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Testimony on "America's Onshore Energy Resources: Creating Jobs, Securing America, and Lowering Prices"

Subcommittee on Energy and Mineral Resources of the Committee on Natural Resources

1324 Longworth House Office Building March 14, 2013 Chairman Lamborn, Ranking member Holt, and members of the Subcommittee: thank you very much for the opportunity to testify today on "America's Onshore Energy Resources: Creating Jobs, Securing America, and Lowering Prices."

When considering energy jobs, energy security, and affordable energy, there are several primary considerations.

- I. Renewable energy projects on public lands create jobs and improve public health.
- II. Expansion of domestic oil production in protected lands and waters will not lower gasoline prices, but high gasoline prices yield high oil company profits for companies receiving huge tax breaks.
- III. Sequester cuts will slow the production of oil and gas from federal lands and waters.
- IV. Big 5 oil companies earn huge profits and receive big special tax breaks, while reducing their domestic workforce and producing less oil.
- V. Oil CEOs' proposal to export crude oil undermines energy security.
- VI. Climate change threatens energy production and distribution.

I. Renewable energy projects on public lands create jobs and improve public health.

CLEAN ENERGY CREATES JOBS

Clean energy is a critical part of the economy, particularly for manufacturing. Last year the U.S. Bureau of Labor Statistics reported that:

"In 2010, 3.1 million jobs in the United States were associated with the production of green goods and services, the U.S. Bureau of Labor Statistics reported today. Green Goods and Services (GGS) jobs are found in businesses that produce goods and provide services that benefit the environment or conserve natural resources. GGS jobs accounted for 2.4 percent of total employment in 2010. The private sector had 2.3 million GGS jobs and the public sector had 860,300. Manufacturing had 461,800 GGS jobs, the most among any private sector industry."

This report confirms the 2011 findings in "Sizing the Clean Economy," by Brookings. It determined that:

"The clean economy, which employs some 2.7 million workers, encompasses a significant number of jobs in establishments spread across a diverse group of industries. Though modest in size, the clean economy employs more workers than the fossil fuel industry.

"Newer 'cleantech' segments produced explosive job gains and the clean economy outperformed the nation during the recession."²

The *Christian Science Monitor* reported that "the clean-economy sector, for example, includes 2.7 million jobs. The oil and gas industry, by contrast, has 2.4 million jobs."³

The American Recovery and Reinvestment Act helped create many clean energy jobs. A 2011 report by the Economic Policy Institute and the Blue Green Alliance, "Rebuilding Green: The American Recovery and Reinvestment Act and the Green Economy," found that it created nearly 367,000 direct jobs and another 630,000 indirect and induced jobs by the end of 2010.⁴

The wind and solar industries continue to provide tens of thousands of jobs. The most recent data indicates that these two industries directly employ nearly 200,000 people, and are expected to grow to nearly 800,000 jobs by 2030.⁵ Solar jobs grew by 13 percent in 2012 despite the sluggish economy.⁶

Energy efficiency also creates jobs. The American Council for an Energy-Efficient Economy reported that "Investments in energy efficiency and the resulting energy cost savings supported about 300,000 jobs in 2010 in the American economy." ⁷

The clean energy sector continues to grow in the United States. E2 Environmental Entrepreneurs just released an analysis that determined that "Companies and communities across the country

announced more than 300 clean energy and clean transportation projects in 2012 that are expected to create 110,000 jobs."8

Green Goods and Services (GGS) employment by state, 2010 annual averages

State	GGS Employment	State	GGS Employment
Alabama	44,288	Montana	14,545
Alaska	11,460	Nebraska	17,703
Arizona	49,717	Nevada	17,254
Arkansas	33,280	New Hampshire	11,502
California	338,445	New Jersey	76,025
Colorado	72,452	New Mexico	21,267
Connecticut	39,207	New York	248,526
Delaware	7,978	North Carolina	77,498
District of Columbia	26,941	North Dakota	8,407
Florida	95,963	Ohio	126,855
Georgia	81,996	Oklahoma	22,411
Hawaii	15,583	Oregon	54,953
Idaho	22,192	Pennsylvania	182,193
Illinois	139,830	Rhode Island	11,924
Indiana	67,948	South Carolina	35,100
Iowa	39,097	South Dakota	11,239
Kansas	27,856	Tennessee	62,004
Kentucky	32,096	Texas	229,685
Louisiana	34,289	Utah	27,948
Maine	13,925	Vermont	12,884
Maryland	87,408	Virginia	91,871
Massachusetts	79,307	Washington	91,906
Michigan	79,771	West Virginia	14,533
Minnesota	69,736	Wisconsin	59,463
Mississippi	17,412	Wyoming	8,031
Missouri	65,205	US Total*	3,129,112

Source: Bureau of Labor Statistics Note: data may not add to total or sub-total due to rounding

FEDERAL LANDS HAVE HUGE CLEAN ENERGY & JOBS POTENTIAL

President Obama took office determined to expand the generation of no carbon pollution electricity. As part of this effort, he set a goal of establishing 10,000 megawatts of power from wind, solar, and geothermal projects located on federal lands. There are 10,413 megawatts of generation capacity built on these lands, enough to power at least 3.5 million homes. These renewable energy projects created 8,287 jobs at their peak.

Source	Peak Jobs
Solar	4,885
Wind	2,349
Geothermal	1,053
Total Jobs	8,287

Source: Bureau of Land Management

Federal lands in the west could build on this progress by hosting significant additional amounts of clean renewable electricity generation over the next two decades according to the Center for American Progress's 2012 analysis "The Vast Potential for Renewable Energy in the American West." We assessed the federal government's "reasonably foreseeable development scenarios" for the likelihood of renewable energy development on appropriate public lands in Arizona, California, Colorado, Nevada, New Mexico, and Utah.

We concluded that the states could support the development of 34,399 megawatts (or 34.4 gigawatts) of wind, solar, and geothermal energy over 20 years. This is enough electricity to power more than 7 million homes, equivalent to the number of homes in Arizona, Colorado, New Mexico, and Utah. These projects would create an estimated 34,399 jobs. 12

FIGURE 2 Clean energy potential

How much renewable energy could be developed on western public lands over 20 years

State	Solar Jobs	Wind jobs	Geothermal jobs	Totals
Arizona	2,424	31	50	2,505
California	15,421	1,462	4,703	21,586
Colorado	2,194	85	50	2,329
Nevada	1,701	701	2,280	4,682
New Mexico	833	199	170	1,202
Utah	1,219	256	620	2,095
Totals	23,792	2,734	7,873	34,399

Note: Figures for solar and wind are for Bureau of Land Management lands; figures for geothermal are for Bureau of Land Management and Forest Service lands. Solar outlook to 2030; wind and geothermal outlooks to 2025.

Source: Bureau of Land Management, http://solareis.anl.gov/documents/supp/Supplement_to_the_Draft_Solar_PEIS.pdf, http://windeis.anl.gov/documents/fpeis/maintext/Vol 1/Vol 1Ch5.pdf, http://www.blm.gov/pgdata/etc/medialib/blm/wo/MINERALS__REALTY__AND__RESOURCE_PROTECTION_/energy/geothermal_eis/final_programmatic.Par.95063.File.dat/Geothermal_PEIS_final.pdf

CLEAN RESOURCE STANDARD WOULD GROW JOBS

To capture the full economic, energy, and public health benefits from this opportunity, the federal government should adopt a "clean resources standard," for public lands and waters. This policy would require siting an increasing amount of renewable electricity generation on appropriate public lands.

A Center for American Progress report, "Using Public Lands for the Public: Good Rebalancing Coal and Renewable Electricity with a Clean Resources Standard," examined the resources extracted from public lands and waters that are used for electricity generation. ¹³ It found that federal lands predominately provide coal for electricity. Currently, approximately 66 percent of the electricity generated from the resources on the lands that belong to all Americans comes from coal, while 15 percent comes from renewable resources, including hydropower, and only 1 percent is derived from solar, wind, and geothermal projects combined. ¹⁴

To set us on a path for achieving this renewable energy opportunity, the president should implement a clean resources standard for public lands and waters. This would require land management agencies to delineate what portion of publicly owned natural resources used for electricity generation will be clean and renewable—from wind, solar, geothermal, biomass, and small hydroelectricity. We recommend an achievable target of 35 percent renewable electricity from public lands and waters by 2035.

Of course, any energy development on public lands must be done in a way that avoids sensitive areas, uses the most modern technology, and is in full compliance with environmental laws. When done responsibly, energy development is an appropriate use of public lands, but it should not be done at the expense of the clean air, clean water, and the recreational opportunities that they provide.

<u>CLEAN ENERGY INVESTMENTS CREATE MORE</u> JOBS THAN OIL SPENDING

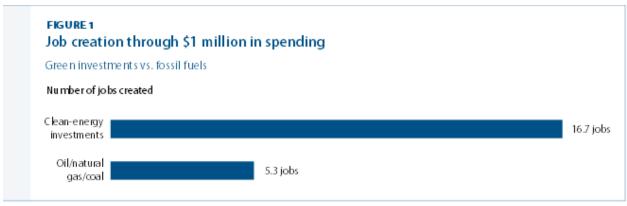
Investments in clean energy projects -- including retrofitting buildings for efficiency, installation of smart grid technology, construction of public transit, and other similar efforts – create more jobs per dollar of investment compared to investments in oil and gas production. "The Economic Benefits of Clean Energy," a report by the University of Massachusetts, determined that:

"Spending directed toward a clean-energy investment program will have a much larger positive impact on jobs than spending in other areas, including the oil industry even when taking into account all phases of oil production, refining, transportation, and marketing.

"Spending a given amount of money on a clean-energy investment agenda generates approximately 3.2 times the number of jobs within the United States as does spending the same amount of money within the fossil fuel sectors." ¹⁵

The report noted that "clean-energy investments create in excess of three times more jobs per a given amount of spending than the fossil fuel industry" because of three factors. Clean energy jobs:

- are relatively labor intensive compared to oil production, which is more capital intensive;
- employ more domestically produced content or economic activities; and,
- "produce far more jobs at all pay levels higher as well as lower compared to the fossil fuel industry." ¹⁶



Source: Input-Output tables of U.S.Commerce Department.

Note: Employment estimates include direct, indirect, and induced jobs. Details of calculations presented in appendix.

RECENT CLEAN ENERGY INVESTMENTS REDUCING COST OF RENEWABLES

The American Recovery and Reinvestment Act included \$23 billion worth of investments for wind, solar and geothermal power to help these industries become more cost competitive. These investments helped the United States double renewable electricity generation in four years.

In addition, the production tax credit for wind power and the investment tax credit for solar power create incentives to invest in these emerging technologies. These efforts are working. *Bloomberg* New Energy Finance reports that "**the levelized costs of electricity for renewable technologies have plummeted**" in the United States. ¹⁸ Wind power is a major electricity generator in the United States. Iowa produces nearly 20 percent of its electricity from wind. ¹⁹ Texas leads the nation in overall wind electricity generation, and was the first state to reach 10,000 megawatts of wind energy installation. ²⁰

The Energy Information Administration reports that new wind energy is cheaper than a new conventional coal plant, new advanced nuclear plant, or new natural gas-fired combustion turbine. Solar power, too, is becoming much more affordable and prevalent. The Solar Energy Industry Association reported in January 2013 that:

"More solar capacity was installed in the first three quarters of 2012 than in all of 2011. The industry expects to have installed more than one gigawatt of solar in the fourth quarter of 2012 alone, while in 2010 we installed 852 megawatts for the entire year. And we expect 2013 will be another year of record growth for our industry.

"Some of this growth is attributed to the fact that the cost of a solar system has dropped by nearly 40 percent over the past two years...solar has become more affordable than ever for the end consumer."²²

Other countries also found that renewable electricity is cheaper than fossil fuel power, while avoiding the external costs of the pollution caused by the latter. *Bloomberg* New Energy Finance just reported that in Australia "wind energy is 14% cheaper than new coal and 18% cheaper than new gas."

Germany reported that "all renewable energies combined accounted for about 26 percent of electricity production over the first nine months" of 2012.²⁴ In 2012 "solar power's share in the country's [Germany] electricity production rose to 6.1 percent from 4.1 percent." This occurred even though Germany receives less sunlight than anywhere in the United States except for Alaska.²⁶

FEDERAL INVESTMENT IN OIL DWARFS SUPPORT FOR RENEWABLES

Despite the greater job potential from investments in renewable energy, federal support for oil and gas production has overwhelmed support for clean renewable energy. A DBL Investors analysis, "What Would Jefferson Do?" determined that oil and gas received \$442 billion in tax breaks and subsidies over the past 90 years, while renewable energy received only \$5.6 billion over the past 15 years. **This is \$80 invested in oil and gas production for every \$1 invested in renewable electricity**. ²⁷ Some of the fossil fuel tax breaks, such as the deduction for intangible drilling costs for oil companies, are nearly 100 years old.

A 2012 analysis by the Congressional Budget Office (CBO) noted that federal support for the oil industry is nearly 100 years old, while investments in clean energy are relatively recent and declining in size (with the exception of the American Recovery and Reinvestment Act in 2009).²⁸

"Tax preferences for energy were first established in 1916, and until 2005 they were primarily intended to stimulate domestic production of oil and natural gas. Beginning in 2006, the cost of energy-related tax preferences grew substantially, and an increasing share was aimed at encouraging energy efficiency and energy produced from renewable sources, such as wind and the sun, which generally cause less environmental damage than would result from producing and consuming fossil fuels.

"With the exception of the substantial funding provided in the 2009 economic stimulus legislation (the American Recovery and Reinvestment Act of 2009, or ARRA), it has generally declined in recent years—from \$10 billion (in 2011 dollars) in 1980 to \$3.5 billion in 2011 and \$3.4 billion in 2012. More than half of that support in both 2011 and 2012 was directed toward energy efficiency and renewable energy."²⁹

It is important to note that nearly half the renewable "tax preferences" in CBO's calculations are excise tax credits for ethanol, and not investments in wind or solar power, or efficiency.³⁰

II. Expansion of domestic oil production in protected lands and waters will not lower gasoline prices, but high gasoline prices yield high oil company profits for companies receiving huge tax breaks.

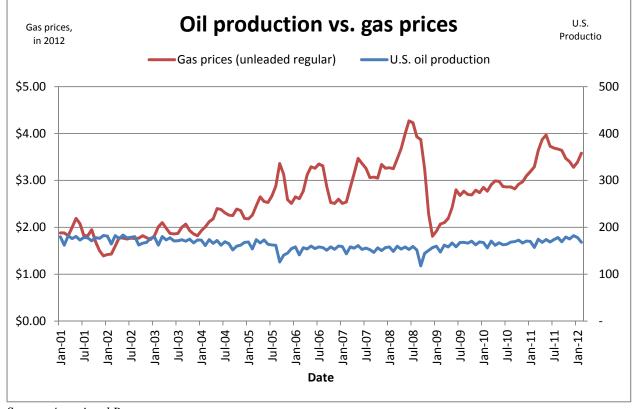
MORE DOMESTIC OIL PRODUCTION WILL NOT LOWER GASOLINE PRICES

Domestic oil production has increased by 45 percent since 2008, from 5 million barrels per day (mbd) to 7.25 mbd in 2013.³¹ There are benefits to more domestic oil production, including fewer oil imports, greater energy security, and recycling oil dollars through the U.S. economy instead of sending them to another nation. However, more production here will not lower oil and gasoline prices.

Over the past four years, oil prices rose even as U.S. domestic oil production grew by 2 million barrels per day (bbl/d). This is due to the fact that oil prices are set on a world market that is not really affected by domestic production. The rise in oil prices over the past several years was attributed to Middle East unrest, including the "Arab Spring" and the revolution in Libya. For instance, last November *Bloomberg* reported that "oil rises to one month high on middle east conflict."

Fear about possible supply disruptions made it possible for oil speculators to bid up oil prices. An investigation by the McClatchy news organization determined that "once again, speculators [are] behind sharply rising oil and gasoline prices."³³

In 2012 the Associated Press (AP) tested the theory whether more U.S. drilling would lower gasoline prices. It conducted an exhaustive analysis of 36 years of monthly U.S. oil production and gasoline price data. AP found "No statistical correlation between how much oil comes out of U.S. wells and the price at the pump."³⁴



Source: Associated Press

The *Washington Post* recently reported that oil prices remain high even with more production due to worldwide demand, particularly from China. Last year, the world pumped more oil out of the ground than ever before in history. In the first nine months of 2012, the world produced an average of 88.8 million barrels per day, about 2 million more barrels per day than in 2010. Nearly half of that increase came from new drilling in the United States.³⁵

As James Hamilton of University of California, San Diego explains, China alone has consumed about half of the extra oil that's been drilled since 2010:

"China likely consumed nearly half of the global 2 mb/d [million barrels per day] increase. The EIA reports that China increased its petroleum consumption by almost 500,000 b/d [barrels per day] in 2011, and preliminary estimates are that China added another 420,000 barrels to its daily consumption in 2012."³⁶

Richard Newell, then administrator of the Energy Information Administration, testified before Congress in 2011 to explain that, "We do not project additional volumes of oil that could flow from greater access to oil resources on Federal lands to have a large impact on prices given the globally integrated nature of the world oil market."³⁷ In other words, because the price of oil is set on a global—rather than a domestic—basis, opening up protected lands and waters would not alter the price of oil or gasoline in a substantial or noticeable way.

NEW OFFSHORE OIL SAFETY RULES HAD LITTLE IMPACT ON OIL PRODUCTION

The oil industry erroneously claims that the new safety rules for offshore oil production adopted after the tragic BP Deepwater Horizon oil spill in 2010 has hampered production. In the wake of the worst oil spill in U.S. history, the Department of the Interior adopted new safeguards to protect offshore oil-rig workers and established procedures to reduce the likelihood of another big blowout.³⁸ Even with these new regulations, offshore oil production continues to flourish, despite what Big Oil would have you believe.

The Department of the Interior recently reported that, "In fiscal year 2012, Interior paid out \$12.15 billion in revenue generated from energy production on public lands and offshore areas—a \$1 billion increase over the previous year."³⁹ And the Energy Information Administration's Short Term Energy Outlook Supplement projects that offshore oil production will only continue to increase in the coming years:

"During 2012, oil production in the Federal GOM [Gulf of Mexico] is projected to have increased from about 1.31 million bbl/d [barrels per day] in January to about 1.39 million bbl/d in December (up 6 percent). ... EIA [Energy Information Administration] expects Federal GOM production to increase from an average 1.27 million bbl/d in 2012 to an average 1.39 million bbl/d in 2013."

Production of oil from the waters in the Gulf of Mexico is rebounding after the BP Deepwater Horizon oil disaster in 2010. The number of oil rigs in the Gulf of Mexico has returned to the number before the tragedy. In July, Barclays Equity Research noted that:

"The offshore rig count in the Gulf of Mexico is nearing its pre-Macondo [pre-Deepwater Horizon disaster] level and is expect to grow another 50 percent by 2014, one of the most visible indicators of the Gulf drilling revival."

Since the new standards were put into place, the Obama administration has approved nearly 700 permits for activities at hundreds of wells in the Gulf of Mexico alone.⁴²

On February 7, 2013, the Department of the Interior announced that it would lease an additional 39 million acres for oil and gas production in the central Gulf of Mexico.⁴³ This is in addition to the 59 million acres put up for auction in 2012.

DEPARTMENT OF INTERIOR SPED UP PERMITTING FOR OIL PRODUCTION ON PUBLIC LANDS

Another common complaint repeated by big oil companies is about the lengthy process for approval of oil and gas production on federal lands. The Congressional Research Service examined this concern and determined that it was unfounded – and that the process has significantly improved under the current administration:

"In 2006 it took the BLM [Bureau of Land Management] an average of **127 days** to process an APD [application for drill permit], while in 2011 it took BLM **71 days**. In 2006, the industry took an average of 91 days to complete an APD, but in 2011, industry took 236 days.

"Some critics of this lengthy timeframe highlight the relatively speedy process for permit processing on private lands. However, crude oil development on federal lands takes place in a wholly different regulatory framework than that of oil development on private lands...A private versus federal permitting regime does not lend itself to an 'applesto-apples' comparison.

"There are substantial oil and natural gas reserves and resource potential in federal areas, many of which are already accessible. Production from these areas will likely continue to make a significant contribution to the U.S. energy supply picture, but any rise in production...will be outpaced by faster rising production in non-federal areas...The regulatory framework for developing resources on federal lands will likely remain more involved and time-consuming than that on private land."

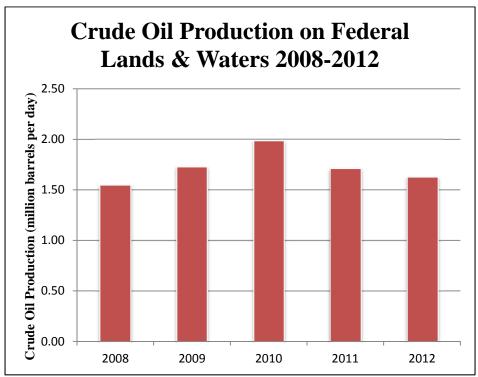
This federal "regulatory framework" is more complicated for oil and gas production on federal lands because these are places owned by all Americans – and not just for the use of big oil companies. These public lands are to be protected for "multiple use." The Federal Land Policy and Management Act specifically defines the term "multiple use" as:

"The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people ... with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output."

In addition to resource extraction, these other uses include hunting, fishing, cattle grazing, hiking, clean air and water, and other values in addition to resource development. The Bureau of Land Management has a responsibility to ensure that proposed drilling projects do not prevent these other uses.

OIL PRODUCTION FROM FEDERAL LANDS UP SINCE 2008

There has been quite a bit of rhetoric from the oil industry about the decline of oil production from federal lands and waters under the Obama administration. These claims are disproven by the data from the Energy Information Administration as analyzed by the Congressional Research Service. Oil production from federally owned places was higher in every one of the past four years compared to 2008, when oil hit a record high price of \$142.50 per barrel.



Source: Congressional Research Service

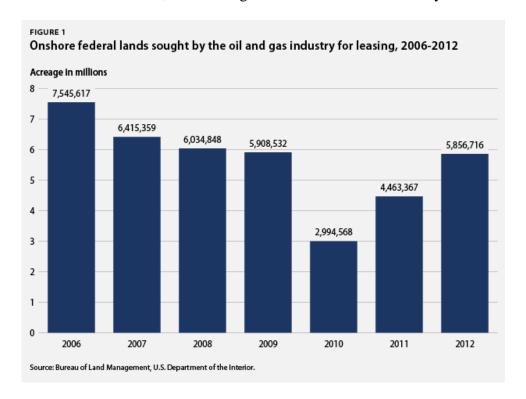
Crude Oil Production on Federal Lands & Waters (Thousands of Barrels per Day)

Fiscal Year	Federal Onshore	Federal Offshore	Total Federal
2008	285	1,266	1,550
2009	288	1,444	1,731
2010	296	1,693	1,989
2011	307	1,408	1,715
2012	332	1,296	1,627

Source: Congressional Research Service

In 2012 the Congressional Budget Office "estimate[d] that about 70 percent of undiscovered oil and gas resources are on federal lands that are available for leasing under current laws and administrative policies." Further opening up these protected places—including off the California and Florida Gulf coasts—would do little to lower oil or gasoline prices.

Interestingly, the oil industry itself has expressed a declining interest in leasing the onshore public lands that are already eligible for drilling. Under current leasing rules, oil companies can make industry "expressions of interest [that] identify lands sought by industry for possible oil and gas leasing." These requests to lease eligible onshore public lands averaged 6.6 million acres annually from 2006 through 2008. The average acreage sought by oil companies dropped by 27 percent from 2009 to 2012, to an average of 4.8 million acres annually. ⁵⁰



OIL COMPANIES FOCUS ON PRIVATE LANDS DUE TO MORE RESOURCES THERE

As many experts have noted, the production of oil and gas from private lands has driven the increase in domestic production.⁵¹ But it's not because the federal government has restricted access to resources on federal lands. Rather, the domestic boom is driven by ample tight oil (or shale oil) and shale gas resources on private lands. In 2012, Adam Sieminski, the Administrator of the Energy Information Administration testified before the House Energy and Commerce Committee that:

"Because the shale resource basins are largely outside of the Federal lands, so too is shale production. In this case, the geology is working in favor of non-Federal landowners.

"The rapid increase in natural gas production from shale resources, **found largely outside the Federal lands**, over the last 5 years has significantly reduced natural gas prices and the relative attractiveness of conventional natural gas resources, including those of Federal and Indian lands." ⁵²

A new study by the Center for Western Priorities, "Follow the Oil," reinforced this finding.

"Nationwide, **90 percent of all current shale gas plays exist on nonfederal lands**, with only 10 percent located on federal lands. Even starker, almost all shale oil resources exist on non-federal lands. Only 7 percent of current **shale oil** and mixed plays are found on federally-owned lands with the remaining **93 percent on nonfederal lands**.

"The lack of shale oil deposits under public lands and the market-driven movement away from natural gas and towards oil explains recent drilling trends on public lands." ⁵³

MORE SERVICE STATION EMPLOYEES THAN OIL PRODUCERS

The increase in domestic oil and gas production since 2008 led to a 108,000 increase in oil and gas extraction, operations, pipeline, and refining jobs. ⁵⁴ This has helped the economy. At the same time, it is important to note that there are more service station employees than people who produce oil and gas jobs. In addition, there were twice as many clean energy jobs in the U.S. in 2010 compared to oil and gas positions. ⁵⁵

Year	Direct oil and gas industry employment from extraction, operations, pipeline, & refining (thousands)	Gasoline station employees (thousands)	Direct oil and gas employment (extraction through refining) plus gas station employment (thousands)	Gas station employees as a percentage of oil and gas employment (Extraction through refining plus gas station jobs)
2008	604	842	1,447	58%
2009	573	826	1,399	59%
2010	571	819	1,390	59%
2011	641	831	1,472	56%
2012	712	841	1,554	54%

Source: Current Employment Statistics Database, Bureau of Labor Statistics

III. Sequester cuts will slow the production of oil and gas from federal lands and waters.

Those representatives who are concerned about the pace of federal approval for on and offshore drilling permits for federal lands and waters ought to oppose the sequester budget cuts. The Department of the Interior noted:

"Efforts to expedite processing of offshore oil and gas permitting in the Gulf of Mexico would be thwarted by delays, **putting at risk some of the [pending] 550 exploration plans**.

"Approximately 300 fewer onshore oil and gas leases would be issued in Western states such as Wyoming, Utah, Colorado, and New Mexico, delaying prospective production from those lease tracts and deferring payments to the Treasury." ⁵⁶

The sequester cuts will undo the improvements in oil drilling permit approvals made over the past four years. Legislators that support the sequester cuts should not complain about a slower pace of drilling approvals.

IV. Big 5 oil companies earn huge profits and receive big special tax breaks, while reducing their domestic workforce and producing less oil.

American families have been plagued by higher oil and gasoline prices over the past several years despite a significant increase in domestic oil production and gradual decline in consumption.⁵⁷ The AAA reported last week that the average national gasoline price is 38 cents per gallon higher than on January 1, 2013 – an 11 percent hike⁵⁸

The Energy Information Administration reported that U.S. households spent an average of \$2,912 on gasoline in 2012.⁵⁹ This is the highest level in four years, equivalent to nearly 4 percent of the average household income before taxes. Last year the average gasoline price was \$3.66 – a dime more than the previous record set in 2011.⁶⁰ *Time* magazine reported in December that "2012 will go down as the most expensive year ever for gas."⁶¹

While higher gasoline prices cause families pain at the pump, they are a boon to the world's largest oil companies. The Big Five oil companies – BP, Chevron, ConocoPhillips, ExxonMobil, and Shell – made a combine record profit of \$118 billion in 2012 on top of a record profit of \$137 billion in 2011. These companies also have nearly \$72 billion in cash reserves. ⁶² And they receive \$2.4 billion annually in special tax breaks, according to the Congressional Joint Committee on Taxation. ⁶³

Despite hundreds of billions of dollars in profits, cash reserves, and special tax breaks, the largest oil companies are shedding domestic workers and producing *less* oil. According to company profit reports, four of the big five companies – BP, Chevron, ExxonMobil and Shell – shed a total of 11,700 U.S. jobs between 2006 and 2011 – a 13 percent cut since 2006.⁶⁴ And the Big Five oil companies actually produced 3 percent *less* oil in 2012 compared to 2011.⁶⁵ So big oil companies' arguments that they need their special tax breaks to protect jobs and produce more oil ring false.

	U.S. Employment				Jobs Losses or	Percent change		
Oil Companies	2006	2007	2008	2009	2010	2011	Gains 2006-2011	2006-2011
BP	33,700	33,000	29,300	22,800	22,100	22,900	-10,800	-32%
Chevron	28,800	31,000	32,000	31,500	30,000	30,000	1,200	4%
ExxonMobil	30,300	30,149	29,829	29,884	33,200	32,200	1,900	6%
Shell	24,000	24,000	23,000	22,000	20,000	20,000	-4,000	-17%
Total	116,800	118,149	114,129	106,184	105,300	105,100	-11,700	-10%

Source: Companies' 10-Ks and annual reports

The big three U.S. publicly owned oil companies – Chevron, ConocoPhillips, and ExxonMobil – claim that they pay plenty in taxes, but they paid relatively low federal effective tax rates in 2011. *Reuters* reports that their tax payments were "a far cry from the 35 percent top corporate tax rate." Their effective federal tax rates in 2011 were: ExxonMobil, 13 percent; Chevron, 19 percent; and ConocoPhillips, 18 percent.

V. Oil CEO's proposal to export crude oil undermines energy security

The Energy Information Administration "expects crude oil production to continue to grow rapidly over the next two years, increasing from an average 6.4 million bbl/d [barrels per day] in 2012 to average 7.3 million bbl/d in 2013," a 14 percent increase.⁶⁷ This is 46 percent more domestic oil production compared to 2008.⁶⁸ Oil imports have dropped by 22 percent since 2008 – from 9.8 million bbl/d to 7.6 million bbl/d in 2013. This will be the lowest amount of oil imports since 1996.⁶⁹

Recently, however, several senior oil industry executives have proposed relinquishing this new found economic and energy security advantage by proposing to export crude oil. The *Wall Street Journal* reported that:

"The U.S. should work toward exporting oil from the Gulf Coast, ConocoPhillips Chief Executive Ryan Lance said.

"Shale development is growing quickly enough that the U.S. will be an energy exporter within a decade, Mr. Lance said Tuesday in an address during IHS CERAWeek, and he urged the federal government not to stand in the way. Permits should be granted to projects aimed at exporting liquefied natural gas and eventually crude oil, he said.

"We live in an interconnected, mutually dependent world that needs free trade,' Mr. Lance said. 'This means allowing LNG exports and at some point even exports of oil.'

"In 2011, exports of petroleum products from the U.S. exceeded imports for the first time in more than 60 years, according to the U.S. Energy Information Administration. And in December, the U.S. imported less crude than it has in any month in over a decade, according to the EIA's data. But a maze of regulations prohibits exports of most crude."

Last year Jack Gerard, President of the American Petroleum Institute, also proposed exporting crude oil. *Reuters* reported:

"As U.S. oil production climbs to record levels, the United States should eventually consider easing its restrictions on crude exports, the head of a powerful oil lobbying group said.

"America's changing energy fortunes call for more support of domestic oil and gas production, and possibly an eventual shift in U.S. energy export policy, American Petroleum Institute President Jack Gerard told Reuters in an interview.

'It's a serious consideration as we continue to produce more and more in this country,' Gerard said."⁷¹

Crude oil is a vital economic commodity, and its production and price have national security implications as well. The more domestic oil we produce, the less reliant we are on other nations for oil, which lessens the likelihood of a devastating supply disruption.

National security experts believe that more domestic oil production can enhance our security in the short run. In 2011, the Center of Naval Analysis's (CNA) Military Advisory Board, which consists of retired senior generals and admirals, released "Ensuring America's Freedom of Movement: A National Security Imperative to Reduce U.S. Oil Dependence." ⁷² The report recommended steps to increase national security via less reliance on foreign oil:

"A near-term increase in domestic production has the potential to decrease reliance on outside sources, to increase the margin between global demand and global supply, and to increase our diplomatic leverage options. However, we also recognize that **domestic oil** alone will not satisfy our nation's transportation energy demand. We must have alternatives to oil for our transportation sector. We can increase domestic production, and simultaneously reduce our overall demand for oil....Together, these steps would significantly strengthen our economic and diplomatic hands.⁷³

It makes little sense to surrender the new found security and economic benefits of greater domestic oil production by exporting this crucial commodity to other nations.

EXPORT OF REFINED OIL PRODUCTS UP

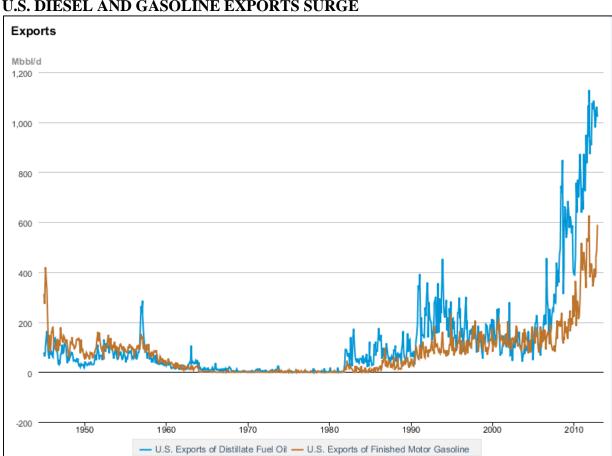
Even without the export of crude oil, the United States has increased its export of refined oil products, particularly diesel fuel and gasoline. The Energy Information Administration reports that in December 2012 the U.S. exported 1 million barrels per day of diesel fuel, and 590,000 barrels per day of gasoline.⁷⁴ These are near record exports.

Some energy experts are very concerned that the export of refined fuels could raise prices here. The *Los Angeles Times* reported that:

"Energy expert Amy Myers Jaffe said fuel exporting removes gasoline and diesel that would otherwise be available to the market to mitigate price spikes.

"There is no such thing as 'surplus gasoline,' said Jaffe, executive director of energy and sustainability at UC [University of California at] Davis. 'It's a little like saying you are only going to take water from the shallow end of the pool. If I take water out, there is less water in the pool.'"⁷⁵

At a time of high diesel and gasoline prices, it does not make much sense to export these commodities to other nations.



U.S. DIESEL AND GASOLINE EXPORTS SURGE

Source: U.S. Energy Information Administration

PRODUCTS REFINED FROM KEYSTONE XL PIPELINE OIL LIKELY EXPORTED

Proponents of the Keystone XL pipeline argue that tar sands oil is vital for U.S. energy security. However, it appears that much of the 830,000 barrels per day of this dirtier oil will be refined and exported to other nations.⁷⁶

The State Department's draft Supplemental Environmental Impact Statement (SEIS) suggests that a sizeable portion of the tar sands oil transported to Gulf Coast refiners via the Keystone XL pipeline will be refined for export, thus reducing the benefits to U.S. energy security.

"This is the case for heavy WCSB crudes, which match well with the large amount of heavy crude processing capacity on the Gulf Coast. Therefore, existing refinery throughputs and **product exports are likely to continue**."⁷⁸

The draft SEIS notes that the Energy Information Administration revised downward the need for foreign oil imports, with "this significant change...driven primarily by the lower U.S. demand forecasts." ⁷⁹ EIA also predicts higher exports compared to the previous draft SEIS. ⁸⁰

The New York Times notes that the Canadian tar sands oil would travel via pipeline "to refineries on the Gulf Coast. From there, most of the fuel would be sent abroad."81

The Natural Resources Defense Council explains that "Many of these [recipient] refineries are in Foreign Trade Zones where oil may be exported to international buyers without paying U.S. taxes." Export of refined petroleum products made from tar sands oil and transported by Keystone XL pipeline would do little to enhance our energy security.

VI. Climate change threatens energy production and distribution

A recent study by Munich Re, the world's largest reinsurance firm, found that North America is experiencing a tremendous rise in extreme weather disasters—a nearly fivefold increase over the past three decades.⁸³ The firm concluded that this is due to climate change.

The last two years reinforced this finding. In 2011 and 2012 the United States experienced 25 storms, floods, droughts, wild fires, and heat waves that each caused at least \$188 billion in damages. Vital infrastructure – including oil production, refineries, and electricity transmission – were damaged or closed due to these climate related severe weather events.

Such extreme weather events will become more common and/or severe as the climate warms. The congressionally-mandated National Climate Assessment recently released its 2013 draft, undertaken by over two hundred scientists. ⁸⁵ The National Climate Assessment draft noted that the changing climate:

"Will be disruptive to society because our institutions and infrastructure have been designed for the relatively stable climate of the past, not the changing one of the present and future.

"Sea level rise, combined with coastal storms, has increased the risk of erosion, stormsurge damage, and flooding for coastal communities, especially along the Gulf of Mexico, the Atlantic seaboard, and Alaska." ⁸⁶

The extreme weather in 2012 caused energy infrastructure damage that could harm the economy and cost jobs. Last summer the *New York Times* reported:

"From highways in Texas to nuclear power plants in Illinois, the concrete, steel and sophisticated engineering that undergird the nation's infrastructure are being taxed to worrisome degrees by heat, drought and vicious storms.

"A subway train derailed after the heat stretched the track so far that it kinked...In East Texas, heat and drought have had a startling effect on the clay-rich soils under highways, which 'just shrink like crazy,' leading to 'horrendous cracking,' said Tom Scullion, senior research engineer with the Texas Transportation Institute at Texas A&M University.

"Excessive warmth and dryness are threatening other parts of the grid as well. In the Chicago area, a twin-unit nuclear plant had to get special permission to keep operating this month because the pond it uses for cooling water rose to 102 degrees; its license to

operate allows it to go only to 100...a different power plant had to shut because the body of water from which it draws its cooling water had dropped so low that the intake pipe became high and dry; another had to cut back generation because cooling water was too warm."87

CNN Money reported that the 2012 drought was hampering oil and natural gas production:

"One of the worst droughts in U.S. history is hampering oil production...[the energy] boom is possible partly by hydraulic fracturing.

"[It requires] lots of water. Each shale well takes between two and 12 million gallons of water to frack. That's 18 Olympic-sized swimming pools worth of water per well.

""We're having difficulty acquiring water,' said Chris Faulkner, CEO of Breitling Oil and Gas, an oil company with operations in many of the new shale regions including Bakken in North Dakota and Marcellus in Pennsylvania.

"Faulkner said officials in two Pennsylvania counties have stopped issuing permits for oil companies to draw water from rivers, forcing them to go further afield to obtain the crucial resource." 88

The *National Journal* also determined that climate change was hampering energy production and raising prices:

"Climate change is causing major disruptions to the nation's transportation and energy infrastructure, leading to increased power outages and fuel-price spikes, and slowing the movement of goods and people." ⁸⁹

Such disruption of energy production and transmission will only grow if climate change continues unimpeded. The American Meteorological Society concluded last year that the climate will become more disruptive if we don't reduce pollution:

"There is unequivocal evidence that Earth's lower atmosphere, ocean, and land surface are warming; sea level is rising; and snow cover, mountain glaciers, and Arctic sea ice are shrinking. The dominant cause of the warming since the 1950s is human activities. This scientific finding is based on a large and persuasive body of research.

"The observed warming will be irreversible for many years into the future, and even larger temperature increases will occur as greenhouse gases continue to accumulate in the atmosphere. Avoiding this future warming will require a large and rapid reduction in global greenhouse gas emissions." ⁹⁰

MAKE ENERGY PRODUCTION AND GENERATION LEASE VULNERABLE TO EXTREME WEATHER

The mounting scientific evidence indicates that extreme weather linked to climate change will increase in severity and/or frequency. For instance, the National Oceanic and Atmospheric

Administration just reported that the winter of 2012-13 was wetter than average while the West remained dry. ⁹¹ Huge snow storms, in particular, can interfere with electricity transmission.

It is imperative that we assist communities with efforts to make their energy and other vital infrastructure more resilient to the increasing threat of extreme weather. Currently, they receive relatively little assistance to reduce the vulnerability of power plants and lines, oil and gas production, and other energy infrastructure. 92

To begin to address these resilience needs, Rep. Lois Capps (D-CA) and 39 additional representatives recently urged President Obama to appoint a bipartisan, blue ribbon panel that would help communities prepare for future extreme weather events by identifying resilience needs and dedicated revenue to help meet them. Rep. Capps said that "it's imperative that we have a complete picture of what we're already doing to prepare, what we still need to do, and how much we'll need to invest in these efforts." ⁹³

Those representatives who seek to increase oil and gas production from federal lands and waters should support Rep. Capps's efforts to provide communities with resources to protect *existing* production from extreme weather.

PROTECT ENERGY PRODUCTION AND JOBS BY CUTTING CARBON POLLUTION FROM POWER PLANTS

Power plants are the largest domestic contributor to climate change, responsible for more than one-third of the greenhouse gas pollution in the U.S. in 2011.⁹⁴ There are no limits on carbon pollution from existing power plants. In April 2012, the Environmental Protection Agency proposed a carbon pollution standard for new power plants, which must be finalized by this April. This would slow the growth of carbon pollution, but not reduce existing emissions.

To slow the impacts of climate change, we must reduce carbon pollution from *existing* power plants and other major sources. During his State of the Union address, President Obama said:

"I urge this Congress to get together, pursue a bipartisan, market-based solution to climate change, like the one John McCain and Joe Lieberman worked on together a few years ago.

"But if Congress won't act soon to protect future generations, I will. I will direct my cabinet to come up with executive actions we can take, now and in the future, to reduce pollution, prepare our communities for the consequences of climate change, and speed the transition to more sustainable sources of energy." ⁹⁵

To accomplish this goal, Congress could pass a carbon tax to be levied on every ton of pollution from the largest emitters. ⁹⁶ If the price was set at an effective level, power plants and other big emitters would have an economic incentive to reduce their pollution. This system would also raise billions of dollars of revenue that could offset a reduction in pay roll taxes, support deployment of clean power sources, and/or reduce the deficit. Both conservative and progressive nongovernmental organizations have endorsed a carbon tax. Unfortunately, Congress is unlikely to pass such a tax any time soon.

In 2007, the Supreme Court ruled that the president has the authority and obligation under the Clean Air Act to set a carbon pollution standard for existing power plants and other major emitters. 97 A carbon pollution standard for existing power plants would have significant impact on the roughly 600 existing coal-fired power plants by requiring them to reduce their emissions to the level determined in the rulemaking process. 98 To reduce their pollution, these plants would probably employ some combination of fuel-switching to natural gas or co-firing with biomass; demand reduction via energy efficiency measures; and, development of clean, renewable electricity generation.

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 $\underline{\text{http://yosemite.epa.gov/opa/admpress.nsf/0c0affede4f840bc8525781f00436213/715f5837da2615ef85257b09005ea7af!OpenDocument.}$

⁹⁵ The Washington Post, "State of the Union 2013: President Obama's address to Congress (Transcript)" February 12, 2013, available at http://www.washingtonpost.com/politics/state-of-the-union-2013-president-obamas-address-to-congress-transcript/2013/02/12/d429b574-7574-11e2-95e4-6148e45d7adb_print.html.

⁹⁶ Richard W. Caperton, "A Progressive Carbon Tax Will Fight Climate Change and Stimulate the Economy," (Washington: Center for American Progress, 2013) available at

http://www.americanprogress.org/issues/green/report/2012/12/06/47052/a-progressive-carbon-tax-will-fightclimate-change-and-stimulate-the-economy/.

⁹⁷ "Massachusetts et al. V. Environmental Protection Agency et. Al." available at http://209.200.74.155/doc/SupCtDecision%20Mass.%20v.%20EPA%2004-02-07.pdf

⁹⁸ Erica Peterson, "NRDC Proposes Plan to Reduce Power Plant Carbon Emissions," *National Public Radio Louisville*, December 4, 2012, available at http://www.wfpl.org/post/nrdc-proposes-plan-reduce-power-plantcarbon-emissions.

⁹¹ Doyle Rice, "USA's winter was warmer and wetter than average," *USA Today*, March 11, 2013 available at http://www.usatoday.com/story/weather/2013/03/11/winter-climate-report/1979553/.

⁹⁴ Environmental Protection Agency, "EPA Updates Greenhouse Gas Emissions Data from Large Facilities," Press release, February 5, 2013 available at

Congress of the United States Washington, DC 20515

February 11, 2012

President Barack Obama 1600 Pennsylvania Ave., NW The White House Washington, DC 20500

Dear Mr. President:

We commend you for the bold commitment to addressing the threat of climate change you made in your inaugural address, and stand ready and willing to help you advance this goal. As part of this commitment, we urge you appoint a bipartisan blue ribbon panel to develop a comprehensive program to help local communities prepare for the anticipated impacts of an increase in climate-related extreme weather events.

As you know, recent extreme weather events like Hurricane Sandy, severe droughts, and wildfires have demonstrated the very real and urgent threat climate change poses to our communities and nations. The 2013 National Climate Assessment draft noted that "Climate change is already affecting the American people. Certain types of weather events have become more frequent and/or intense, including heat waves, heavy downpours, and, in some regions, floods and droughts. ... These changes are part of the pattern of global climate change, which is primarily driven by human activity."

We must protect our communities from the potentially devastating impacts on both lives and livelihoods caused by climate related extreme weather. For example, Hurricane Sandy was an extraordinary storm that wreaked havoc across the mid-Atlantic region of the United States. However, it was only one of 25 deadly and destructive floods, droughts, heat waves, storms and wildfires in the last two years that each caused at least \$1 billion in damages. These extreme weather events led to 1,113 fatalities and up to \$180 billion in economic damages nationwide.²

Scientists predict that extreme weather events will grow in frequency and/or ferocity over the coming years, particularly if unchecked climate pollution continues. For instance, the National Climate Assessment draft explains that "sea level rise, combined with coastal storms, has increased the risk of erosion, storm-surge damage, and flooding for coastal communities." These events will have high human and economic costs, particularly on middle and lower income households.⁴

Fortunately, many of the communities that are most vulnerable to extreme weather are working with local stakeholders to develop and implement plans to reduce the potential impact of extreme weather on homes, businesses, electricity, water systems, and other essential infrastructure. Every dollar of investment in community resilience or mitigation returns \$4 in economic benefit, according to the Multihazard Mitigation Council.⁵ Nonetheless, it is difficult for many communities to make such

³ http://ncadac.globalchange.gov/download/NCAJan11-2013-publicreviewdraft-chap1-execsum.pdf (page 4)

¹ http://ncadac.globalchange.gov/download/NCAJan11-2013-publicreviewdraft-chap1-execsum.pdf (page 1)

http://www.ncdc.noaa.gov/billions/events (years 2012, 2011)

⁴ http://www.americanprogress.org/issues/green/report/2012/11/16/45135/heavy-weather-how-climate-destruction-harms-middle-and-lower-income-americans/

http://c.ymcdn.com/sites/www.nibs.org/resource/resmgr/MMC/hms_vol1.pdf (page iii)

investments because of dramatic budget reductions in recent years. While local communities must ultimately make the decisions that are best for their respective communities, the significant public benefit and high cost of these projects create a compelling interest for the federal government to assist these communities with these resilience efforts.

We urge you to appoint a bipartisan blue ribbon panel to develop a comprehensive plan to help local communities prepare for the anticipated impacts of increased climate-related extreme weather. Within six months, the blue ribbon panel should:

- Determine total federal expenditures on disaster relief and recovery over the past five years, broken down by disaster and project type;
- Estimate the financial support necessary for communities to develop and implement plans to increase their resilience to floods, severe storms, droughts, heat waves, sea level rise, wildfires, and day-to-day economic impacts;
- Identify federal programs that already provide funding for resilience efforts;
- Recommend a dependable revenue stream to provide additional resources for local pre-disaster mitigation planning; and
- Establish eligibility criteria for applications for this revenue.

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The panel's membership should include people who led recovery efforts from recent weather tragedies, including governors, mayors, first responders, and business and civic leaders. After an opportunity for public comment, the blue ribbon panel should forward its recommendations to you and Congress for action.

Since we cannot prevent extreme weather events from happening in the future, we must take action now to safeguard our communities from their devastation. Assessing current efforts and developing comprehensive strategies will provide an important guide for these actions, which will save lives as well as reduce the tens billions of dollars spent on disaster relief and recovery.

Again, we thank you for your commitment to addressing climate change and stand ready and willing to help you advance this goal. Thank you for your consideration.

Sincerely,

David M. Cicilline las forman Junt. Galin Louise M. Slaughter Steve Cher much the Carolp McCarel (Jaralyn B. Melonay) Jin Moran Elist L. Engel Jud Hoffen Chelle Rush Holt

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Rep. Lois Capps

Rep. Henry Waxman

Rep. David N. Cicilline

Rep. Earl Blumenauer

Rep. John P. Sarbanes

Rep. Louise M. Slaughter

Rep. Steve Cohen

Rep. Emanuel Cleaver

Rep. Carolyn McCarthy

Rep. Carolyn B. Maloney

Rep. Jim Moran

Rep. Eliot L. Engel

Rep. Jared Huffman

Rep. Chellie Pingree

Rep. Rush Holt

Rep. William R. Keating

Rep. Suzanne Bonamici

Rep. Jerrold Nadler

Rep. Chaka Fattah

Rep. Charles B. Rangel

Jehly Wosen

Rep. Frank Pallone, Jr.

Rep. Sam Farr

Rep. Jim Langevin

Rep. Madeleine Z. Bordallo

Rep. Donna F. Edwards

Rep. Paul Tonko

Rep. Doris O. Matsui

Rep. Lucille Roybal-Allard

Rep. Bill Pascrell, Jr.

Rep. Barbara Lee

Rep. Eleanor Holmes Norton??

Rep. Edward J. Markey

Rep. Michael M. Honda

Rep. Raúl M. Grijalva

Rep. Joe Garcia

Rep. Debbie Wasserman Schultz

Rep. Carol Shea-Porter

Rep. David Price

Rep. Peter Welch

Rep. Gerald Connolly