

## **POLICY BRIEF**

# Identifying States That Will Benefit Most from Updated Building Energy Codes

JANUARY 2023

States will soon have access to major federal investments to advance building energy codes.

The Department of Energy (DOE) recently announced \$45 million in competitive grants for Resilient and Efficient Codes Implementation (RECI), the first installment of such funding from the 2021 Bipartisan Infrastructure Law (BIL).<sup>1</sup> And there is much more to come: An eventual total of \$225 million in BIL funding over five years, and \$1 billion in funding to support state adoption of stronger energy codes in the Inflation Reduction Act (IRA) is expected to become available later this year. While all states' residents and businesses would benefit from reducing building energy usage, states with older energy codes (or none at all) will see the biggest improvements in efficiency. But the overall impact of updating energy codes will also depend on other factors, such as a state's existing building emissions and new construction activity. In our 2022 *State Scorecard*,<sup>2</sup> we assess the strength of states' current residential and commercial building energy codes, but what about the states who could see the biggest impact from *improving* their energy codes?

To understand this, we performed an analysis using publicly available data sources to identify the 10 states with statewide codes that are best positioned to take advantage of the upcoming funding: Louisiana, North Carolina, Minnesota, Virginia, Arkansas, Tennessee, South Carolina, Wisconsin, Kentucky, and Oklahoma. We are also including the five "home rule" states that scored similarly to these 10 but that have additional challenges because they lack statewide codes: Colorado, North Dakota, Wyoming, South Dakota, and Missouri. These 15 states—shown in figure 1—cover regions of the United States extending southwest from the mid-Atlantic and into the upper Midwest, range from small to large, and are highly diverse in their current building emissions, climate policies, and construction activity.

<sup>&</sup>lt;sup>1</sup> Biden–Harris Administration Announces \$45 Million from Bipartisan Infrastructure Law to Support Resilient and Efficient Building Energy Codes. <u>https://www.energy.gov/articles/biden-harris-administration-announces-45-million-bipartisan-infrastructure-law-support</u> (December 19, 2022).

<sup>&</sup>lt;sup>2</sup> Subramanian, S., W. Berg, E. Cooper, M. Waite, B. Jennings, A. Hoffmeister, and B. Fadie. 2022. *2022 State Energy Efficiency Scorecard*. Washington, DC: ACEEE. <u>www.aceee.org/research-report/u2206</u>.

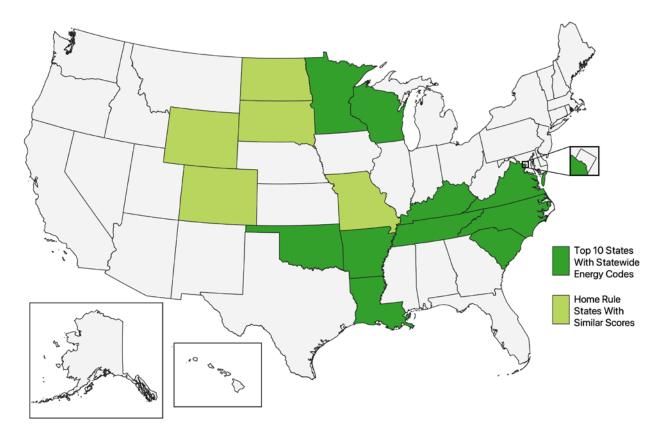


Figure 1. States primed to benefit from federal funding to advance building energy codes. Top 10 states in our scoring metrics with statewide codes are shown in dark green; "home rule" states that achieve similar scores are shown in light green.

The first barrier to adopting new energy codes is the will to do so, particularly where there may have been little appetite for improving building energy efficiency in recent years. But even with a strong desire to advance energy codes, there are challenges for implementation that the upcoming federal funding is intended to address: establishing and coordinating partnerships across diverse stakeholders, developing local workforces that can design and build energy-efficient homes and buildings, verifying compliance with minimum standards, ensuring equitable access to energy efficiency across communities, and aligning energy codes that primarily address new construction with innovative existing-building energy policies, such as building performance standards.

Home rule states present a particular challenge because they do not have statewide codes and only local jurisdictions can adopt and implement codes. One model for tackling this issue is Colorado, which requires local jurisdictions to update their energy codes to one of the three most recent versions of the model codes when they make *any* other code update. Home rules states may also incentivize local jurisdictions to adopt and implement better energy codes, and there is plenty of space for these states to be innovative in this area.

Leading states in the Northeast and on the West Coast may not be identified here as most primed to benefit from new federal codes funding, but we need these states to continue

pushing the leading edge. We look forward to the innovative proposals these states develop for the upcoming federal funding, but in this brief we are focused on the states we hope will join or strengthen their position in the movement to advance building energy efficiency.

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How did we arrive at these states? We first looked at the energy cost savings expected from energy code updates to the most recent model energy codes for both residential and commercial buildings. But that only gets at the percentage improvement for new homes and buildings, so we added a few additional metrics. We looked at existing building-energyrelated greenhouse gas (GHG) emissions in each state to see where the building stock could benefit the most from improvement. We looked at construction activity because energy codes primarily impact new homes and buildings. Finally, we evaluated state climate policies with specific GHG emissions targets to gauge the policy landscape in each state and how much they need to do to meet their 2030 goals. We then scored each of these metrics and arrived at a final score used to rank and determine the best positioned states. We go into each of these metrics in the sections below. A table with all values for all states and DC is included near the end of this brief.

In general, the states we have identified land in the top third of states in potential energy cost savings from adopting the most recent model energy codes for both residential and commercial, plus they score very highly in one of our other metrics. There are a few exceptions where potential energy code savings are not in the top 20, but multiple metrics indicate the state could significantly benefit from stronger energy codes.

- Arkansas, Oklahoma, Tennessee, Kentucky, North Dakota, Missouri, South Carolina, and South Dakota are all in the top 10 for potential home energy cost savings from implementing new residential energy codes.
- Louisiana is in the top 10 for potential commercial building energy cost savings, joined again by Oklahoma, Arkansas, South Carolina, Missouri, and South Dakota.
- North Dakota, Wyoming, Kentucky, and Missouri are all in the top five highest building-energy-related emissions in the country.
- South Carolina, Colorado, North Carolina, South Dakota, and Tennessee are among the top states for new construction activity.
- Virginia, Colorado, Minnesota, and North Carolina all must significantly accelerate progress toward their GHG reduction goals by 2030, as must Wisconsin to a lesser degree.

## **RESIDENTIAL ENERGY COST SAVINGS**

The potential energy cost savings from updating to the most recent model energy code for residential construction—the 2021 International Energy Conservation Code (IECC)—varies across the United States (see figure 2). States with weak energy codes—or no energy codes at all—will see the most benefit from updating to the 2021 IECC. The highest impact states

generally use older versions of the IECC; however, many have also adopted more recent codes with amendments that significantly weaken energy efficiency. The IECC is updated on a three-year cycle: DOE computed a significant 9.3% efficiency improvement in the 2021 version after two cycles estimated to achieve 1.1% energy savings *total.*<sup>3</sup> The prior cycle had seen a major advance in the IECC: DOE estimated the 2012 version to save 19.1% of energy over the 2009 IECC, making a total 27% improvement between the 2009 and 2021 versions of the IECC. So, the energy efficiency requirements are highly dependent on what version of the model codes apply. Improving energy codes requires not only adopting the most recent energy codes but also ensuring that their energy-saving provisions remain intact and a robust compliance and enforcement process is in place.

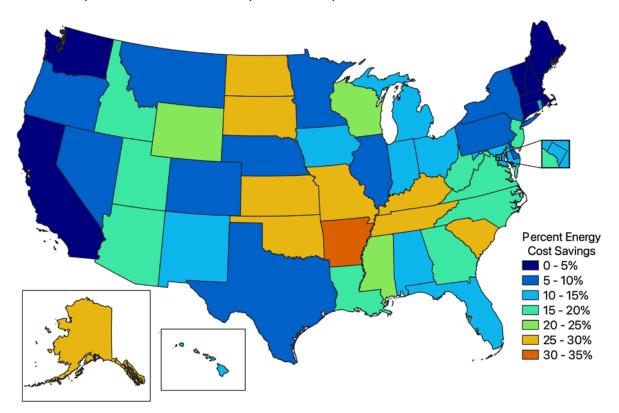


Figure 2. Residential energy cost savings from updating to the 2021 IECC. The legend includes "Over 35%" to maintain a consistent scale for comparison with commercial building energy cost savings in figure 3, though no residential energy code cost savings reach this level in this analysis.

https://public.tableau.com/app/profile/doebecp/viz/HistoricalModelEnergyCodeImprovement/CombinedHistoric alCodeImprovement 1.

<sup>&</sup>lt;sup>3</sup> Pacific Northwest National Laboratory, U.S. Department of Energy. *Historical Model Energy Code Improvement*. December 21, 2022.

Our analysis here used DOE's Residential State Savings Calculator<sup>4</sup> with default assumptions and energy prices. We made adjustments in a few cases where states very recently adopted new energy codes that were captured by DOE's code status analysis,<sup>5</sup> but not the State Savings Calculator. All analyses incorporated DOE's assessment of both the version of the IECC adopted by the state and any weakening (or strengthening) amendments. Home rule states are compared to the 2009 IECC, so it is certainly possible that widespread adoption and implementation of new energy codes in these states would have an even bigger impact. And for all states, the actual savings will depend on design and construction in compliance with the code.

### COMMERCIAL ENERGY COST SAVINGS

Compared to residential, commercial energy codes are generally stronger across the United States, primarily because of fewer weakening amendments than for residential energy codes. At the same time, those states with older energy codes—or no energy code at all—could see even more significant energy cost savings from updating to the most recent model commercial energy code: ASHRAE 90.1-2019. This is because of the steady energy efficiency improvements to ASHRAE 90.1 over the years: DOE estimates that the 2019 version is 33% better than the 2007 version.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> Pacific Northwest National Laboratory, U.S. Department of Energy Building Energy Codes Program. *2021 IECC State Cost-Effectiveness Analysis Tool, Version 1.0.* September 2022. https://www.energycodes.gov/state-savings-calculators.

<sup>&</sup>lt;sup>5</sup> U.S. Department of Energy Building Energy Codes Program. *Status of State Energy Code Adoption*. December 19, 2022. <u>https://www.energycodes.gov/state-portal.</u>

<sup>&</sup>lt;sup>6</sup> Pacific Northwest National Laboratory, U.S. Department of Energy. *Historical Model Energy Code Improvement*. December 21, 2022.

https://public.tableau.com/app/profile/doebecp/viz/HistoricalModelEnergyCodeImprovement/CombinedHistoric alCodeImprovement 1.

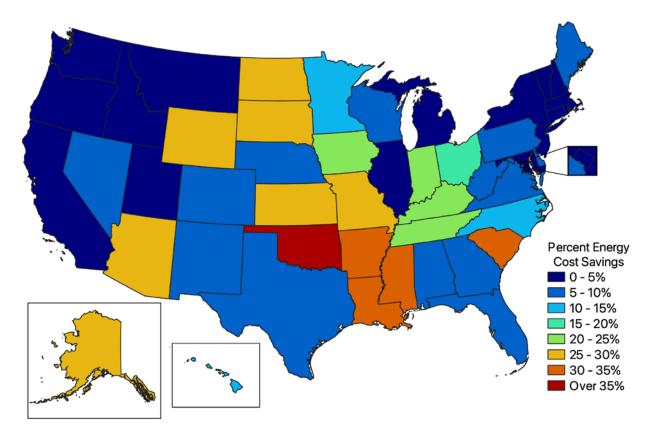


Figure 3. Commercial energy cost savings from updating to ASHRAE 90.1-2019

We took a slightly different approach here than for our residential analysis as DOE's Commercial State Savings Calculator<sup>7</sup> only compares different model code versions (e.g., ASHRAE 90.1-2019 to ASHRAE 90.1-2016) and does not compare directly to the current commercial energy code in the state. We used DOE's code status analysis<sup>8</sup>—which does have a basis in each state's current statewide commercial energy code—to compute the energy savings of updating each state's commercial energy code to ASHRAE 90.1-2019. We then assumed the relationship between energy savings and cost savings to be the same as in each state's residential analysis.

<sup>&</sup>lt;sup>7</sup> Pacific Northwest National Laboratory, U.S. Department of Energy Building Energy Codes Program. *ASHRAE Standard 90.1-2019 State Cost-Effectiveness Analysis Tool, Version 1.0.* September 2022. https://www.energycodes.gov/state-savings-calculators.

<sup>&</sup>lt;sup>8</sup> U.S. Department of Energy Building Energy Codes Program. *Status of State Energy Code Adoption*. December 19, 2022. <u>https://www.energycodes.gov/state-portal.</u>

## CURRENT BUILDING-RELATED CARBON DIOXIDE EMISSIONS

To get a sense of where states currently stand, we looked at total residential and commercial building-energy-related emissions per capita (see figure 4, noting that the color scale is not linear). There are a host of factors at play here, including historical building construction practices, building envelope and equipment efficiency, heating fuel and/or air-conditioning needs, and the electricity grid fuel mix in the state. States relying largely on coal for electricity and with significant heating needs (e.g., North Dakota and Wyoming) stand out, having the highest building emissions. Heating needs are also a driver of emissions in the upper Midwest. While the Northeast and Northwest also experience cold winter temperatures, they have lower overall emissions because of lower-carbon electricity supplies and more energy-efficient homes and buildings. Overall, there is a very wide range across the United States.

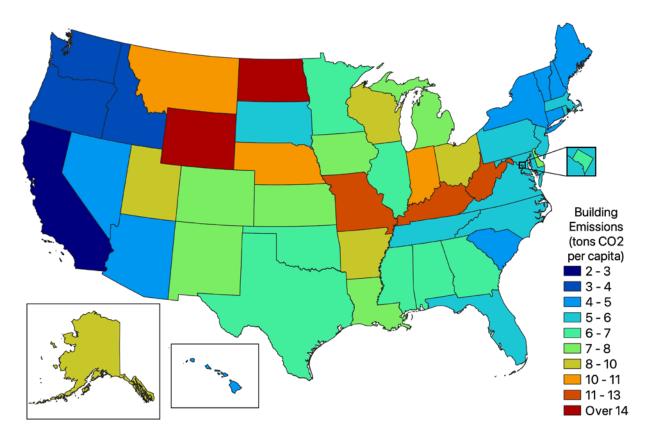


Figure 4. Residential and commercial building energy-related carbon dioxide equivalent (CO<sub>2</sub>e) emissions, 2019. Note that color scale is nonlinear above 9 tCO<sub>2</sub>e.

While some states conduct their own GHG emissions inventories, we use GHG emissions data<sup>9</sup> from the U.S. Environmental Protection Agency (EPA) to ensure a consistent methodology across states. We used 2019 data for our analysis; 2020 data are the most recent year for which all necessary data are available, but we wanted to avoid the effects of measures to combat the COVID-19 pandemic. We allocated CO<sub>2</sub>e emissions to residential and commercial buildings by: computing each state's average electricity generation emissions rate by dividing electric power sector emissions by the total electric power sector generation from the U.S. Energy Information Administration (EIA) State Electricity Profiles,<sup>10</sup> applying each state's electricity system losses from the same EIA data evenly across the state, and computing residential and commercial electricity use emissions based on sales of electricity<sup>11</sup> to residential and commercial customers. One possible shortcoming of this approach would be if the electricity generation fuel mix serving loads in the state is significantly different from that of imported or exported electricity; absent data for such a detailed analysis, we do not expect the set of assumptions here to have an impact on our overall findings. We computed per capita values using population data from the EIA<sup>12</sup> as a consistent data set across our analyses.

## CONSTRUCTION ACTIVITY

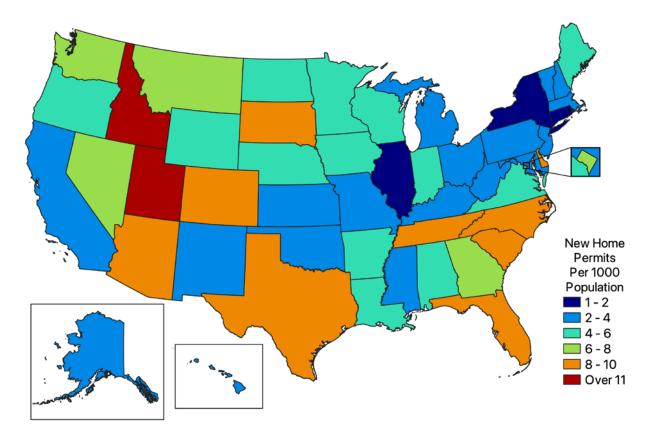
Because codes largely apply to new construction, updated energy codes are likely to have greater impact in states with more construction activity. We look at new home permits per capita as a proxy for construction activity in figure 5. There are few surprises here to anyone familiar with population growth in the "Sun Belt," with the highest construction activity states extending from the Southeast to the Southwest, and also up into parts of the Northwest. Utah jumps out in particular if we look back at figure 4, since it has the most construction activity and fairly high emissions from its existing building stock. Another item to note is that many states with strong energy codes have less new construction, such as much of the Northeast, California, and Illinois.

<sup>12</sup> U.S. Energy Information Administration. *Monthly Energy Review*. November 2022. <u>https://www.eia.gov/totalenergy/data/monthly/.</u>

<sup>&</sup>lt;sup>9</sup> U.S. Environmental Protection Agency. *State GHG Emissions and Removals*. August 2022. https://www.epa.gov/ghgemissions/state-ghg-emissions-and-removals.

<sup>&</sup>lt;sup>10</sup> U.S. Energy Information Administration. *State Electricity Profiles*. November 2022. <u>https://www.eia.gov/electricity/state/.</u>

<sup>&</sup>lt;sup>11</sup> U.S. Energy Information Administration. *Retail Sales of Electricity to Ultimate Customers, Annual*. October 2022. <u>https://www.eia.gov/electricity/data.php#sales.</u>



#### Figure 5. New home construction permits per capita, 2021

Our computations for construction activity are based on U.S. Census Bureau data<sup>13</sup> for "new privately owned housing units authorized" and the same EIA population data as for the emissions analysis above. We use the residential construction data as our only construction activity metric here because there are no comparable commercial construction data.

#### STATE CLIMATE POLICY TARGETS

We looked at existing building emissions to understand where states have been and new home permits to assess the present construction environment in each state, but how about where they are going? We analyzed the emissions reductions each state needs to reach their 2030 climate targets—or to be on track to hit later targets—as shown in figure 6. This metric indicates the need to immediately advance policies to meet the fast-approaching targets, as well as the potential appetite for doing so in the state. Twenty-four states and DC have

<sup>&</sup>lt;sup>13</sup> U.S. Census Bureau. *Permits by State, Annual 2021*. November 30, 2022. <u>https://www.census.gov/construction/bps/statemonthly.html&c year=2021</u>.

specific GHG emissions targets—for our analysis we do not differentiate between states with statutory requirements and executive targets.

Nearly all states with emissions targets have a lot of work to do between now and 2030. Only Illinois and Maine have been reducing emissions at the pace needed since 2008 to reach their 2030 targets, according to our analysis. Virginia, Oregon, and Rhode Island jump out by needing to cut their 2019 emissions by more than half by 2030, but many states are close behind with nine others needing to reduce emissions by more than 40% by 2030.

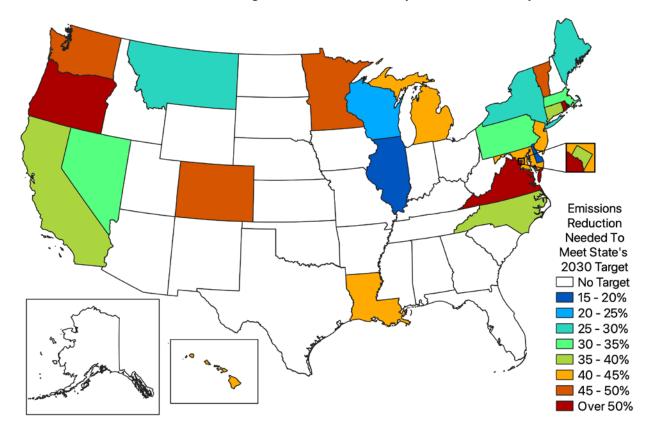


Figure 6. Emissions reduction needed by 2030 for state targets

Our primary data source for GHG targets was Climate Xchange's policy database,<sup>14</sup> with some confirmation and supplemental information from the Center for Climate and Energy

<sup>&</sup>lt;sup>14</sup> Climate XChange. *State Climate Policy Tracker*. December 2022. https://climate-xchange.org/network/map/.

Solutions,<sup>15</sup> as well as publications with specific targets for DC,<sup>16</sup> Hawaii,<sup>17</sup> and Montana.<sup>18</sup> In a handful of cases where states give a target range for a given year, we took the midpoint; Virginia has a "net zero" 2045 target, which we set to 85% to allow some consideration of GHG offsets, consistent with other states' policies. Our analysis used total CO<sub>2</sub>e values from the EPA's 1990–2020 Inventory of U.S. Greenhouse Gas Emissions and Sinks by State.<sup>19</sup> Although GHG targets for 2030 are common, six states and DC have targets for other years between 2025 and 2035; further, not all states compare emissions to the same baseline. Our analysis puts each state on a common 2019 baseline, again avoiding the impact of the COVID-19 pandemic on 2020 data. We also estimate 2030 targets for those states that do not have them: For states with 2025 targets only (Delaware, Illinois, and Wisconsin), we assumed the same year-on-year percentage reduction extending to 2030; for DC (2032 target), Oregon (2035), and Virginia (2045), we assume constant year-on-year percentage reductions between 2019 and each state's target year; and for Minnesota and Pennsylvania, we assumed constant year-on-year percentage reductions between their policy target years of 2025 and 2050.

<sup>&</sup>lt;sup>15</sup> Center for Climate and Energy Solutions. *U.S. State Greenhouse Gas Emissions Targets*. August 2022. https://www.c2es.org/document/greenhouse-gas-emissions-targets/.

<sup>&</sup>lt;sup>16</sup> District of Columbia Department of Energy & Environment. *Greenhouse Gas Inventories*. <u>https://doee.dc.gov/service/greenhouse-gas-inventories</u> (accessed December 21, 2022).

<sup>&</sup>lt;sup>17</sup> House of Representatives, State of Hawaii. *H.B. No. 1800: A Bill for an Act Relating to Climate Mitigation*. 2022. https://www.capitol.hawaii.gov/sessions/session2022/bills/HB1800\_CD2\_.htm.

<sup>&</sup>lt;sup>18</sup> Montana Climate Solutions Council. *Montana Climate Solutions Plan*. August 2020. https://deq.mt.gov/files/DEQAdmin/Climate/2020-09-09\_MontanaClimateSolutions\_Final.pdf.

<sup>&</sup>lt;sup>19</sup> U.S. Environmental Protection Agency. *State GHG Emissions and Removals*. August 2022. https://www.epa.gov/ghgemissions/state-ghg-emissions-and-removals.

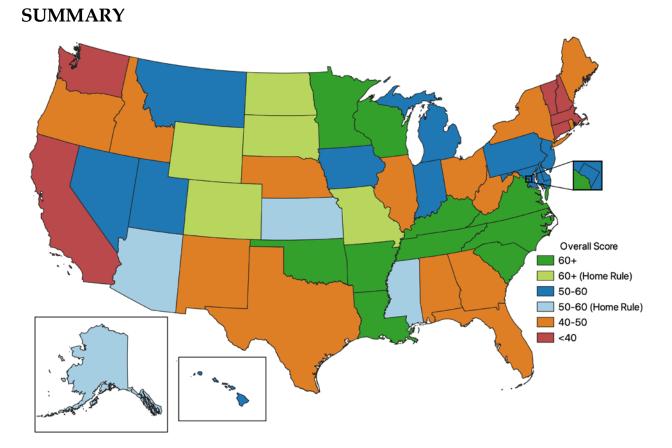


Figure 7. States grouped by overall score. Note that the states identified as most primed to benefit from new federal codes funding are those with an overall score over 60.

Our overall results and scoring are shown in table 1 at the bottom of this brief, and figure 7 groups states by overall score. There are many dynamics at play here with states ranking very differently under different metrics. We can get a sense of these effects by taking a closer look at the states we identify as "most primed to benefit from new federal codes funding" states:

**Louisiana** is our top-scored state because of significant potential energy savings from code updates, middle-of-the-road building emissions and construction activity, and significant GHG emissions reductions needed to meet its 2030 target; however, that target is a voluntary executive target, and Louisiana would drop to 23rd without it.

**North Carolina** sees potential energy savings in the top 20 for both residential and commercial codes and has both a GHG target and is in the top 10 states for construction activity. Adopting new energy codes in North Carolina could have a major impact.

**Colorado** is a home rule state, but with policy that requires local jurisdictions to update their energy code when they make another code update. With fairly high building emissions, the fifth-most construction activity, and a lot of work to do to meet its GHG targets, it would benefit from pushing that policy further.

**North Dakota**'s score is driven largely by the lack of a statewide energy code (as a home rule state) and very high existing building emissions. **Wyoming** is similar, but a bit farther down the list because of slightly lower expected energy cost savings from updated codes. Both states need to dramatically lower their electricity grid emissions rates to see a significant dent in those emissions but would also benefit from improving building energy efficiency.

**Minnesota** is not at the top for potential energy savings from new energy codes—though it could certainly improve its standing—but it has about median existing building emissions, some significant construction activity, and ambitious climate policy targets that could make advancing the state's energy codes highly impactful.

By our assessment, **Virginia** needs to see the most emissions reduction by 2030 to meet its policy targets, so implementing advanced energy codes will need to be part of a comprehensive strategy that could not come any sooner.

Several states in the Southeast seeing new home construction activity could benefit from energy, cost, and emissions savings: **Arkansas** is computed to have the highest potential residential energy cost savings from updated energy codes (and third-most for commercial) with high existing building emissions and a moderate amount of construction activity. **South Carolina** could see significant savings from updated energy codes and is fourth among the states in per capita construction activity. **Tennessee** could see the second-highest energy cost savings from updating its residential energy code, as well as big improvements on the commercial side; it is also seeing a significant amount of construction activity.

**South Dakota**, a home rule state, ranked in the top 10 states for potential residential energy cost savings, potential commercial energy cost savings, and construction activity. **Missouri**, another home rule state, similarly ranks in the top 10 for both residential and commercial energy costs savings, as well as in existing building emissions.

**Wisconsin** is fairly balanced across our metrics, ranking between 13th and 31st in all of them. The state could see particularly significant energy cost savings for homes and multifamily buildings, its existing building stock has high GHG emissions, and it has some work to do to get on pace for its climate targets.

**Kentucky** and **Oklahoma** round out our top 10 states with statewide codes. Kentucky could see significant savings from updated energy codes, particularly on the residential side, and has high existing building emissions. Oklahoma sees the most potential commercial energy cost savings and ties for second-most potential residential savings in our analysis.

The analysis presented here identifies states primed to benefit from updated building energy codes, but it also shows the diversity of conditions in the states that can affect the impact of implementing higher efficiency codes. In this lie lessons for other states, both for comparing themselves to the specific states we identify and because individual states might emphasize specific metrics or set higher bars for themselves than the most recent model energy codes.

Ultimately, the impact will be measured in how successfully advanced codes are implemented in states and jurisdictions.

#### Table 1. Overall results and scoring

	Residential energy code cost savings		Commercial energy code cost savings		Current building emissions		Construction activity		2030 emissions reduction target		Overall ranking	
State	Percentage savings	Rank	Percentage savings	Rank	tCO₂e per capita	Rank	Permits per 1,000 people	Rank	Percentage reduction	Rank	Score	Rank
Louisiana	20.0%	14	31.8%	5	7.70	15	4.12	29	44.1%	10	75.4	1
North Carolina	16.2%	18	13.4%	18	5.82	30	9.07	8	39.5%	13	70.6	2
Colorado	9.7%	37	7.0%	28	7.36	18	9.77	5	47.6%	4	68.4	3
North Dakota	26.5%	6	25.9%	11	15.91	1	4.62	23	0.0%	26	66.7	4
Minnesota	9.1%	38	11.1%	20	6.98	21	5.90	17	46.6%	6	65.0	5
Virginia	17.8%	16	7.1%	27	5.75	33	4.56	24	55.2%	1	64.9	6
Wyoming	24.1%	12	25.6%	12	14.64	2	4.69	22	0.0%	26	64.9	7
Arkansas	30.2%	1	32.7%	3	8.21	11	4.71	21	0.0%	26	63.2	8
South Carolina	25.2%	9	31.9%	4	4.42	44	9.88	4	0.0%	26	62.2	9
Tennessee	29.0%	2	24.4%	13	5.82	31	8.31	11	0.0%	26	61.9	10
South Dakota	25.2%	9	26.3%	10	5.78	32	8.93	9	0.0%	26	61.9	11
Wisconsin	21.6%	13	6.0%	31	8.09	13	4.32	27	23.1%	23	61.5	12
Missouri	26.0%	7	27.2%	8	11.12	5	3.47	36	0.0%	26	60.8	13
Kentucky	28.5%	5	23.5%	14	11.67	4	3.30	37	0.0%	26	60.6	14
Oklahoma	29.0%	2	36.8%	1	6.69	22	3.72	31	0.0%	26	60.2	15
Delaware	9.8%	34	8.0%	24	7.30	20	8.57	10	15.7%	25	59.8	16
Nevada	9.7%	36	5.4%	33	4.98	39	7.52	12	31.7%	18	57.9	17
Arizona	18.0%	15	26.6%	9	4.87	41	9.10	7	0.0%	26	57.8	18
Kansas	26.0%	7	27.7%	7	7.59	16	3.25	38	0.0%	26	56.7	19
Alaska	29.0%	2	28.2%	6	8.89	9	2.12	46	0.0%	26	56.5	20
Mississippi	24.9%	11	33.2%	2	6.59	24	2.70	42	0.0%	26	55.4	21
Indiana	14.0%	24	22.6%	15	9.97	8	4.40	25	0.0%	26	55.0	22
Hawaii	11.1%	30	12.3%	19	4.07	47	2.38	44	44.8%	8	54.7	23
Maryland	10.6%	33	4.7%	36	5.54	35	3.00	40	44.4%	9	54.3	24
New Jersey	16.1%	19	1.1%	43	5.24	38	4.00	30	40.9%	12	54.3	25
Utah	16.4%	17	4.1%	37	8.13	12	11.90	1	0.0%	26	54.2	26

#### ANALYZING STATE ENERGY CODE UPDATE BENEFITS © ACEEE

	Residential energy code cost savings		Commercial energy code cost savings		Current building emissions		Construction activity		2030 emissions reduction target		Overall ranking	
State	Percentage savings	Rank	Percentage savings	Rank	tCO₂e per capita	Rank	Permits per 1,000 people	Rank	Percentage reduction	Rank	Score	Rank
Michigan	10.7%	32	3.5%	40	7.75	14	2.16	45	42.8%	11	53.9	27
District of Columbia	11.0%	31	0.0%	44	6.07	28	6.87	14	38.0%	15	53.3	28
Montana	6.4%	43	0.0%	44	10.17	6	6.70	15	30.0%	20	53.3	29
Pennsylvania	8.1%	41	5.4%	34	5.50	36	3.69	32	31.2%	19	51.8	30
lowa	12.7%	26	21.0%	16	7.36	19	4.29	28	0.0%	26	50.7	31
Texas	8.9%	39	9.4%	23	6.61	23	9.10	6	0.0%	26	49.1	32
Georgia	15.1%	22	10.0%	21	6.38	26	6.27	16	0.0%	26	48.9	33
Florida	11.7%	29	7.1%	26	5.67	34	9.90	3	0.0%	26	48.8	34
Rhode Island	14.1%	23	3.9%	38	5.49	37	1.27	51	50.5%	3	48.5	35
Maine	3.4%	46	6.3%	29	4.41	45	4.79	20	29.4%	21	48.3	36
Ohio	12.0%	27	19.1%	17	8.49	10	2.58	43	0.0%	26	47.3	37
Idaho	15.2%	21	5.0%	35	3.58	48	11.76	2	0.0%	26	46.7	38
West Virginia	15.6%	20	7.3%	25	12.89	3	2.06	47	0.0%	26	46.3	39
Nebraska	7.9%	42	5.9%	32	10.00	7	5.47	18	0.0%	26	45.7	40
Alabama	13.0%	25	9.9%	22	6.44	25	4.40	26	0.0%	26	45.0	41
Oregon	5.1%	44	0.0%	44	3.45	49	5.17	19	52.6%	2	44.7	42
Illinois	9.8%	34	3.4%	41	6.34	27	1.54	49	19.1%	24	42.9	43
New York	8.5%	40	2.7%	42	4.52	43	1.99	48	27.9%	22	42.9	44
New Mexico	12.0%	27	6.2%	30	7.50	17	3.66	33	0.0%	26	42.4	45
Massachusetts	2.4%	47	0.0%	44	5.86	29	2.83	41	34.2%	17	38.9	46
Washington	0.0%	48	0.0%	44	3.19	50	7.38	13	47.2%	5	37.7	47
Vermont	0.0%	48	0.0%	44	4.59	42	3.61	34	45.9%	7	35.3	48
New Hampshire	4.8%	45	3.9%	39	4.36	46	3.55	35	0.0%	26	30.9	49
Connecticut	0.0%	48	0.0%	44	4.97	40	1.29	50	36.9%	16	25.6	50
California	0.0%	48	0.0%	44	2.66	51	3.02	39	38.7%	14	24.9	51

Note: Home rule states without statewide codes are shown in italics.