Update on Federal Clean Energy Policy

8.11.16

Outline

- Clean energy tax credits
- Energy bill conference
- Fuel economy regulations for trucks and passenger vehicles
- Mission Innovation and appropriations
- Other executive branch actions



E.ON North America



Clean Energy Tax Credits

- Dec. 2015: 5-year extension and gradual phase-down of production tax credit (PTC) for wind and investment (ITC) and residential tax credits for solar
 - P.L. 114-113, Consolidated Tax and Spending Package
- Credits for other technologies expire at end of 2016

ITC					
Solar					
Fuel Cells					
Small Wind					
Geothermal					
Microturbines					
Combined Heat and Power					

PTC					
Wind					
Closed-Loop Biomass					
Open-Loop Biomass					
Geothermal Energy					
Landfill Gas					
Municipal Solid Waste					
Qualified Hydroelectric					
Marine and Hydrokinetic					



Evolving Path Forward on Tax Credits

- ITC extension bills:
 - H.R. 5167 (Reed): Sec. 48C & 25D
 - H.R. 5172 (Meehan): Sec. 48C
- Discussion of attaching tax extension to Federal Aviation Administration (FAA) bill—but "clean" bills passed in March & July
- Now pivoting to possible tax measures in lame duck (after elections)



2G CENERGY—Project Department

Energy Bill Conference

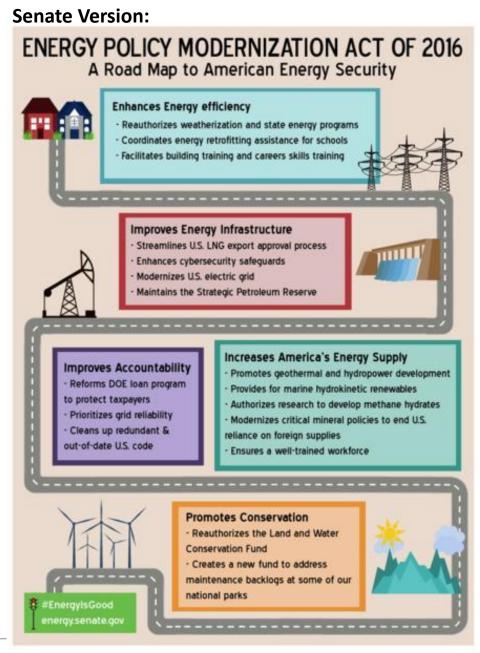
- Senate passed energy bill on 4/20 (<u>S. 2012: the</u> <u>Energy Policy</u> <u>Modernization Act of</u> 2015)
- House passed on 5/25, replacing much of it with text of their own bill (H.R. 8: the North American Energy Security and Infrastructure Act)



Energy Bill Provisions

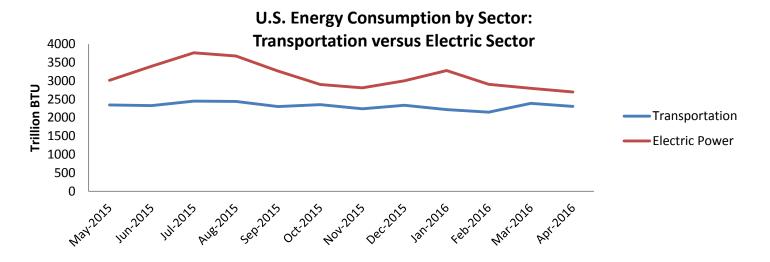
Sticking points in conference include:

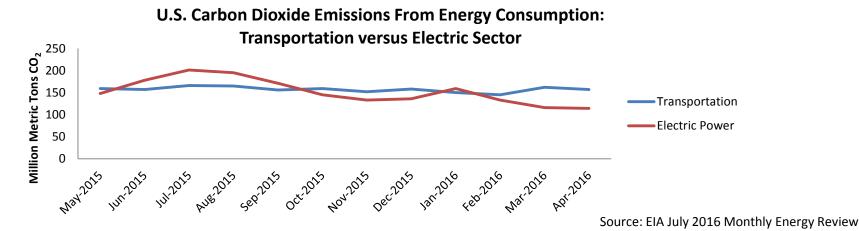
- Environmental Regulations
- Energy Efficiency
- Funding Levels





Transportation







Medium- and Heavy-Duty Vehicles

- Variety of vehicles delivery vans, tractor-trailers, garbage trucks, and buses
- Second largest and fastest growing segment of U.S. transportation



- Reduce oil consumption by ~1.8 billion barrels
- Cut fuel costs by ~\$170 billion
- Save ~1 billion metric tons of carbon pollution
- Final second round fuel efficiency and carbon emissions rule expected soon





Light-Duty Vehicles



- Last CAFE/GHG standards set in 2012
 - Model Year (MY) 2017 2025
 passenger cars and trucks
 - 163 grams CO₂/mile (~54.5 mpg)
- Mid-term Evaluation
 - Reviewing MY 2022-2025 standards
 - Draft Technical Assessment Report released July 2016
 - Industry on-pace towards compliance
 - Similar or lower than anticipated costs to industry
 - Final determination April 2018



Mission Innovation

- Accelerate development of clean energy technologies by doubling public sector R&D funding
- 21 countries including the U.S.
 - E.U. recently added
- Breakthrough Energy Coalition to pool \$2 B towards MI projects
- For U.S.: seek \$12.8 B in federal R&D funding by end of 2020.



Dept. of Energy Appropriations

DOE Office/Program	FY16 Enacted (Mission Innovation portion) in millions	FY17 Request (Mission Innovation portion) in millions	Senate E&W Appropriations Bill (S.2804) in millions	House E&W Appropriations Bill (H.R. 5055) in millions
Science	\$5,347 (\$1,577)	\$ 5,572 (\$1,853)	\$5,400	\$5,400
Energy Efficiency and Renewable Energy	\$2,073 (\$1,406)	\$2,898 (\$2,108)	\$2,073	\$1,825
ARPA-E	\$291 (\$291)	\$350 (\$350)	\$325	\$306
Office of Electricity	\$206 (\$153)	\$262 (\$177)	\$206	\$225
Nuclear Energy	\$986 (\$862)	\$994 (\$804)	\$1,057	\$1,011
Fossil Energy	\$632 (\$533)	\$600 ¹ (\$564)	\$632	\$645
Discretionary Total	\$29,603 (\$4,823)	\$30,240 (\$5,857)	\$30,741	\$29,962

Source: DOE FY17 Budget Request, S. 2804/H.R. 2028, Hr. 5055. Fossil Energy FY17 request includes carryover funds from FY16

- Senate Energy and Water Appropriations (E&W) bill passed
- House E&W bill failed because of late controversial amendments
- Funding for Mission Innovation activities still TBD



Other Executive Branch Actions

- Federal agency clean energy procurement
- Smart Manufacturing Innovation Institute
- National lab incubators: <u>Cyclotron</u>
 <u>Road</u> and <u>Chain</u>

 <u>Reaction Innovations</u>



Other Resources

- Clean energy tax credits:
 - Slides from Pew webinar on Dec. 2015 tax deal
 - Text of P.L. 114-113, the law including tax deal
 - ACTION ALERT: Support PTC & ITC extension
- Energy bill conference:
 - Summary of S. 2012, Senate Energy Bill
 - Summary of House Amendment to S. 2012 and H.R. 8 (Original House Energy Bill)
 - White House's position on **House**, **Senate** energy bills
 - ACEEE Analysis comparing efficiency provisions
 - Alliance to Save Energy on building efficiency codes



Other Resources

- Fuel Economy:
 - Pew information on fuel economy regulations
 - ACTION ALERT: Support maintaining CAFE standards
- Mission Innovation:
 - Pew fact sheet explaining Mission Innovation
 - ACTION ALERT: Support energy innovation
- Executive Branch Actions:
 - Agency renewable energy & efficiency goals
 - National Network for Manufacturing Innovation
 - Cyclotron Road (Lawrence Berkeley National Laboratory)
 - Chain Reaction Innovations (Argonne National Laboratory)



For More Information

- Visit <u>Clean Energy</u>
 <u>Business Network</u> site
 - Check out our
 Government Policy
 section for updates,
 policy 101, & action alerts
- Email <u>Lynn Abramson</u>

Pew Clean Energy Business Network Member Locations

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