

2014 Year in Review of State Advanced Energy Legislation

December 12th, 2014

With all but eight state [legislative sessions](#) closed for 2014¹, and focus turning to the 2015 sessions, the [Center for the New Energy Economy](#) (CNEE) has produced this Advanced Energy Legislation 2014 Year in Review.²

Key highlights from 2014:

1. Thus far, 430 advanced energy bills have become law.^{3,4} While the total number of enacted bills decreased from 713 in 2013, it is notable that the percentages of energy legislation by policy category held relatively stable across the two sessions. This trend suggests that the relative interest in various energy policies may remain somewhat constant year to year.
2. Notable advanced energy-related legislation was enacted by multiple states, including California ([AB 2188](#)), Hawaii ([SB 632](#)), [Nevada](#), Maine ([SP 644](#)), Minnesota ([HF 2834](#)), and Rhode Island ([HB 7727](#), [HB 7991](#)), each of which are discussed in this report. In particular, South Carolina ([SB 1189](#)) became the latest state to enact an RPS, focused on distributed generation.
3. States responded to a number of federal policy developments, notably the EPA's [Clean Power Plan Proposed Rule](#), concerns about revenue shortfalls in the federal [Highway Trust Fund](#), and [new pipeline safety rules](#) released by the Pipeline and Hazardous Materials Safety Administration.

¹ MA, MI, NJ, OH, PA, NY, WI have sessions that are calendared through December 31st.

² CNEE's 2013 AEL Tracker Year in Review can be found [here](#).

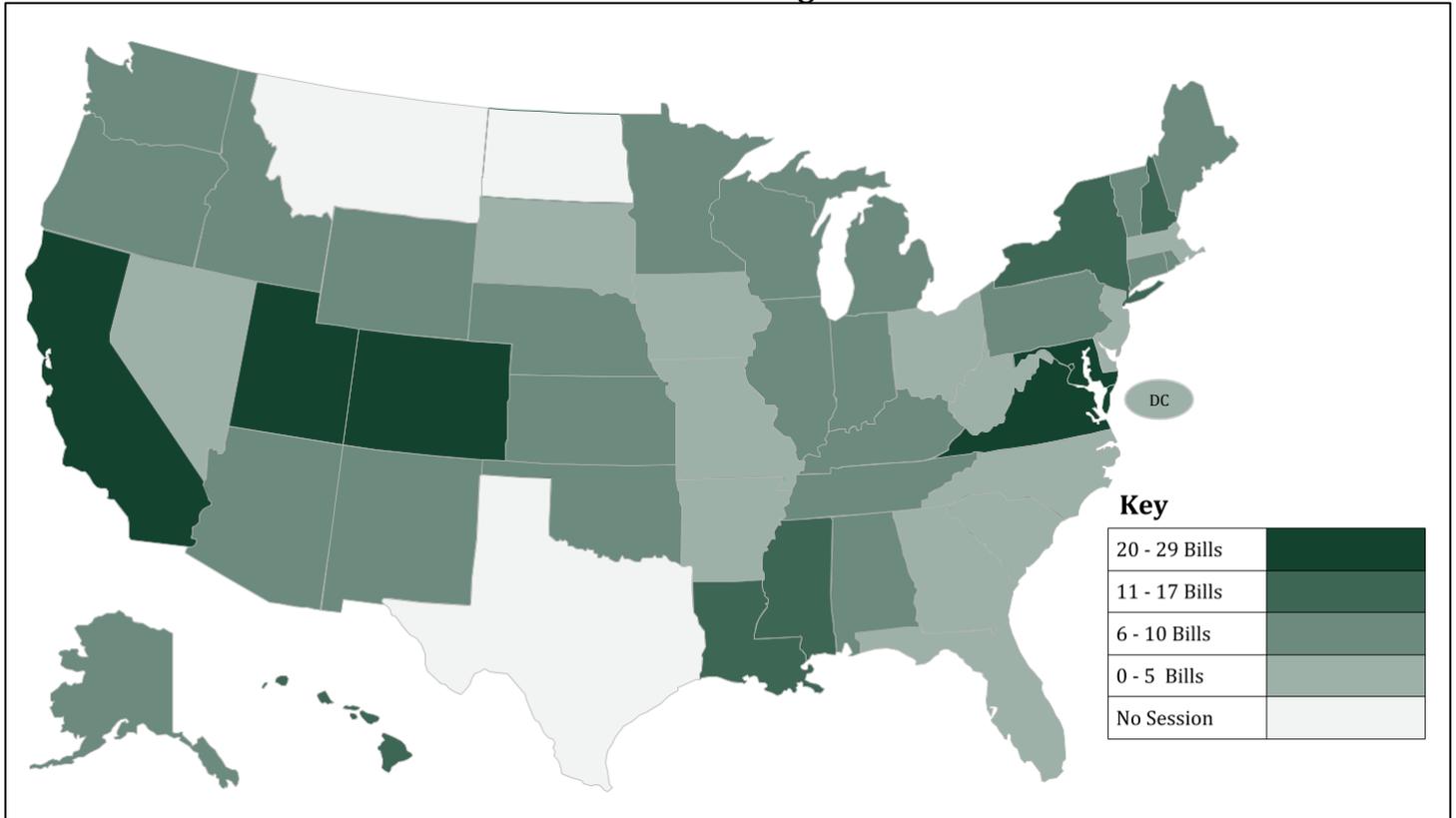
³ Companion legislation, which in many cases are identical bills introduced in both chambers of a legislature, are counted as a single bill in all analyses by CNEE.

⁴ Legislation data is current as of October 26th, 2014.

Level of activity by state varied significantly in 2014

The map below is a snapshot of the relative volume of enacted state legislation by state. As noted above, the total number of bills passed around the country decreased from 713 in 2013 to 430 this year. The reduction is likely attributable to the fact that four states did not hold regular sessions⁵, another four held budget-only sessions, and many states hold shorter even-year sessions. California took the lead this year with 29 bills enacted.

2014 Enacted Legislation



⁵ Nevada, one of the four states that does not convene their legislature in even years, held a special session during which they enacted 4 bills (discussed below in Transportation).

2013 v. 2014 – Relative activity by energy policy category held constant

Figures 1 and 2 compare 2013 and 2014 enacted legislation by energy policy category. An interesting finding is that the percentage shares of each category (the relative size of each pie wedge) held stable across the two sessions, suggesting that legislative priorities have not shifted significantly. This is not unexpected as there was little turnover in state legislatures over the past two years. Legislative priorities may shift when the newly elected legislative cohort takes office. In both sessions, legislation directing state regulatory agencies and financial incentives for advanced energy technologies comprised the largest individual shares of new energy laws.

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

Figure 1. 2014 Enacted Legislation by Policy Category (430 bills)

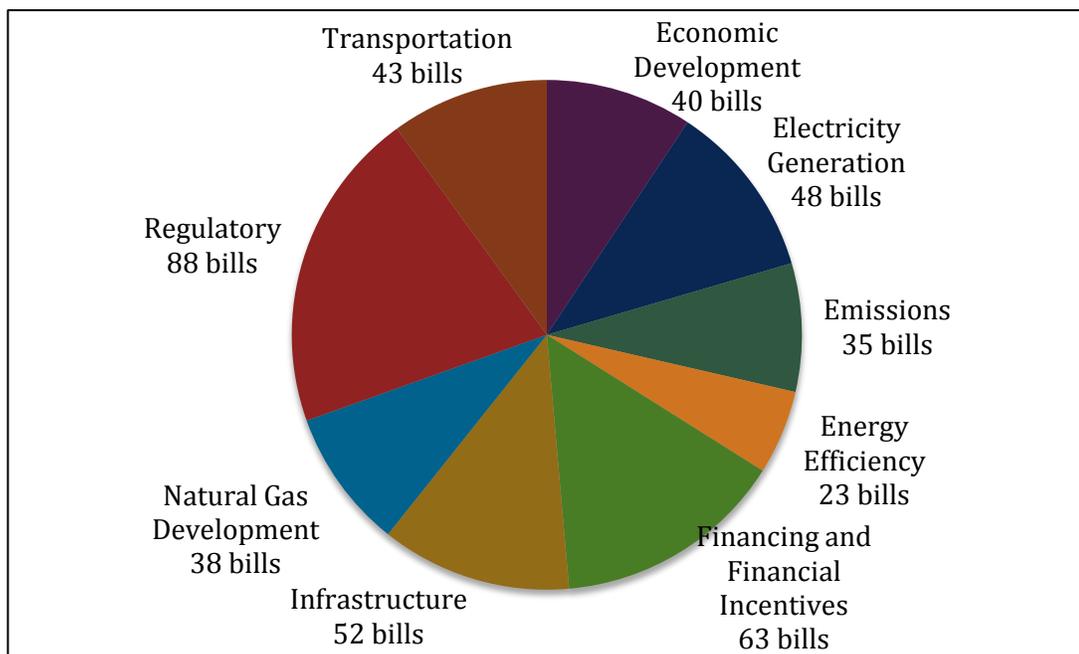
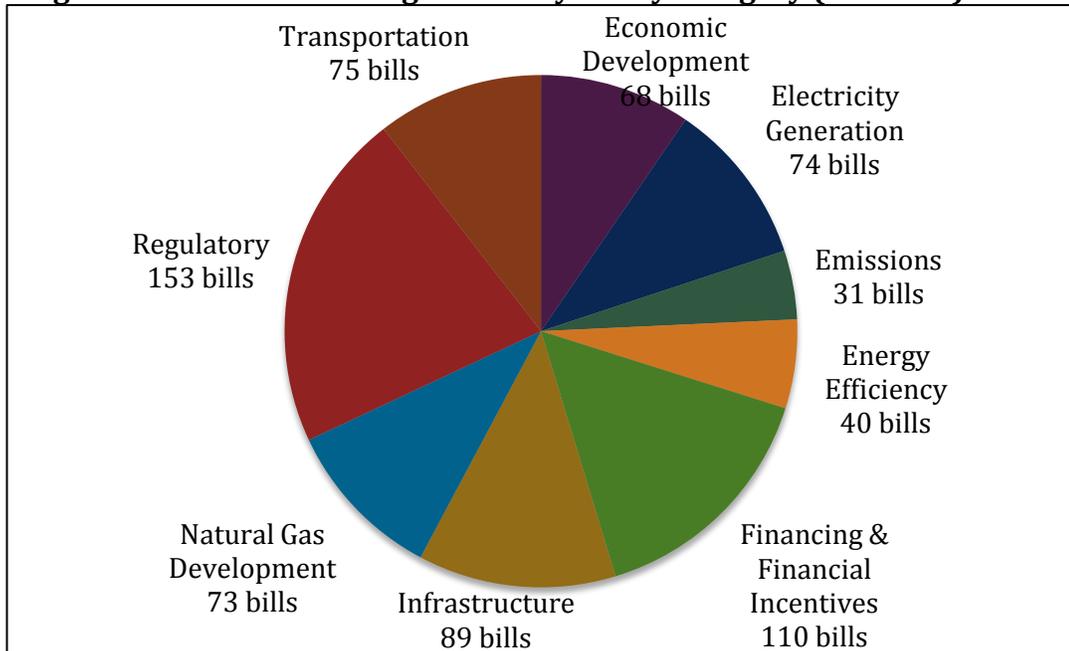


Figure 2. 2013 Enacted Legislation by Policy Category (713 bills)

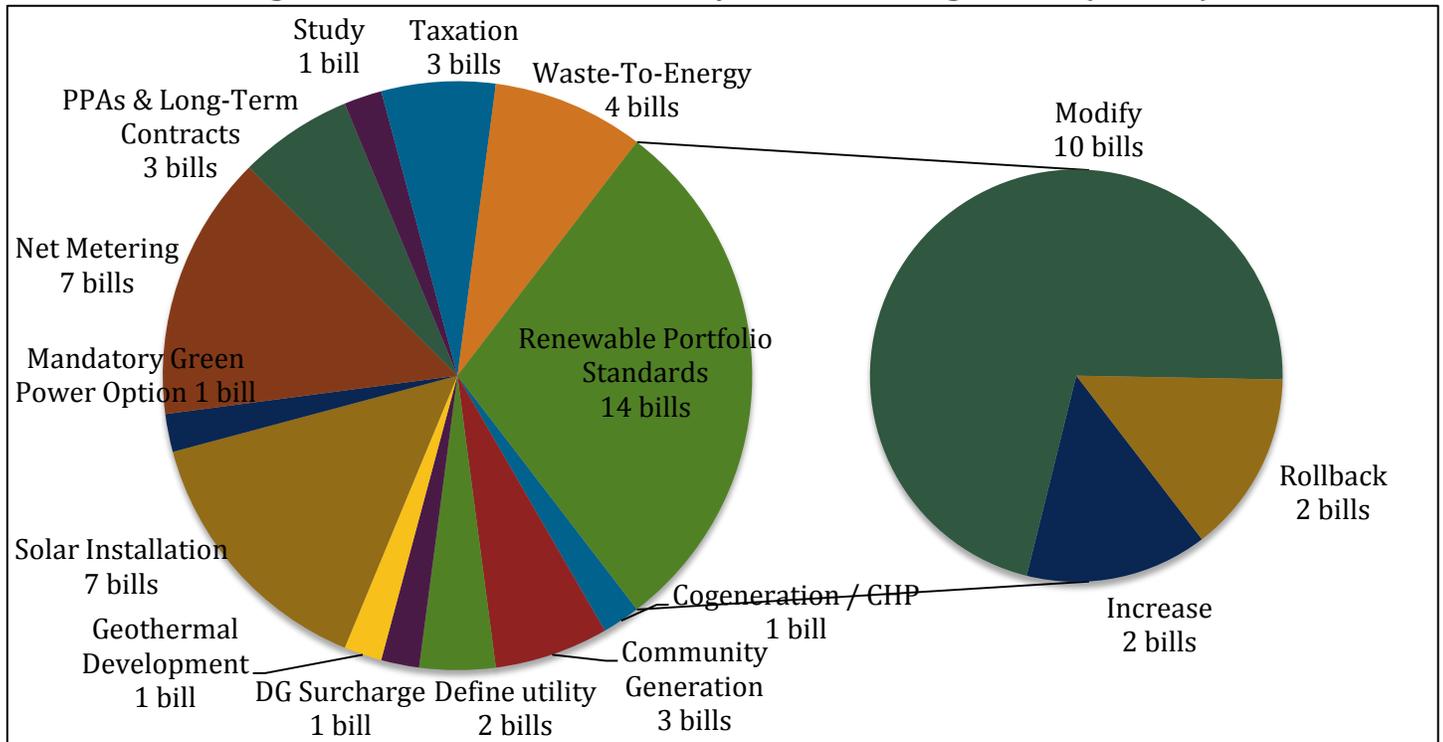




Electricity Generation

In the Electricity Generation category, Renewable Portfolio Standards (RPS) and net energy metering (NEM) continue to see the greatest legislative activity.

Figure 3. 2014 Enacted Electricity Generation Legislation (48 bills)



Key Takeaways:

1. Thus far, 14 RPS-related changes have been enacted by 12 states⁶. Notable laws include Maine's [SP 644](#), which creates a new solar goal of 500 MW by 2030 and South Carolina's [SB 1189](#) which established new cost recovery and net metering provisions that will provide for a 2% by 2021 renewable energy goal⁷. In Massachusetts, [S 2214](#) directs the Department of Energy Resources to establish a thermal energy portfolio standard for retail electric suppliers.

2. A handful of recently enacted legislation addresses NEM. While most of these relate to credit eligibility, highlights include Kansas [HB 2101](#) which amended rules relating to credit carryover, billing and ratemaking, and system interconnection sizing. Vermont's [H 702](#) increases the aggregate capacity limit and requires the Public Service Board to develop new NEM rules by 2016. In Oklahoma, [SB 1456](#) allows the state's Corporation Commission to create a monthly surcharge on distributed generation.

3. Enacted legislation relating to the installation of renewable energy technologies, with one exception (Washington [HB 1417](#)), emphasizes solar. Most new laws address contracting and contractor licensing, fire safety, and homeowners' association restrictions related to the installation of solar panels. A development of note is California's [AB 2188](#), which revises and streamlines permitting for rooftop solar.

⁶ Readers may also wish to refer to [CNEE's August, 2014 brief on legislative changes to RPS](#).

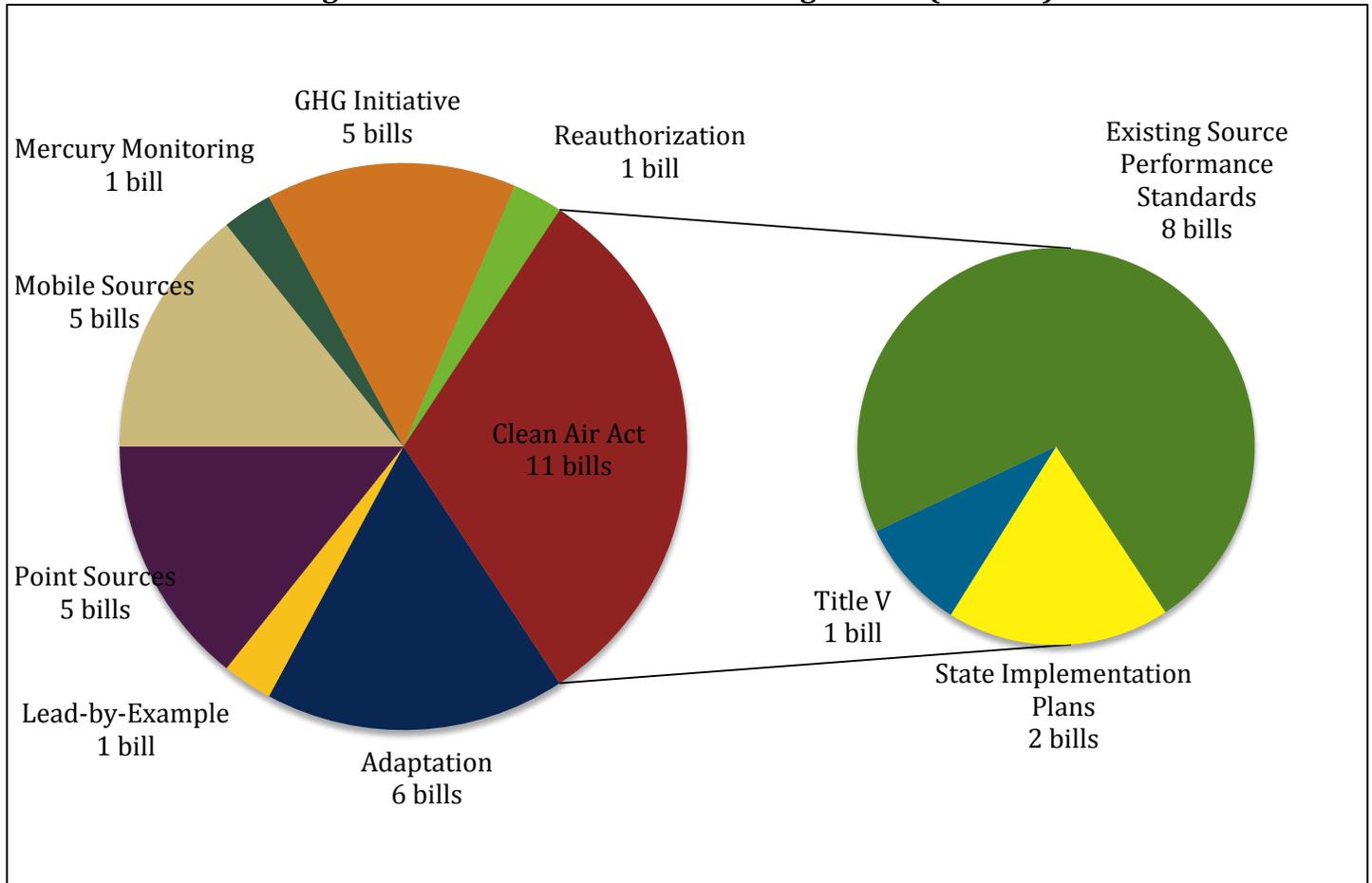
⁷ See [DSIRE](#) summary of SC's Distributed Energy Resources Program for more information.



Emissions

This year, the [National Climate Assessment](#), which emphasizes the need for adaptation strategies, and the [Clean Power Plan Rule](#), released by EPA on June 2nd, likely influenced state-level activity in Emissions- related bills.

Figure 4. 2014 Enacted Emissions Legislation (35 bills)



Key Takeaways:

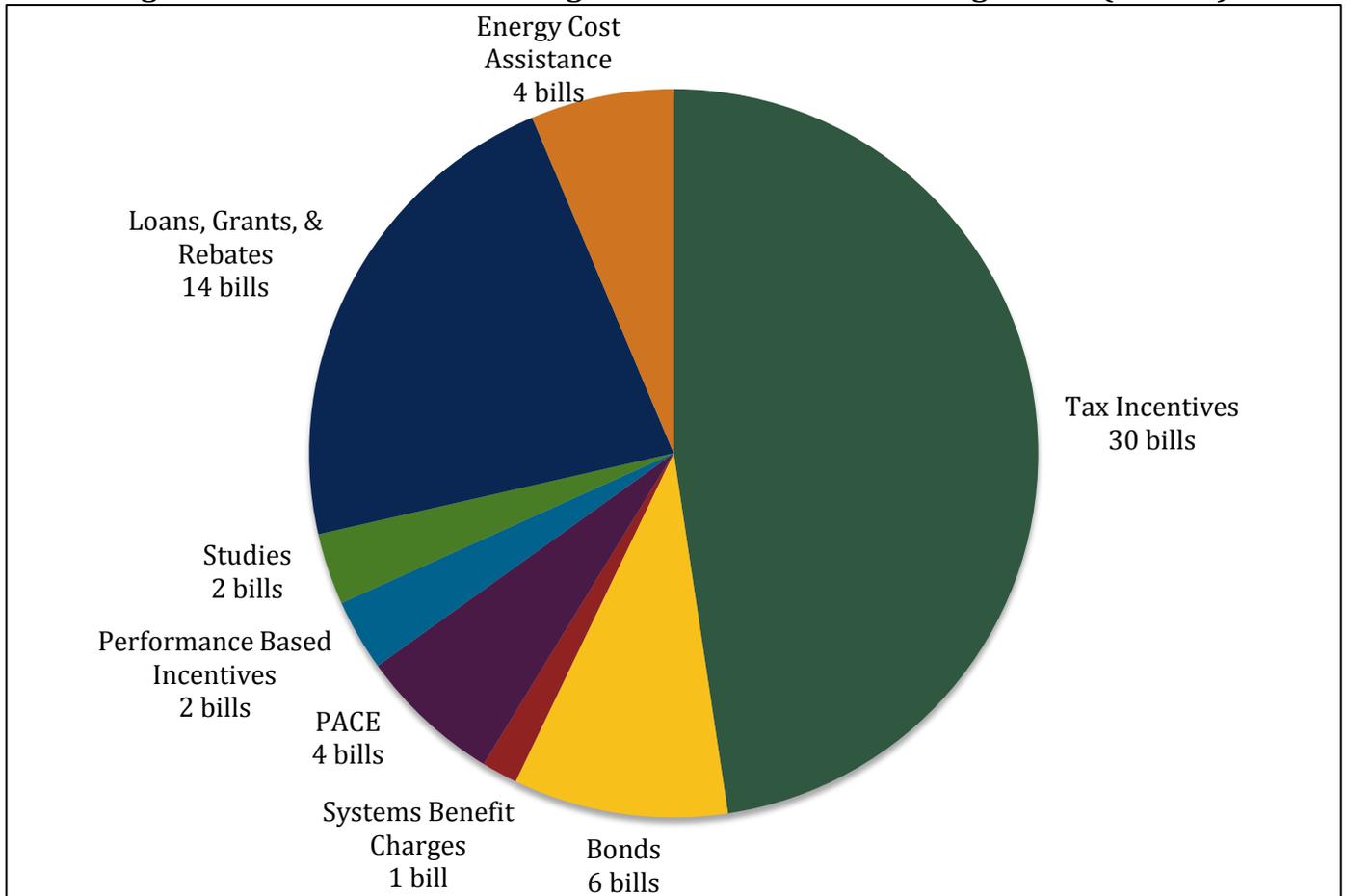
1. Anticipating the June 2014 release of EPA's Proposed Rule for Existing Source Performance Standards under Section 111(d) of the Clean Air Act, 11 states introduced and passed new laws relating to State Implementations Plans and utility Title V permitting. Several of these bills were based on [model legislation from the American Legislative Exchange Council](#).
2. Indiana enacted [HB 1005](#), which terminated the state's participation in the Midwest Greenhouse Gas Reduction Accord.
3. Six states passed climate adaptation legislation including new studies to evaluate the impacts in Oklahoma ([HB 3192](#)) and Nebraska ([LB 1008](#)).



Financing and Financial Incentives

Financing mechanisms and financial incentives continue to be a common area of policy activity among legislatures with 63 bills enacted this year. While true financing and rebate programs comprise about half of new laws, the other half are new tax credit programs.

Figure 5. 2014 Enacted Financing and Financial Incentives Legislation (63 bills)



Key takeaways

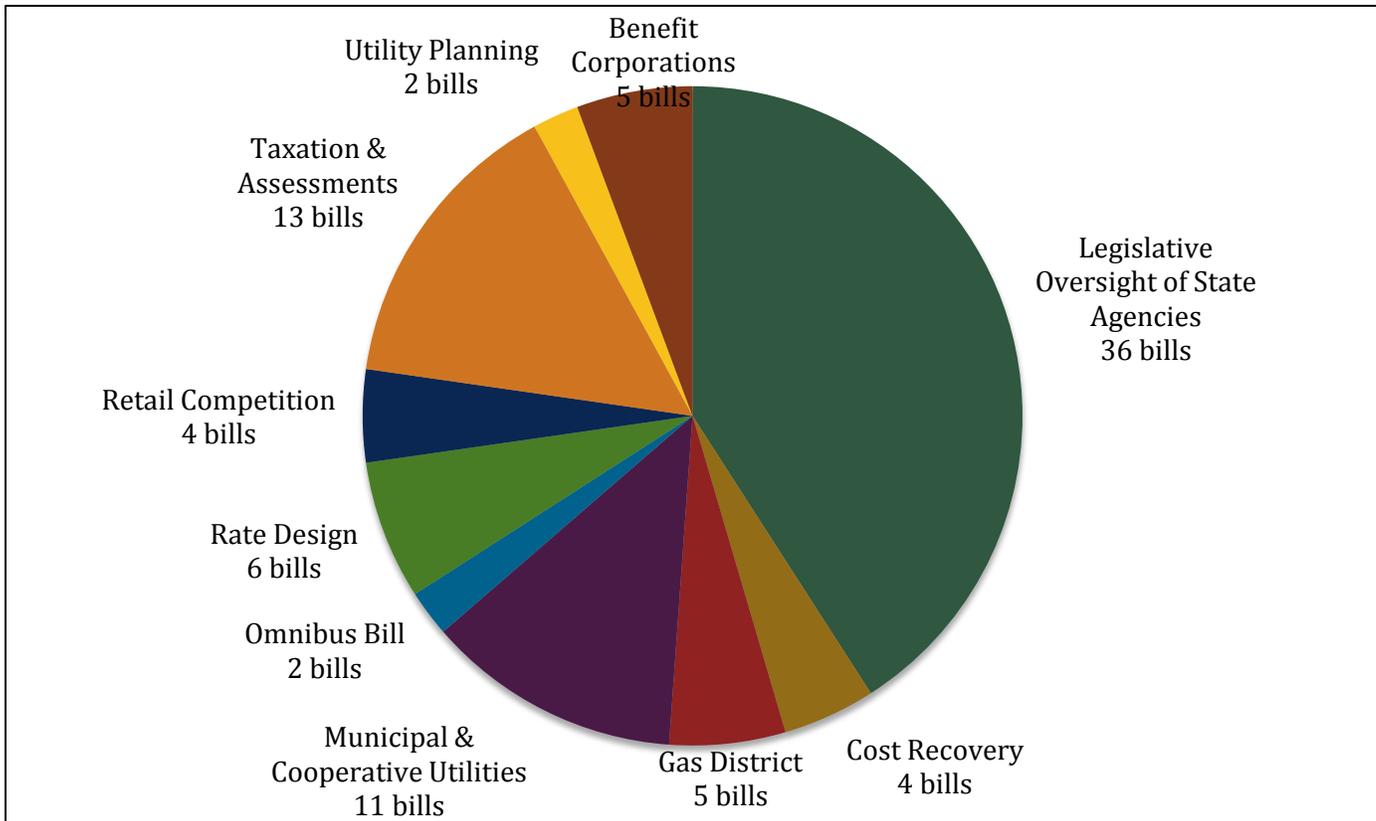
1. Tax incentive policies continue to dominate this category. Iowa's [SF 2340](#), for example, increases the states solar property tax incentive by 10%. As states recover from the recession, tax incentives may be considered preferable by some legislatures as opposed to increasing state spending through appropriations.
2. Colorado (7 bills), Maryland (7 bills), New York (6 bills), Utah (6 bills), and Virginia (6 bills) accounted for roughly half of all enacted legislation in this category.
3. Rhode Island ([HB 7727](#)) enacted a unique tariff-based financing program and several states amended their Property Assessed Clean Energy (PACE) statutes. Though a number of states have passed enabling PACE legislation, programs and loan terms vary widely, which often serves to limit investment. Residential PACE legislation was enacted in California ([AB 2597](#)), Commercial PACE changes were made in Maryland ([HB 202](#)). New Hampshire ([HB 532](#)) and Oregon ([HB 4041](#)) passed laws to change both R-PACE and C-PACE statutes.



Regulatory

State energy policy is established and implemented by a variety of regulatory agencies which typically derive their authority from state statute. Again in 2014, legislatures were the most active, across all energy policy categories, in modifying state regulatory agency authority and oversight with 88 laws enacted.

Figure 6. 2014 Enacted Regulatory Bills (88 bills)



Key Takeaways:

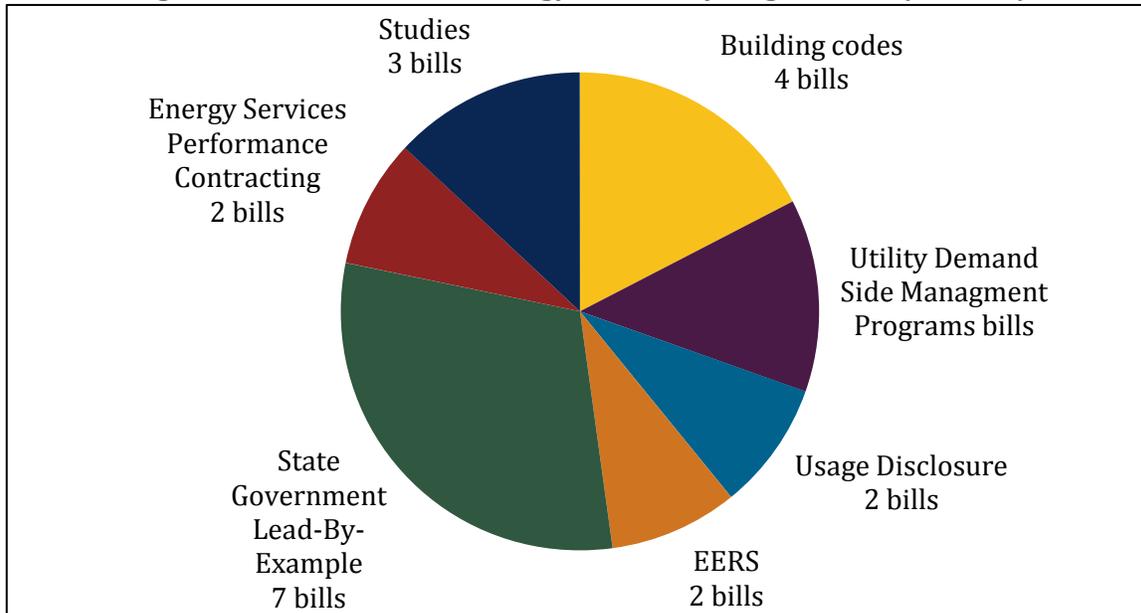
1. Legislatures were most active in providing procedural direction and revising agency organizational structures. Two laws stand out: Hawaii's [SB 632](#) creates new courts with jurisdiction over the state's environmental laws and New Hampshire's [SB 417](#) requires the Public Utilities Commission to direct the utilities to educate their customers on how the state RPS, systems benefit charge, and Regional Greenhouse Gas Initiative are administered.
2. Utility resource planning, cost recovery, and rate design also continue to receive a good deal of attention. In this class, Virginia [SB 643](#) contains provisions on cost recovery for offshore wind, and West Virginia [HB 2803](#) requires utilities to develop and submit integrated resource plans for Public Service Commission review.
3. Two omnibus regulatory bills defy easy classification. In Minnesota, [HF 2834](#) contains provisions relating to the Low-Income Home Energy Assistance Program, interconnection of renewable energy, an electric vehicle charging tariff, on-bill financing, utility greenhouse gas emission reduction planning, and solar and transmission siting. Connecticut [SB 357](#) makes several changes, which include provisions related to product and building energy efficiency standards and amendments to expand the state's C-PACE program to include micro grids, to allow cost recovery for on-bill financing programs, and to revise property tax exemptions for solar thermal and geothermal systems.



Energy Efficiency

While energy efficiency, the “first fuel”, remains the most cost effective clean energy investment, this policy category was the least active in 2014 (as it was in 2013) with only 23 bills enacted.

Figure 7. 2014 Enacted Energy Efficiency Legislation (23 bills)



Key takeaways

1. In a notable shift from our mid-session [Energy Efficiency policy brief](#)⁸, State Government Lead-by-Example policies have taken the lead as the most commonly enacted policy type. Of particular interest here, South Carolina’s [H 3592](#) requires a new committee to set building code standards for public facilities. Pennsylvania’s [HB 1672](#) allows state facilities to act as test sites for new energy efficiency technologies.
2. Indiana’s [SB 340](#) eliminated energy efficiency goals in that state.
3. In Mississippi, [SB 2521](#) allows Energy Saving Performance Contracts for state facilities. Colorado’s [SB 14-186](#) allows small or rural communities to aggregate energy efficiency and renewable energy projects in order to attract investment by energy performance contractors. [HB 2482](#) in Kansas requires the state’s Corporation Commission to allow electric and natural gas utilities to implement and recover costs associated with energy efficiency programs. A recently enacted amendment in Illinois ([SB 635](#)) clarifies the definition of self-directed industrial programs under the state’s EERS.

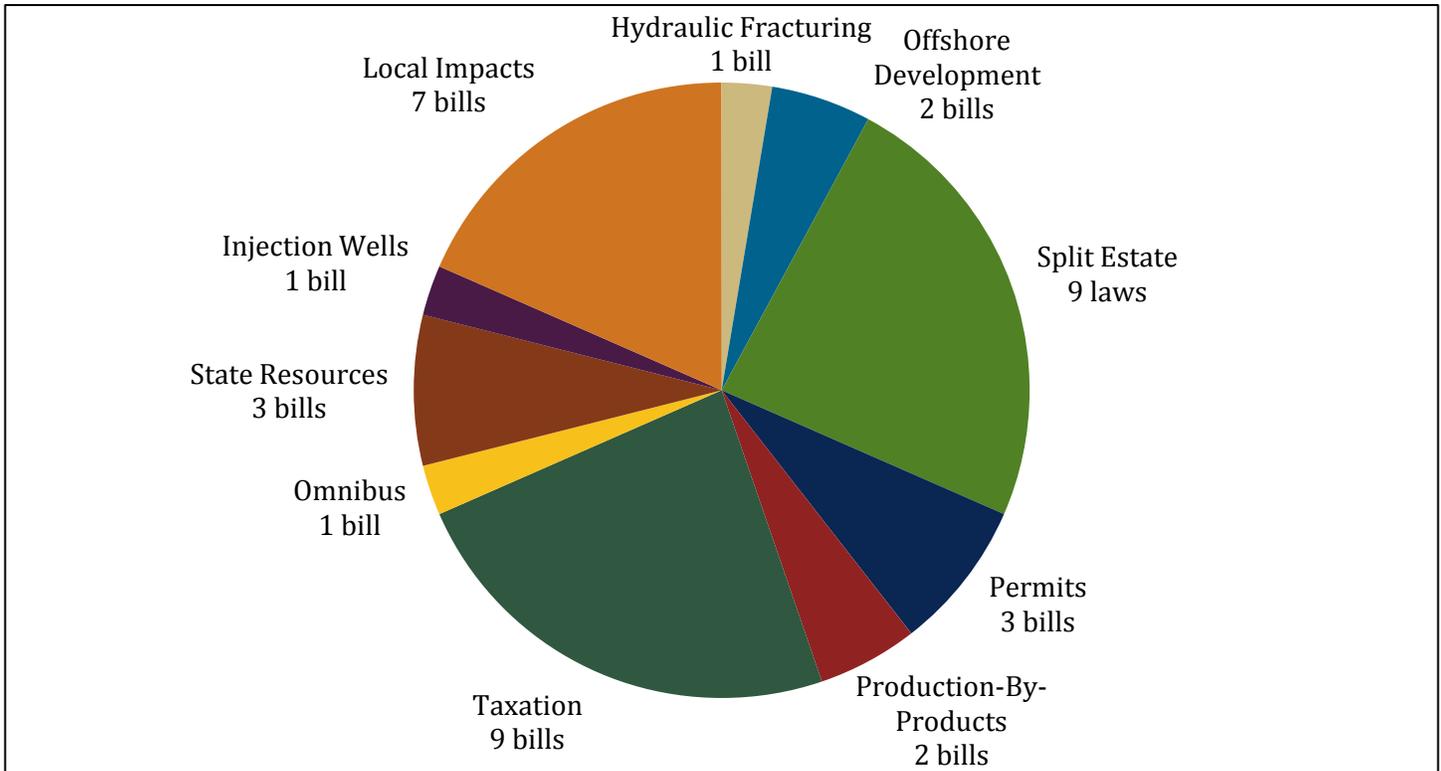
⁸ “Lead by Example” refers to a suite of programs directed at state-owned infrastructure – typically energy savings goals and programs for state buildings, fleet and procurement.



Natural Gas Development

While some states have a long history with oil and natural gas production, hydraulic fracturing, horizontal drilling, and [record high production levels](#) have required more states to develop regulations for extraction industries.

Figure 8. 2014 Enacted Natural Gas Legislation (38 bills)



Key Takeaways:

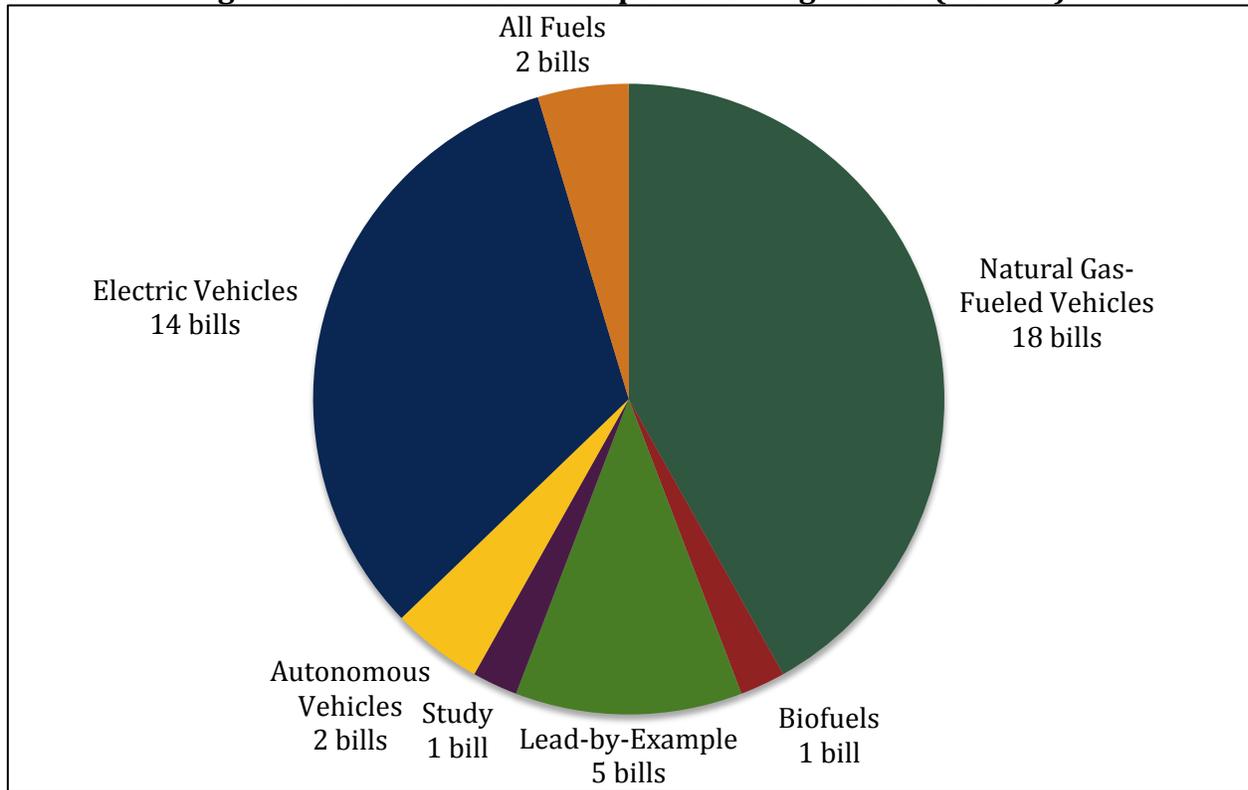
1. Similar to last year, bills related to severance and property taxes, [split property and mineral estate](#), and local impacts of natural gas development were the most frequently enacted in 2014.
2. New laws addressing local impacts covered a handful of topics including liability for spill remediation and funding for state-managed remediation programs. Wyoming's [HB 102](#) creates a Sage Grouse task force and California's [SB 1281](#) creates new water use reporting requirements.
3. North Carolina's [SB 786](#) was perhaps the most high profile bill in the category this year. As noted in [CNEE's September natural gas policy brief](#), the new law revises several sections of the state's oil and gas statutes and lifts the state's moratorium on hydraulic fracturing.



Transportation

As CNEE wrote about earlier this year in a [Transportation policy brief](#), concerns about potential revenue shortfalls in the federal Highway Trust Fund led several states to propose their own modifications to motor-fuel taxes in order to address potential shortfalls. States were also active in harmonizing taxes for gasoline and natural gas fuels on an energy content basis.

Figure 9. 2014 Enacted Transportation Legislation (43 bills)



Key Takeaways:

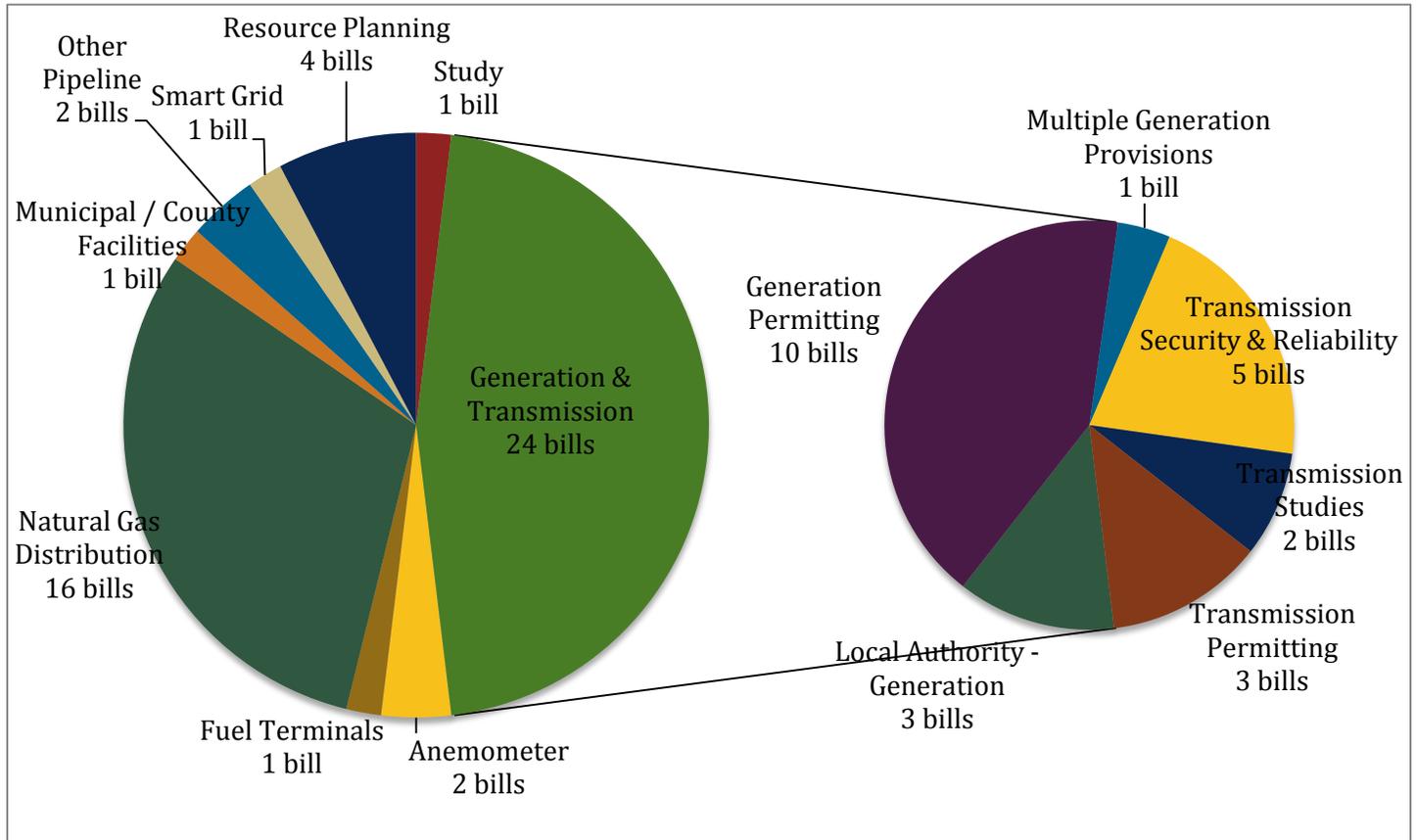
1. The most commonly enacted type of transportation legislation this session dealt with the use of natural gas in the transportation sector. Much of the activity was directed at clarifying the gasoline vs. natural gas energy content equivalent. California ([AB 1907](#)) imposed higher taxes on natural gas, while New Mexico ([HB 30](#)) equalized tax rates across fuel types.
2. Policy related to electric vehicles was a close second this session. Of particular interest, Nevada's special session ended with the enactment of [four bills](#) to support Tesla's [planned "Gigafactory"](#) – a lithium-ion battery manufacturing site near Reno.
3. State lead-by-example programs to support advanced transportation were also created and revised this session. In Utah, [SB 99](#) requires that 50% of new passenger vehicles in the state fleet be fueled with natural gas.



Infrastructure

An aging energy grid, increasing demand, emerging environmental and security threats, public opposition to certain siting decisions, and the integration of new, intermittent resources are just a few of the important issues that state policy makers confront with respect to Infrastructure policies.

Figure 10. 2014 Enacted Infrastructure Legislation (52 bills)



Key Takeaways:

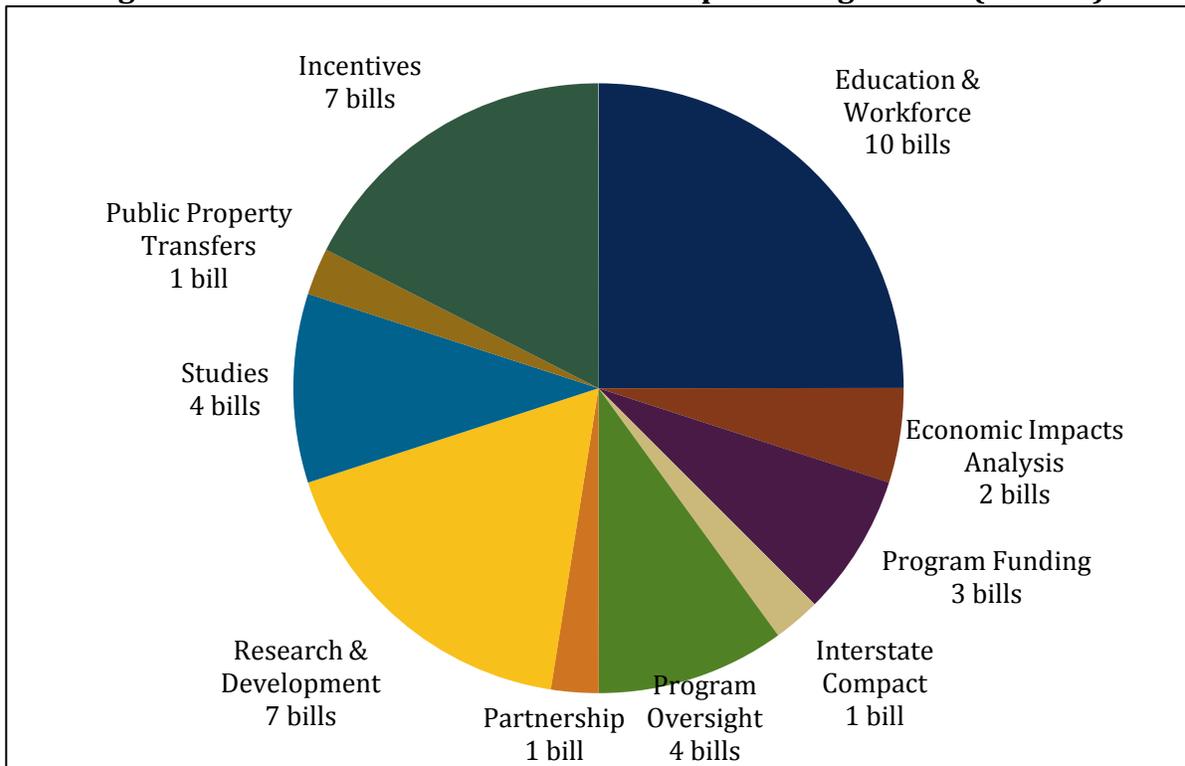
1. Similar to 2013, the majority of infrastructure-related laws amended provisions for the siting and permitting of generation and transmission facilities. Seven of the 23 laws in this category specifically address siting of wind farms. For example, Ohio's [HB 483](#) creates new setback requirements for turbines.
2. As noted in a [previous CNEE analysis](#), the majority of new laws treating natural gas distribution infrastructure relate to some aspect of pipeline safety through provisions on leak monitoring and repair, safety inspections and penalties for violations, contractor licensing requirements, and mandatory excavation notifications.
3. Rhode Island's [HB 7991](#) stands out for promoting both regional collaboration and a regional perspective in energy planning and procurement.



Economic Development

Legislators across the nation continue to modify various incentives aimed at attracting advanced energy companies to invest in and locate to their state.

Figure 11. 2014 Enacted Economic Development Legislation (40 bills)



Key Takeaways:

1. Lawmakers enacted 10 bills that will create new programs or modify existing programs for both the unemployed and the young people preparing to enter the energy workforce. For example, Louisiana [HB 1033](#) increases higher education funding and calls for a workforce gap analysis in the state.
2. Nine states provided financial incentives aimed at business attraction and retention. In Colorado, [HB 14-1012](#) provides for a tax credit against investments made in certain qualified small businesses in the advanced industries sector.
3. Several states addressed energy industry Research & Development needs. In Utah, [SB 263](#) extends eligibility for the state's Technology Commercialization and Innovation Program grants and loans to small businesses.

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