CENTER FOR THE NEW ENERGY ECONOMY
Colorado State University

ADVANCED ENERGY LEGISLATION tracker

2015 Year in Review: State Advanced Energy Legislation

January 5th, 2016

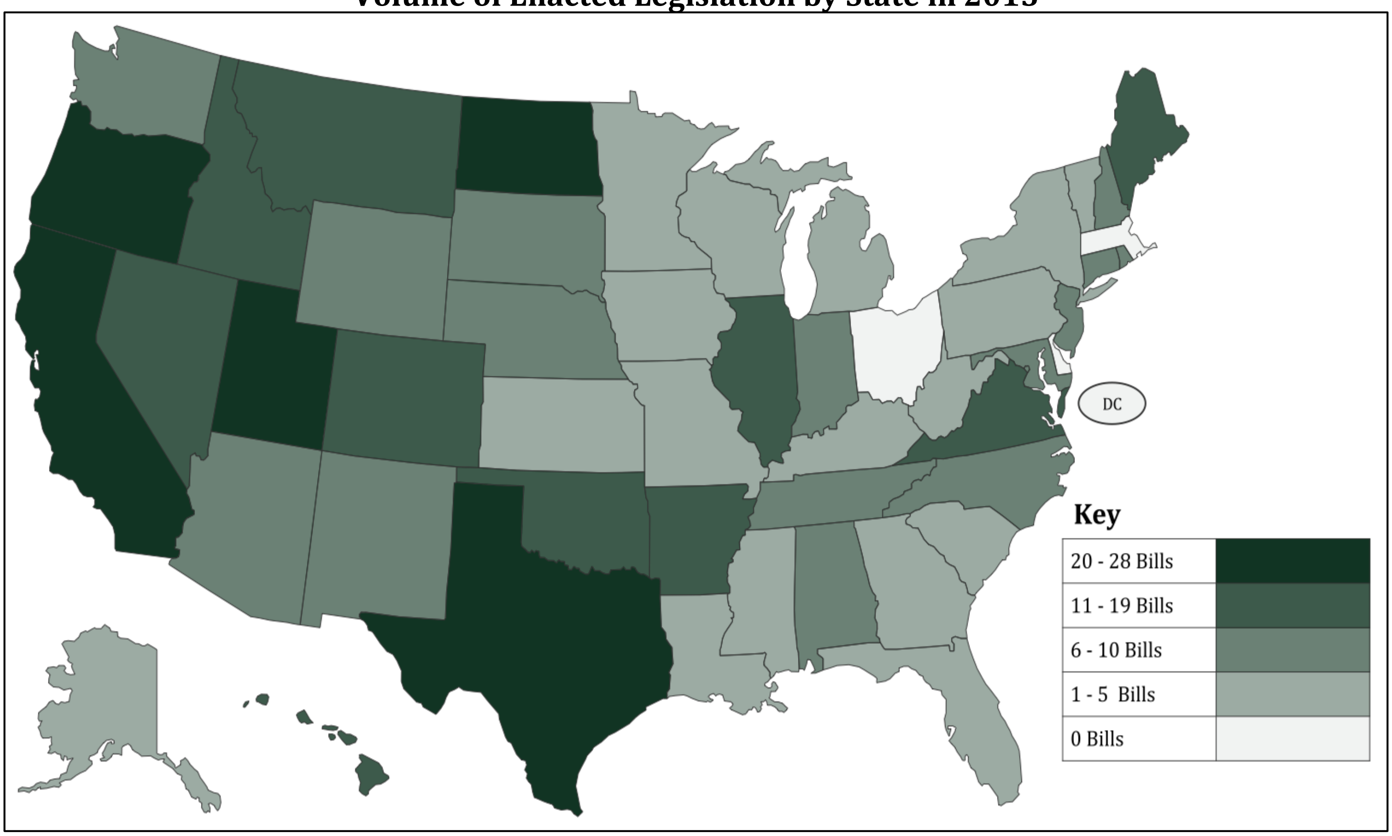
With the 2016 legislative sessions about to begin, the Center for the New Energy Economy (CNEE) takes a look back at advanced energy legislation enacted by U.S. states in 2015[1].

Key Highlights:

1. Last year, 439 advanced energy bills were enacted[2]. This number is comparable to what we found in 2014 (430 bills), but less than 2013 (713 bills). Since every state legislature convenes a full session in odd years, the 2015 total is somewhat lower than expected.

2. In general, percentage shares by policy category have held relatively stable for the last three years (see table, next page). Legislation directing state regulatory agencies, addressing infrastructure, and providing financial incentives for advanced energy technologies continues to be the most common.

Volume of Enacted Legislation by State in 2015



[1] CNEE's 2013 and 2014 annual reviews can be found on the AEL Tracker's Trends and Analysis page.
[2] All data used in this paper reflects Tracker data on December 21st, 2015. Companion legislation, identical or very similar bills introduced in both chambers of a state's legislature, are counted as a single bill in all analyses by CNEE.

2015 Compared to 2013 and 2014

The table below is a snapshot of the volume of enacted legislation by policy category. We noted in 2014 that a decrease in activity was likely attributable to the fact that in even years, four states do not hold regular sessions, another four hold budget-only sessions, and many states hold shorter sessions. The relatively low number this year may be a result of legislative hesitation in anticipation of the Clean Power Plan.

Looking at the frequency of legislation by policy category over the last three years, an interesting trend is that the percentage shares of each category have held relatively constant, suggesting that legislative priorities have not shifted significantly. In all sessions, legislation directing state regulatory agencies, addressing infrastructure, and providing financial incentives for advanced energy technologies held the top three spots for new energy laws.

2013, 2014, and 2015 Enacted Legislation by Policy Category

	2013			2014			2015	
Policy Category	**Count**	**Percent of Total**		**Count**	**Percent of Total**		**Count**	**Percent of Total**
Economic Development	68	10%		40	9%		26	6%
Electricity Generation	74	10%		48	11%		51	12%
Emissions	31	4%		35	8%		33	8%
Energy Efficiency	40	6%		23	5%		29	7%
Financing and Financial Incentives	110	15%		63	15%		53	12%
Infrastructure	89	13%		52	12%		57	13%
Natural Gas Development	73	10%		38	9%		46	11%
Regulatory	153	21%		88	20%		96	22%
Transportation	75	11%		43	10%		48	11%
Total	713			430			439	

In the pages that follow, CNEE analyzes enacted legislation in nine energy policy categories[3] corresponding to the categories in CNEE's Advanced Energy Legislation Tracker (AEL Tracker).

[3] We do not include the 'Other Energy' category in year-end analyses.

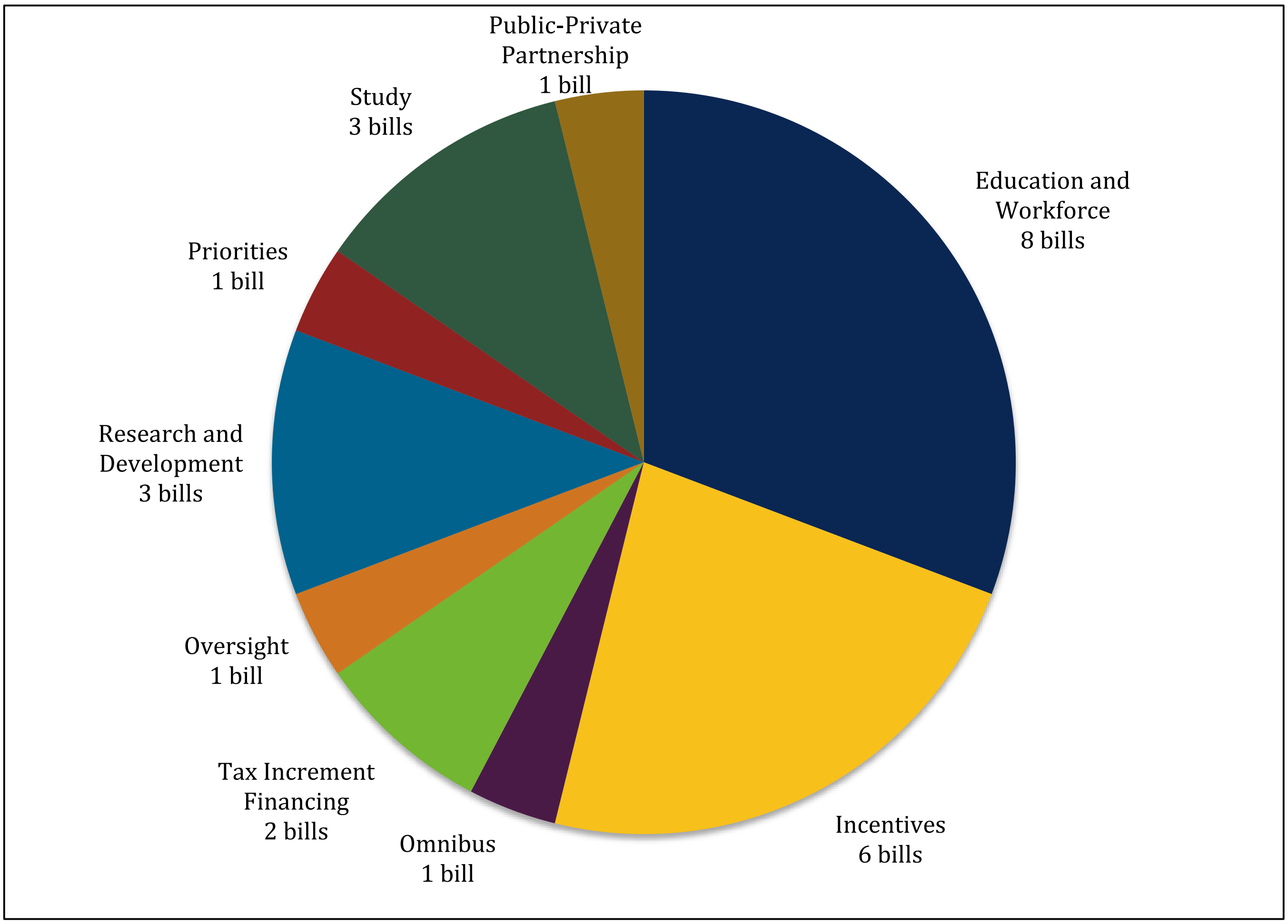
Economic Development: Key Highlights

1. In 2015, the most frequently enacted types of economic development legislation related to workforce development (training and education initiatives) and incentive programs to attract businesses to a state. This is comparable to the previous two sessions.

2. Virginia was the most active state in this category. State lawmakers enacted five unique bills last session. Of particular note, House Bill 2267 created the Virginia Solar Energy Development Authority tasked with facilitating, through a number of programs, the development of the solar industry in the state. The bill includes a goal for the development of at least 400 megawatts of solar energy by 2020.

3. Other notable legislation in this category included Arkansas' Senate Bill 368, which coordinates workforce development programs; and Hawaii's House Bill 1513, authorizing the High Technology Development Corporation to provide matching alternative energy research grants to Office of Naval Research awardees.

2015 Enacted Economic Development Legislation (26 bills)



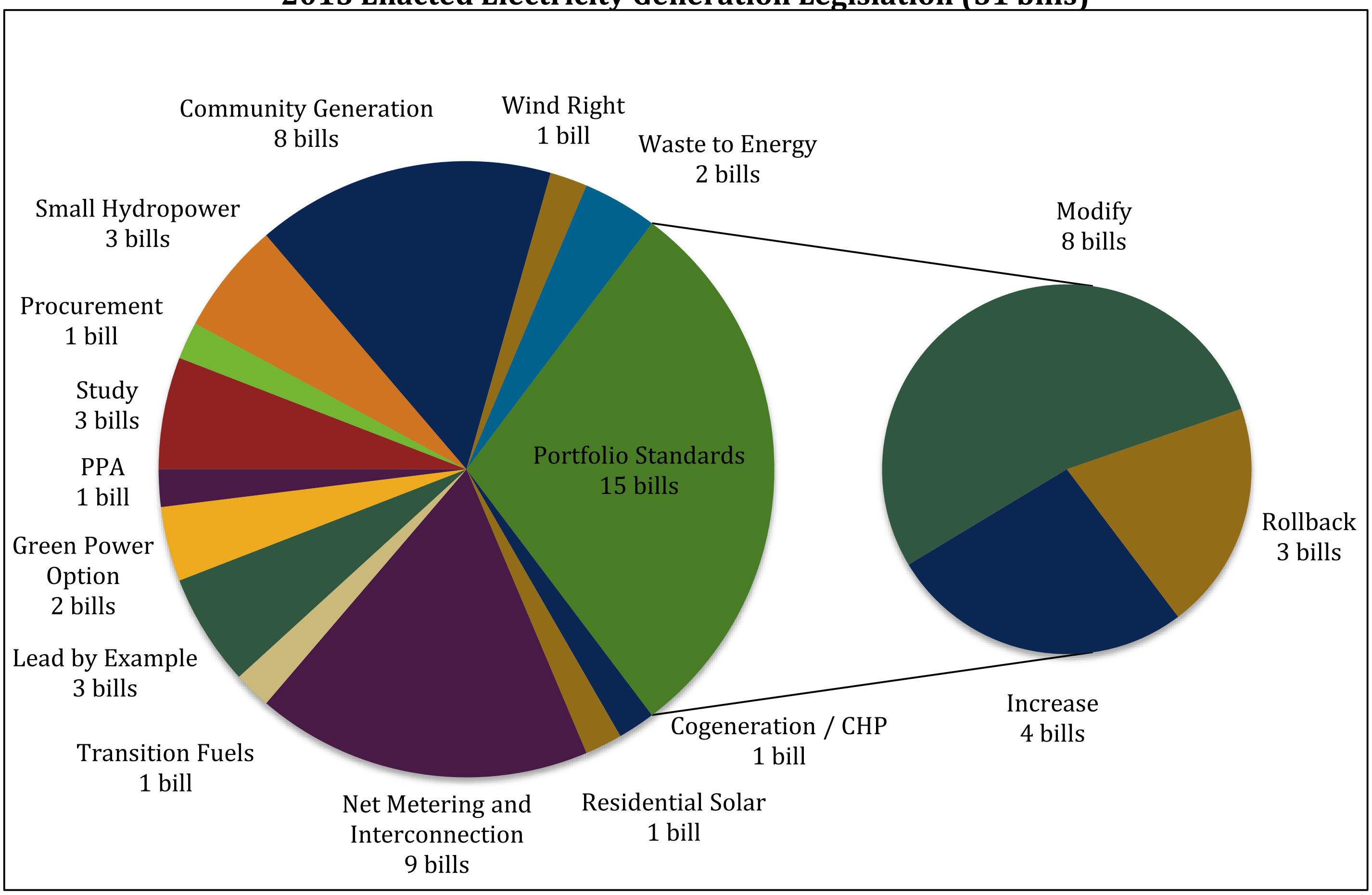
Electricity Generation: Key Highlights

1. While lawmakers in Kansas[4] rolled back the state's RPS and West Virginia[5] repealed their alternative energy standard, significant increases to RPSs were enacted in three states (California, Connecticut, and Hawaii). A new RPS was enacted in Vermont, setting a 75 percent renewable target. The most sweeping bill, California's Senate Bill 350 requires utilities to procure at least 50 percent of retail sales from renewable resources by 2030 and thereafter. The bill includes other notable changes impacting the EERS and the California Independent System Operator (CAISO). Notably, Hawaii became the first state in the nation to set a 100 percent renewable standard.

2. Nine states amended net metering and interconnection policies. Bills directing a public utilities commission to open an investigatory or rulemaking docket related to net metering and/or interconnection were enacted in six states (Arkansas, Iowa, Maine, Rhode Island, Virginia, and West Virginia).

3. Seven states amended provisions related to shared renewables policies. Of note, new programs were authorized in Connecticut, Hawaii, and Maryland. In other states, amendments extended sunset dates or changed program guidelines.

2015 Enacted Electricity Generation Legislation (51 bills)



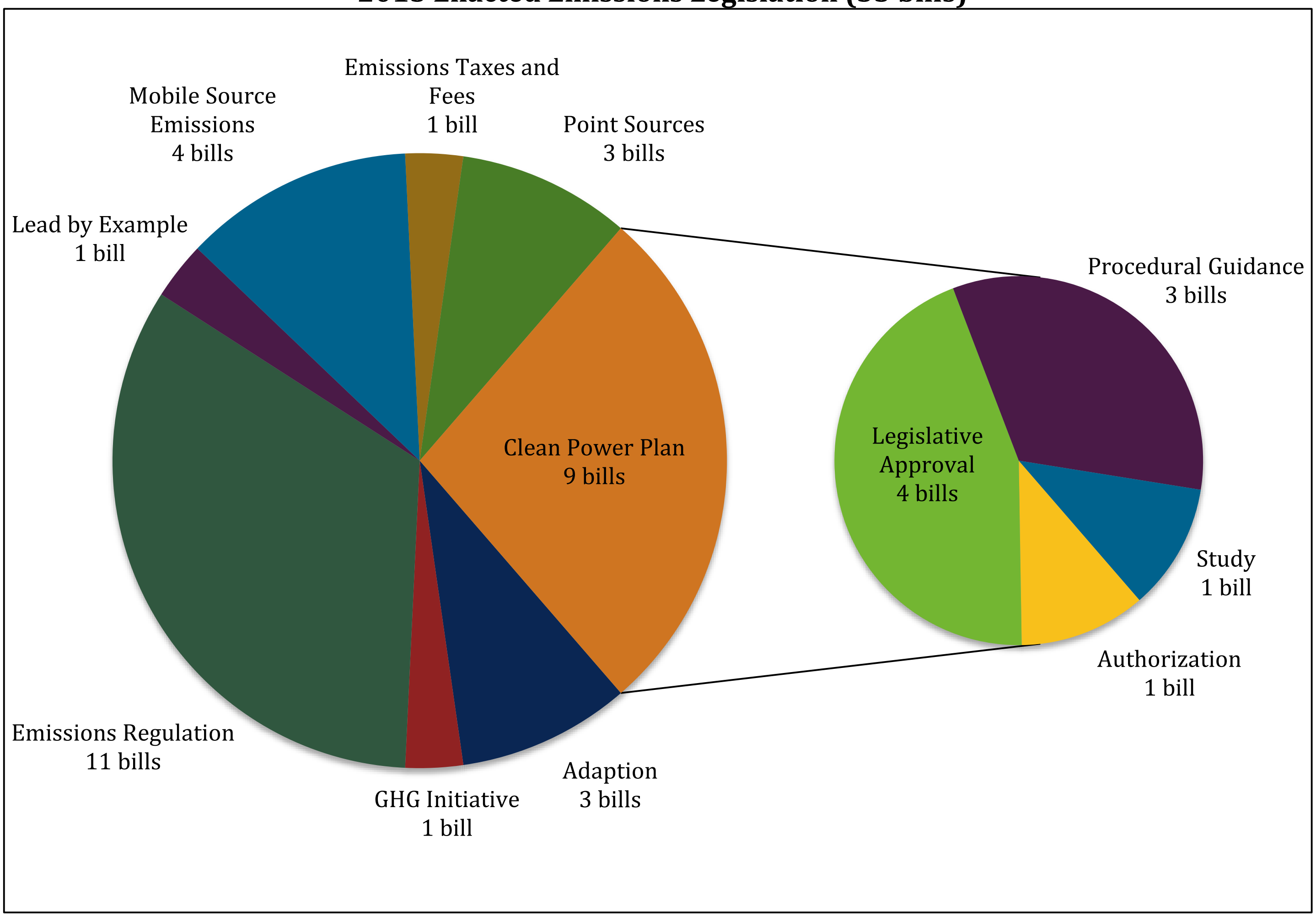
[4] Note that even with a shift from a mandatory standard to a voluntary goal, Kansas is still expected to achieve a 20 percent renewable target.
[5] West Virginia's standard had set a voluntary renewable energy target, and the standard included many non-renewable resources.

Emissions: Key Highlights

1. Nine states enacted legislation relating to air regulation procedures. These include Utah's [House Bill 226], which allows state regulators in the Division of Air Quality to propose more stringent measures than the EPA Clean Power Plan (CPP) if they align with scientific and public outreach efforts. Similar to the other three bills in the legislative approval subcategory, West Virginia's House Bill 2004, would require CPP compliance plan approval by the state legislature prior to submittal to the EPA.

2. Three Climate Adaptation bills passed state houses this year. In California, which struggled with drought throughout 2015, Senate Bill 246 established the Integrated Climate Adaptation and Resilience Program as a partnership between the Office of Planning and Research and regional and local efforts. Similarly, Maryland's House Bill 514 created a Commission on Climate Change to plan for adaptation and mitigation. In Virginia, Senate Bill 1443 requires that the comprehensive plans of localities in the Hampton Roads Planning District include strategies to combat sea-level rise and recurrent flooding.

2015 Enacted Emissions Legislation (33 bills)



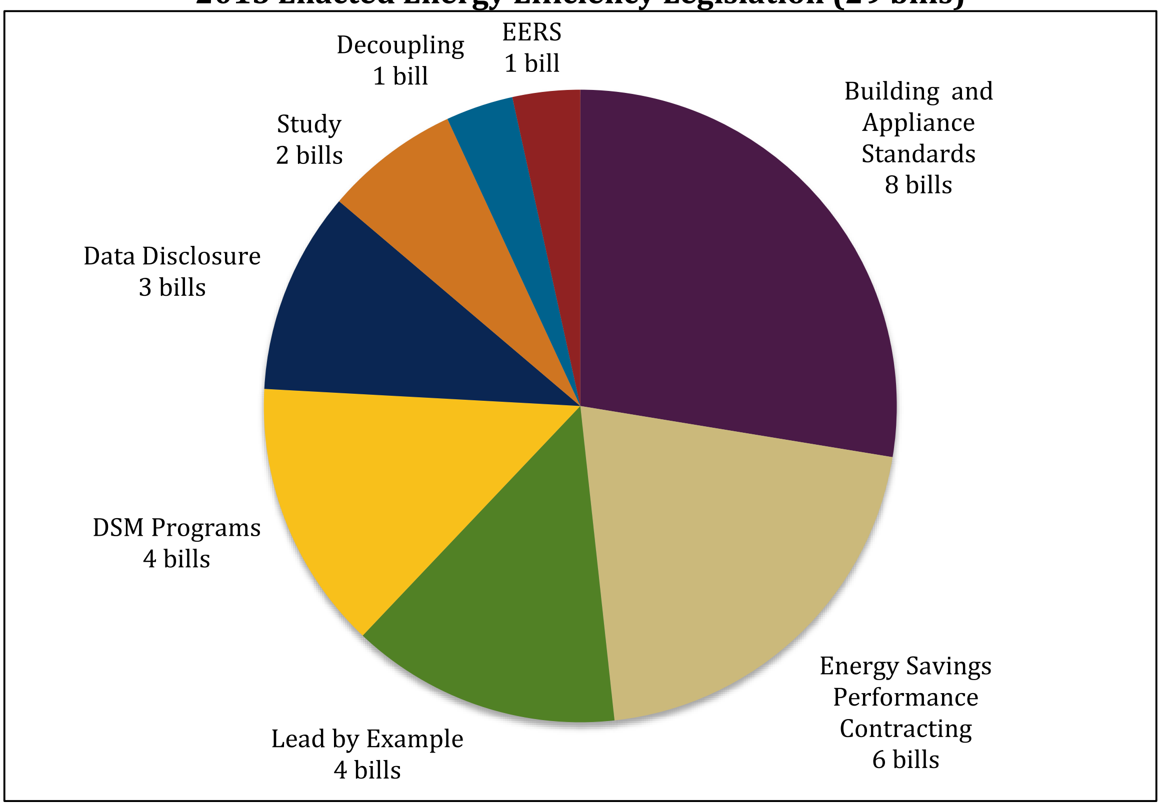
Energy Efficiency: Key Highlights

1. Building and appliance standard policies were the most frequently enacted legislation this session. Most of these policies focused on making changes to state building codes. Of particular interest, Maryland enacted House Bill 323 requiring the adoption of the newest International Energy Conservation Code within 12 months of issuance.

2. Energy Savings Performance Contracting (ESPC) policies were the second most common type of legislation enacted in this category. Senate Bill 869 in Arkansas allows local governments the option to enter into ESPC's, while Montana revised their statute to increase the use of ESPCs by local governments and school districts by clarifying that they may participate.

3. The major news in Energy Efficiency last year was Indiana's EERS rollback. States generally went the other direction this year. New Hampshire enacted House Bill 614 that requires the Public Utilities Commission to create a demand reduction goal, and California enacted Senate Bill 350[6], requiring a 50 percent reduction in end use energy consumption by 2030.

2015 Enacted Energy Efficiency Legislation (29 bills)



[6] See Electricity Generation: Key Highlights.

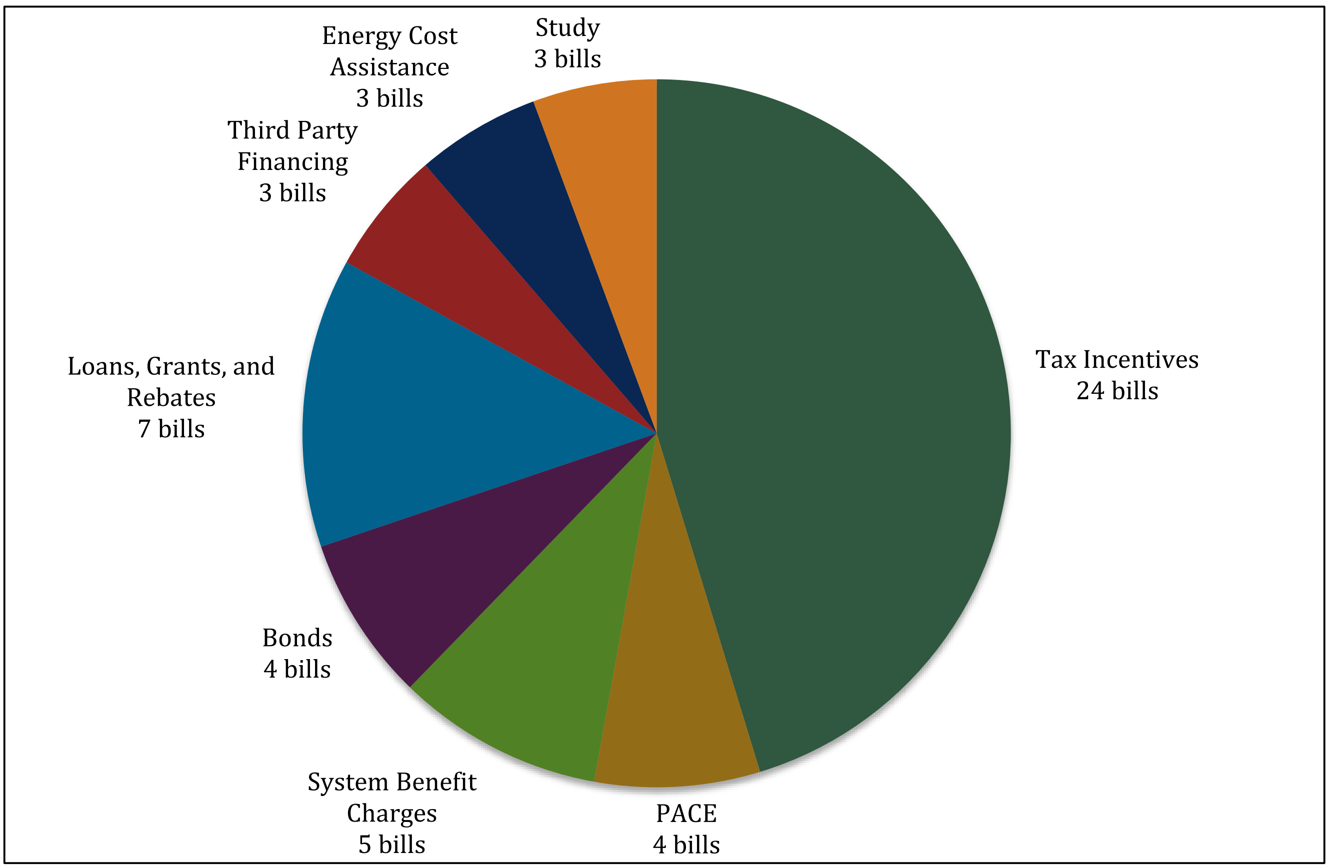
Financing and Financial Incentives: Key Highlights

1. For the third straight year, tax incentives continue to dominate this category, though by a somewhat smaller margin than previous years. Montana enacted House Bill 156, which exempts carbon capture equipment from property taxation.

2. Third-party financing, particularly as it relates to solar, has been in the news in 2015. Three states (Arizona, Maryland, and Georgia) enacted bills related to this type of policy. Most notably, Georgia's House Bill 57 allows third party financing of solar, though it limits residential system size to 10 kilowatts and commercial customers to systems that meet 125 percent of their total demand.

3. Two other bills were of particular interest this year. Alabama enacted Senate Bill 220 allowing local governments to use Property Assessed Clean Energy (PACE) financing to promote energy efficiency, and Nevada enacted Senate Bill 360, which commissions a study to evaluate the viability of developing a green bank.

2015 Enacted Financing and Financial Incentives Legislation (53 bills)



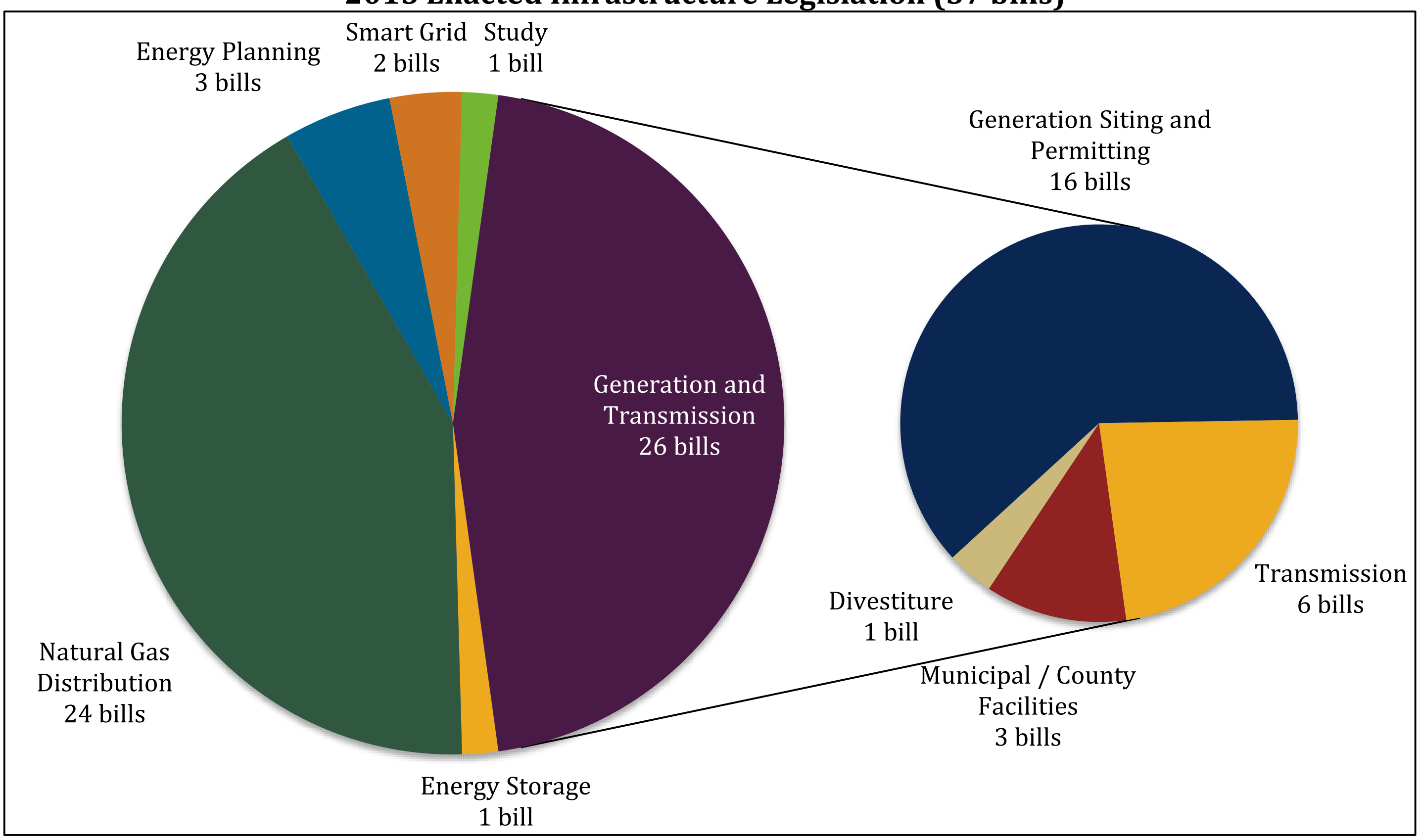
Infrastructure: Key Highlights

1. Many bills addressing the siting, permitting, decommissioning, and divestiture of generation and transmission facilities were enacted in 2015. Bills within this type include legislation in Illinois addressing siting requirements for wind and in Maine amending siting requirements for wind, small wind, and micro-hydro facilities. North Carolina's Senate Bill 716 requires expedited decision-making for certain natural gas-fired generation facilities.

2. Noted in a previous analysis by CNEE, the majority of natural gas distribution-related bills address pipeline safety (including leaks) and siting. States continue to raise pipeline safety penalties to conform to federal law (five bills this year). And, legislators in Mississippi, Nevada, North Dakota, Oregon, Virginia, and West Virginia passed legislation addressing increased access to natural gas.

3. Other notable legislation in this category includes New Hampshire's House Bill 362 which requires that integrated resource plans assess the costs and benefits associated with adopting smart grid technologies and implementing or extending utility programs designed to promote grid reliability and resiliency. In Oregon, House Bill 2193 directs the public utilities commission (PUC) to develop guidelines for utility proposals to procure energy storage systems. A detailed analysis of the bill can be found here.

2015 Enacted Infrastructure Legislation (57 bills)



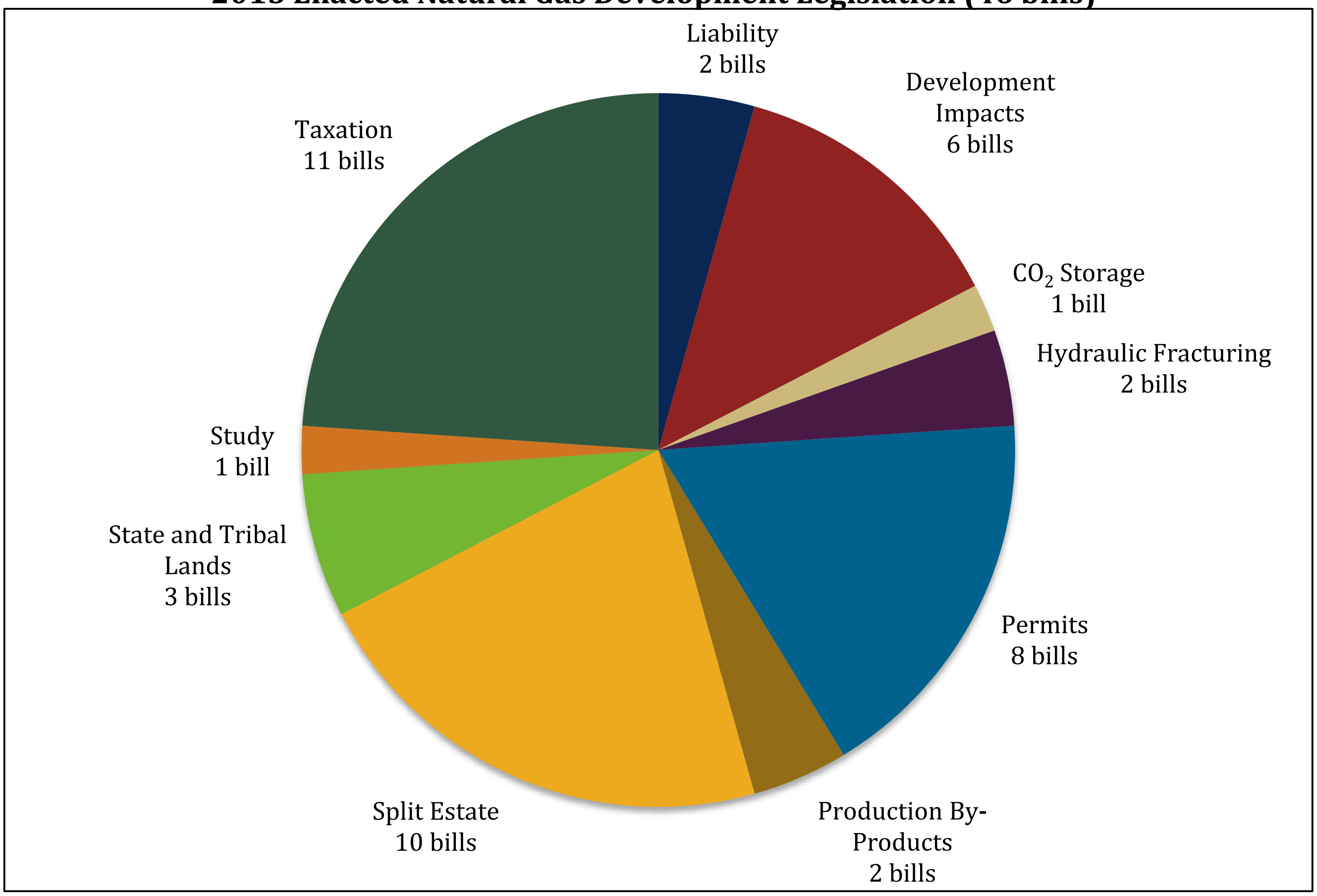
Natural Gas Development: Key Highlights

1. In 2015, bills related to the split estate and to severance and property taxation were the most frequently enacted[7]. In Texas and Oklahoma, bills addressing local authority to regulate natural gas activity dominated the legislative sessions. In both states, while enacted legislation preempts local authority to ban drilling activity, local governments are allowed to establish regulations to reduce the local impacts of drilling activity (see Oklahoma Senate Bill 809 and Texas House Bill 40).

2. Other bills of note in this category include Colorado's House Bill 1225, which provides financial and technical assistance to local governments participating in federal land use decision-making. In Wyoming, Senate File 84 allows operators using carbon dioxide (CO_2) for enhanced recovery to apply to the Wyoming Oil and Gas Conservation Commission for an order certifying the CO_2 that was incidentally stored through the oil recovery process.

3. The most active state in this category in 2015, lawmakers in North Dakota enacted 11 unique bills related to natural gas development. The new acts cover a range of subjects including taxation, the split estate, and development impacts. Senate Bill 2226 requires legislative approval of oil and gas tax collection agreements between operators, the state, and tribal governments.

2015 Enacted Natural Gas Development Legislation (46 bills)



[7] For additional information, see our 2015 Trends in Natural Gas Supply Chain Legislation paper.

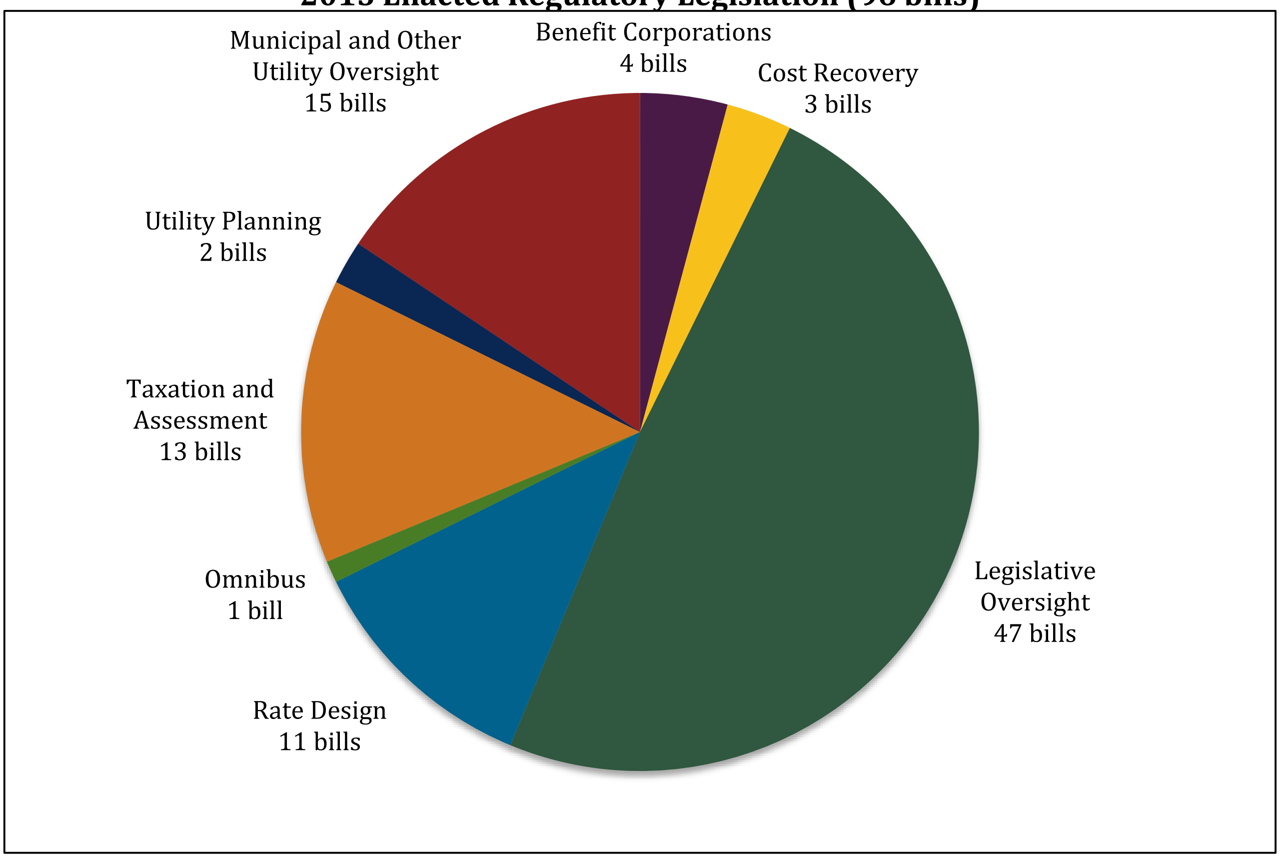
Regulatory: Key Highlights

1. Legislatures in 2015 were most active in providing procedural direction to and amending the authority of state agencies. In Florida, House Bill 7109 limits public service commissioners to three consecutive terms and requires that commissioners undertake ethics training. The bill includes provisions related to rate design and allows Duke Energy to issue securitization bonds to pay off the costs associated with the Crystal River nuclear facility.

2. Several bills addressing rate design and cost recovery made headlines this year. Among these, Connecticut's Senate Bill 573 prohibits the use of variable rates. In Virginia, while Senate Bill 1349 implements a five-year rate freeze for Dominion and Appalachian Power (among other provisions), House Bill 2237 allows utilities to recover the costs, with an enhanced rate of return, for acquiring certain solar facilities.

3. Minnesota's omnibus bill, House File 3 addresses cost recovery for commission ordered divestiture, distribution planning, electric and natural gas distribution infrastructure, and lost revenues associated with competitive rates for energy-intensive trade-exposed electric customers. The bill also amends provisions related to net metering, multiyear rate planning, performance measures, and funding for the low-income energy assistance program. It also requires that the Commissioners of Commerce and the Pollution Control Agency submit a draft plan for compliance with the Clean Power Plan to the legislature by March 15th, 2016.

2015 Enacted Regulatory Legislation (96 bills)



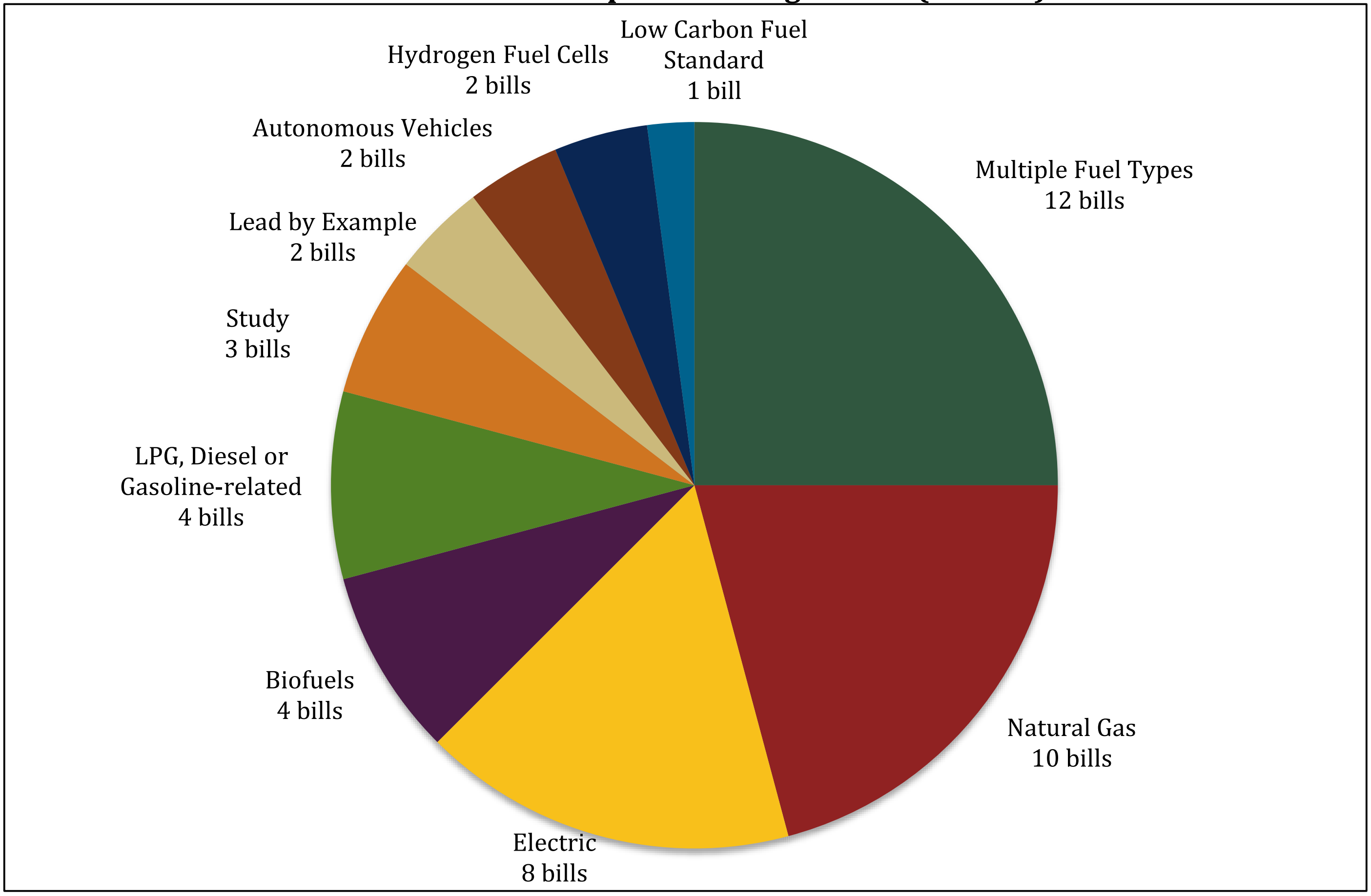
Transportation: Key Highlights

1. In 2015, policies related to alternative fuel taxation were common. For example, South Dakota enacted Senate Bill 1 setting tax rates for natural gas and biofuels. Washington's Senate Bill 5987 set motor fuel tax and electric vehicle fee rates while creating a pilot program to incentivize the development of electric vehicle infrastructure. All enacted legislation related to natural gas vehicles addressed fuel taxes.

2. Over half of the electric vehicle legislation enacted this year focused on infrastructure, such as Idaho's House Bill 185, which clarified that electric vehicle charging stations and their providers are not electric corporations. Biofuels policy was the third most frequently enacted legislation for the first time in this category. Of interest, Hawaii repealed the requirement to blend gasoline with 10 percent ethanol.

3. The number of state lead by example bills enacted this year was the lowest in three years. Both laws enacted this year, however, are significant. California's Assembly Bill 692 requires that at least three percent of aggregate fuel purchases come from low carbon fuel sources by 2017, increasing at one percent per year through 2024. In contrast, Illinois' House Bill 3667 rolled back, from 25 percent to 15 percent, the state's procurement requirement for alternatively fueled passenger vehicles.

2015 Enacted Transportation Legislation (48 bills)



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