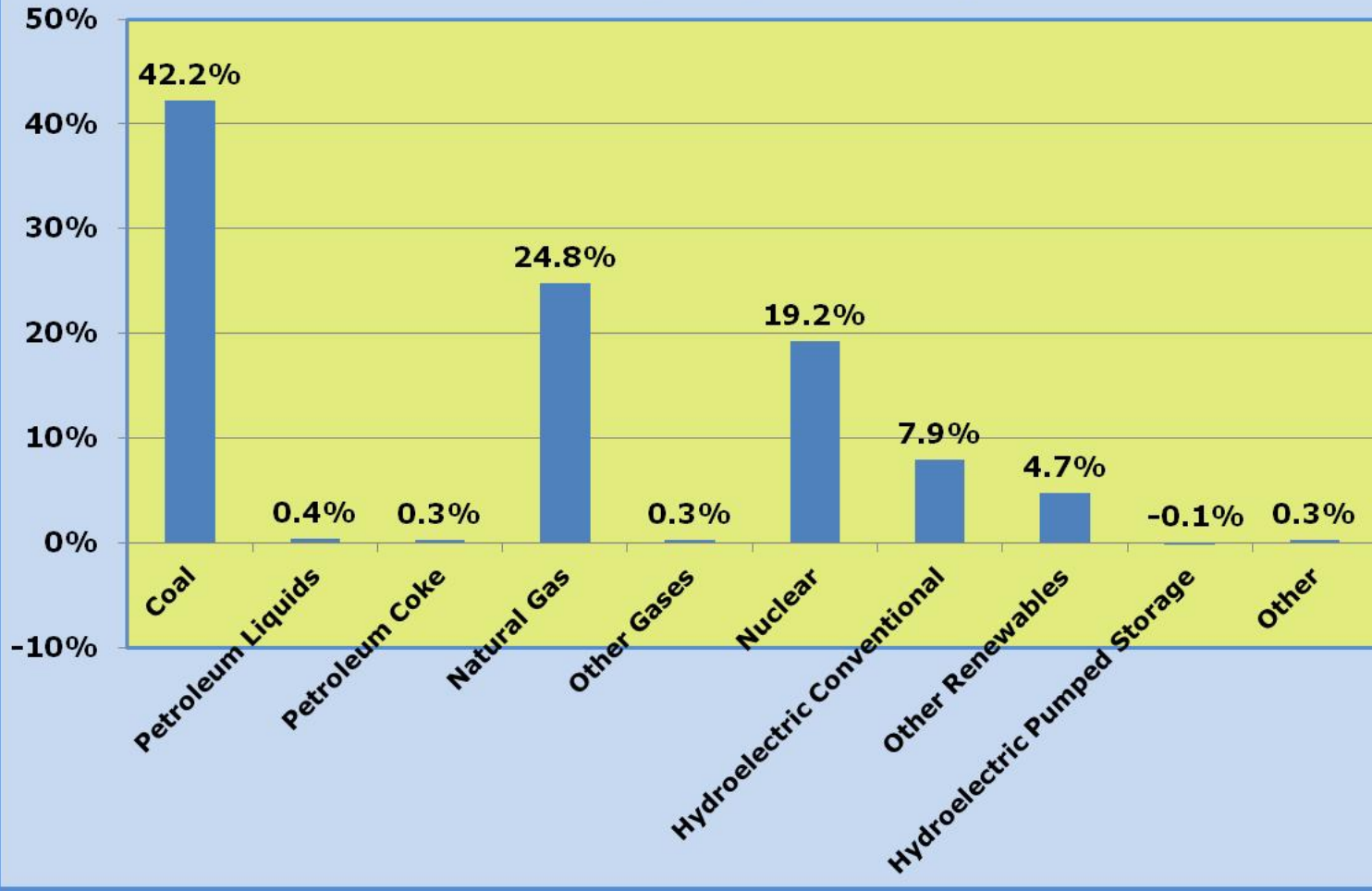
http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_1_1
US Department of Energy, Energy Information Agency



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Net Electricity Generation 2011 by Sector

http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_1_1
US Department of Energy, Energy Information Agency



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Renewable Energy

http://www.eia.gov/kids/energy.cfm?page=renewable_home-basics

The five renewable sources used most often are:

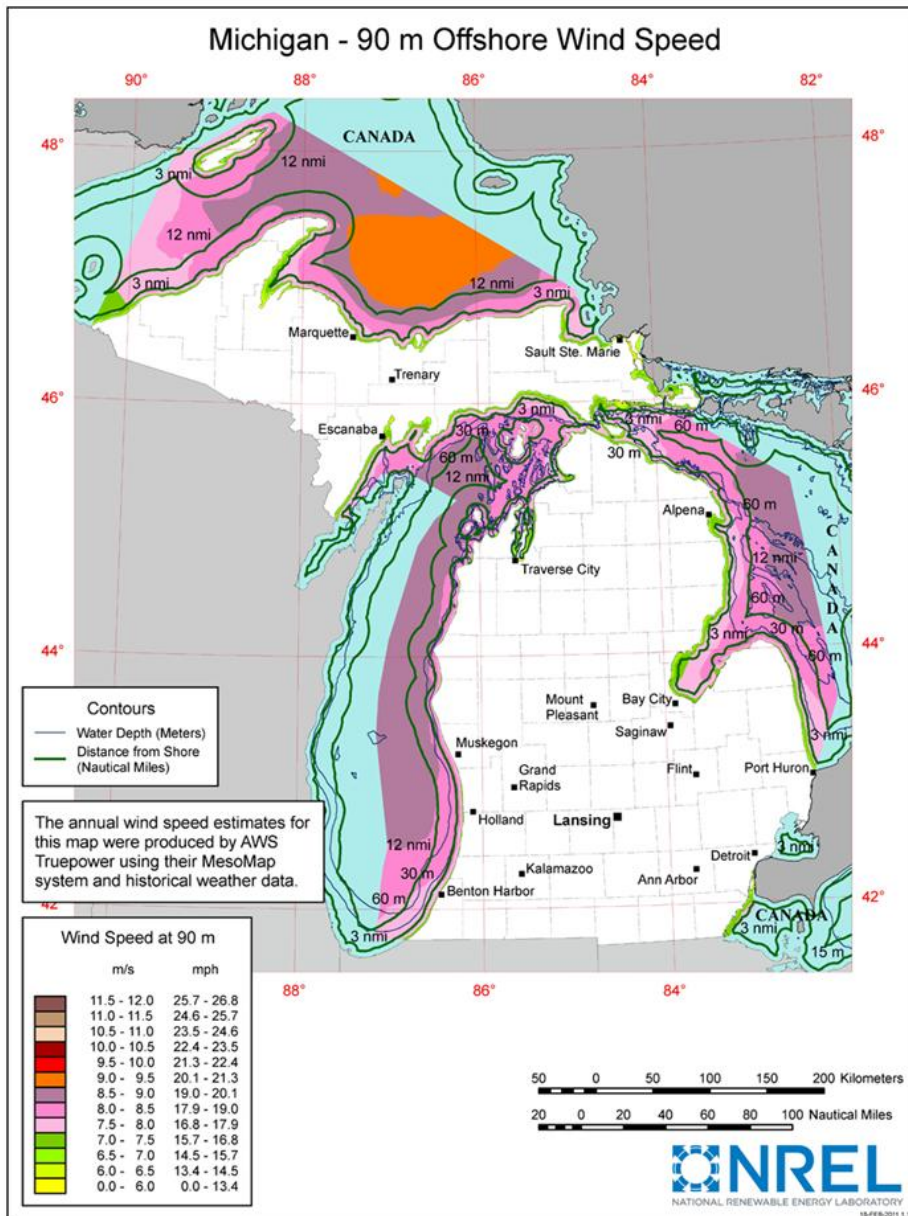
Biomass — including:
wood and wood waste,
municipal solid waste,
landfill gas and biogas,
ethanol
biodiesel
Water (hydropower)
Geothermal

Wind

Solar

...a quick glance at Wind Power – Michigan

http://www.windpoweringamerica.gov/windmaps/offshore_states.asp?statea=b=mi



Wind power, study by MSU Land Policy Institute

At the end of 2010, the installed capacity of wind power in the United States was just over 40,000 megawatts (MW)...Wind power accounts for about 3% of the electricity generated in the United States.

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A study by Michigan State University argued that enough wind power could be achieved from off shore wind turbines to satisfy nearly one-quarter of the nation's need for electricity ON A RENEWABLE BASIS.

Michigan's Offshore Wind Potential - Land Policy Institute

Michigan's Offshore Wind Potential

September 30, 2008

Web page Press Release

http://www.landpolicy.msu.edu/modules.php?name=News&op=viewlive&sp_id=71

Report

http://www.landpolicy.msu.edu/modules.php?name=Documents&op=viewlive&sp_id=812

"Assuming that wind towers can be located at all depths without restrictions, Michigan could potentially generate 321,936 Megawatts (Mw) of electricity from offshore wind."

"In essence, if the Great Lakes surface area is built out, without restrictions, to maximum depth, the total power output is projected to be 321,936 Mw, or 99,932 Siemens SWT 3.6 turbines."

Summary

We need to focus much more on growing the economy and less on redistributing income and wealth. An aggressive anti-trust policy to decrease the concentration of industries such as currently exist in the financial services and crude oil and its derivative products, is a much more efficient way of maintaining an equitable income distribution than is letting industries concentrate monopoly power over production and prices with the resulting grossly inequitable income distribution and then massive intervention by government to redistribute income to lessen such inequalities.

Why stand we here idle? We send billions of dollars to unfriendly oil exporting nations who in turn are large funders of terrorism around the world resulting in the deaths of tens of thousands of not only innocent foreign people, but of their own people as well.

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