Covered Bases: Northeastern States Clean and Efficient Energy Scorecard

Northeast-Midwest Institute

By Environmental Policy Intern Owen Macdonald April 2024



Executive Summary

States are some of the foremost actors in the United States when it comes to fighting against climate change.¹ One of the ways states do this is to make and implement policies that increase the use of clean and efficient energy in order to reduce greenhouse gas emissions.² There is a wide variety of policy options that states have undertaken, and this scorecard aims to showcase many of the most common and most important ones. This is where the title of this scorecard, "Covered Bases", comes from, as it is only the methods that are being examined, not the results.

This scorecard covers the northeastern states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. Several of the country's leading states in energy policy are in the northeast³, and as such, the northeast provides information about the wide range of policy options available to states.

Data was gathered for each state's policies on the North Carolina Clean Energy Technology Center's Database of State Incentives for Renewables & Efficiency, DSIRE, and sorted into 37 policy indicators. The states were then scored using these indicators to determine the variety of approaches that each of the states took to advancing clean and efficient energy policy. The highest scoring states included New York, Massachusetts, New Jersey, and Maryland, and the lowest included Maine, Delaware, New Hampshire, and Pennsylvania. The detailed scoring data is included in Appendix I.

Methodology

1. Data Collection

Data was collected from the North Carolina Clean Energy Technology Center's Database of State Incentives for Renewables & Efficiency, DSIRE.⁴ It compiles a regularly updated list of policies across the country⁵, tagged with the "category" of policy (regulatory policy, financial incentive, etc.) as well as a narrower "type" (Property Assessed Clean Energy (PACE) financing, tax incentives, solar/wind access policies) tag within these categories. This scorecard only looked at policies implemented by state governments⁶ that exist within the states being researched. These states are

¹ (Rabe, 2021).

² (Carley, 2021).

^{3 (}Carley, 2021).

⁴ The database can be found here: https://www.dsireusa.org/

⁵ Notably not an entirely complete list, as some policies are more rarely updated and may be out of date. Policies that DSIRE made clear are out of date were not considered for this scorecard. See **Areas For Further Study** for more on this.

⁶ Includes organizations run by third parties on behalf of the state government, such as Green Banks.

Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

2. Data Categorization

Clean and efficient energy policies were sorted into four categories for organizational and analytical purposes: Renewable Generation/Distribution, Energy Efficiency, Availability of Funding, and Transportation.

The Renewable Generation/Distribution category includes policies that require or encourage the generation of renewable energy, such as Renewable Portfolio Standards (or RPSs), tax exemptions on renewable energy equipment, or solar access laws. This category also focuses on policies affecting the distribution and end use of renewable energy, such as net metering and energy storage policies.⁷

Energy Efficiency includes policies requiring or encouraging the adoption of energy efficient technologies, such as heat pumps or combined heat and power (CHP). These policies can take the form of energy efficient building standards, energy efficient appliance standards, or rebates for the installation of certain technologies, among others.

The previous two categories primarily focus on specific, targeted policies, meaning they target specific sectors, subsidize specific technologies, or have rigidly described applications or incentives. The Availability of Funding category instead encompasses broad, sweeping funding programs that can finance a wide array of projects and programs, often including policies that fall into the other categories⁸. These can include Clean Energy Funds found in many of the northeastern states, as well as other large-scale programs like PACE financing. Policies that raise the money for these larger funding programs, such as system benefits charges, are included here as well.⁹ Notably, since this scorecard is strictly focused on policies run by the states, regional and federal funding sources such as the Regional Greenhouse Gas Initiative and the Inflation Reduction Act are not discussed.

The Transportation category includes policies specific to transportation within the states, such as incentives for electric and hybrid vehicles, as well as for charging equipment and other related infrastructure. Where the Renewable Generation/Distribution and Energy Efficiency Categories are closely related to the

⁷ For the purposes of this scorecard, these are the only kinds of policies implicated by the term "distribution." Other policies related to distribution on DSIRE, such as interconnection standards, were uniform and ubiquitous to a degree that they were excluded from the scorecard. This applies throughout the entire scorecard, including the appendixes.

⁸ In cases where a policy in this category clearly funds something that would receive a point in another category, both points will be granted.

⁹ These policies, as well as any other scored indicator, will be explained in Appendix II.

utilities sector, the Transportation category is related to the automotive sector instead, leading to different policy approaches.

3. Indicators and Scoring

Within these categories, different policy approaches appeared with varying levels of prevalence. Some, such as RPSs and Energy Efficiency Resource Standards (EERSs) were practically ubiquitous, while others such as Vermont's energy efficiency utility appeared only a single time. Others, such as rebates and tax incentives appeared with varying frequency from state to state and category to category. This variation is to be expected, as every state is different and has different policy objectives and priorities.

One of the primary goals of this scorecard is showcasing the variety of approaches that these states take in their efforts to further clean and efficient energy within their boundaries, so not every type of policy is scored within this scorecard. Policies that were found to be ubiquitous and not substantially different from state to state were excluded, such as emissions disclosure requirements and interconnection standards. EERSs were also excluded, as many appeared to lack up to date information on DSIRE. It was not determined during this project's research whether this is because some EERS policies have expired or because some information is not yet up to date on the database.

The types of policies that were chosen as indicators to be scored were primarily those that varied in prevalence the most between states and categories, such as the use of rebates, grants, and other financial incentives. Other types of policies were highlighted as well to show important aspects of the clean energy transition, such as policies focused on low to moderate income communities and residents, who are most vulnerable to the consequences of climate change¹o. In much the same vein, RPSs, which were present in every state examined for this scorecard, were scored based on whether they targeted 100% renewable energy or net zero emissions by 2050, in line with the nation's climate change goals.¹¹¹¹ In some cases, more specific types of policies, such as the presence of Clean Energy Funds, solar carve-outs, and others, were scored as well due to their at least semi-frequent occurrence across states. Ultimately, which types of policies and which specific policies were chosen as indicators for scoring came down to a value judgment made from the studying of all the policies across the states, so some policies may be excluded that otherwise seem to fit the criteria for being scored.

Each indicator was scored in the form of a yes or no question where a "yes" gets one point and a "no" gets no points. 37 total indicators were chosen, with 14 in the Renewable Generation/Distribution category, eight in the Energy Efficiency category,

^{10 (}EPA, 2021).

^{11 (}Horowitz, 2021).

¹² Low-moderate income provisions and 100%/net zero RPSs also exhibited significant variation between states and categories.

six in the Availability of Funding category, and nine in the Transportation category. The result of this method of scoring is that different categories are essentially weighted in importance to overall score purely by how many different policies were scored. This was done because this scorecard is primarily interested in examining the variety of different approaches to policymaking taken between the states rather than the efficacy of those policies. One category having more possible points than another simply means that the states examined have generally used a greater number of different methods when it comes to that category. Consequently, one state having a higher score than another, whether that is overall or within a specific category, only means that that state has employed a greater variety of policies in addressing clean and efficient energy than another. It cannot be stressed enough that high scores on this scorecard translate only to policy variety, and not to policy efficacy. **Appendix I** contains the complete scoresheet for each indicator, while the separate Excel sheet included with this report contains that, plus what policies on DSIRE led to points being granted. Appendix II explains the definition of each indicator in detail.

Results/Discussion

1. Overall Results

The states examined exhibited a wide range of scores, with New York scoring the highest with a score of 32 out of 37 possible points, and Delaware and New Hampshire scoring the lowest with 18 points each. Connecticut and Vermont tied for the median overall score with 20 points. The total scores show a noticeable gap between the top four states and the remaining seven, with there being a five-point gap between Maryland's score of 26 points and Rhode Island's score of 21 points. These top four states are further apart in score from each other as well, with New York, Massachusetts, New Jersey, and Maryland having a six-point range compared to Rhode Island through Delaware and New Hampshire only having a three-point range. This means the top four states have a greater degree of policy variation than the rest of the northeastern region, and that the remaining states are more typical for this part of the country. The rest of this section will spotlight the broad results across the different policy categories, with an emphasis on the differences between the states at different points in that category's score distribution. The end of each section will have a graph showing the distribution of scores by percentage of possible points earned within that category.

¹³ Sometimes more than one policy could satisfy the requirement for a point to be granted. In these cases, only one point is granted, but all policies that satisfy the requirement are listed in the separate Excel sheet that comes with this report. A policy satisfying one point does not exclude it from satisfying another.

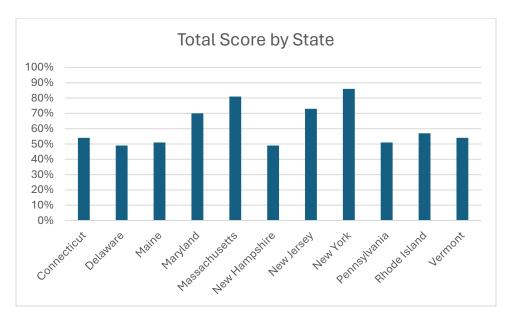


Figure A

2. Renewable Generation/Distribution

Scores in the Renewable Generation/Distribution Category ranged from six to 12 out of a possible 14 points. Maryland and New Jersey tied for the highest score of 12 points, New Hampshire and Rhode Island scored the median of 10 points, and Pennsylvania and Vermont both scored the lowest with six points. It is already apparent that a state's placement within the overall scoring distribution does not correspond to their placement within the distribution of specific categories.

Maryland and New Jersey's approaches to this category are slightly different from each other despite scoring the same. Maryland misses out on the point for setting energy storage goals as well as the point for having equitable policies, while New Jersey did not get the net zero/100% by 2050 point or the grants for renewable energy point. New Jersey notably has a very large number of solar-specific policies, with eight in total, two more than the runner ups of Delaware and New York. Maryland only has four solar specific programs, but the state makes extensive use of tax incentives in this category, with a total of seven. These differences are illustrative of the different ways that states can foster a variety of policy approaches when it comes to the generation and distribution of renewable energy.¹⁴

The median scorers are close to the top scorers in this category, but also have some key differences in approach. Neither state has a carve-out¹⁵ for wind energy, and Rhode Island is missing a solar carve-out as well. Rhode Island makes significant use of grant programs and tax incentives to advance its goals in this category, while New Hampshire

¹⁴ See **Appendix II** for any specific policy types mentioned.

¹⁵ See Appendix II.

does not particularly specialize in any given indicator despite being just as varied in approach as Rhode Island.

The lowest scorers in this category only earned 6 of 14 points, less than half of what was possible. Pennsylvania and Vermont miss out on many possible avenues for policymaking as a result. For example, Pennsylvania is lacking when it comes to policies meant to address the distribution of renewable energy, such as community net metering policies or energy storage policies. Vermont also misses out when it comes to energy storage, and neither state scores the net zero/100% by 2050 point or the renewable lead by example point. Both states receive points for making use of solar specific policies, loans for renewables, and permitting and access laws, but these are policies that almost every state has in common.¹⁶

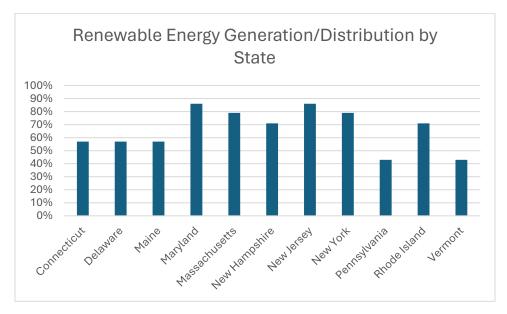


Figure B

3. Energy Efficiency

Scores in the Energy Efficiency category span a very different distribution from the Renewable Generation/Distribution category, with scores ranging from two points out of a possible eight to multiple perfect scores. This is a significant departure from the previous section, where every state scored just under half of the possible points or higher, but none received a perfect score. These differences mark a clear difference in uniformity between state approaches to this category compared to the last one, with a greater degree of variance in policy approaches when it comes to Energy Efficiency. Maryland, Massachusetts, and New York were the states that achieved this distinction. Massachusetts and New York both did a little bit of everything in this category, while

¹⁶ See **Appendix II** for specific policy types mentioned.

Maryland additionally displayed a strong focus on loan and grant programs, with seven of the former and five of the latter.

Maine, New Jersey, and Rhode Island all received the median score of six points. All of these states miss the point for the use of tax incentives in this category but lose their other points from different categories. None of these states place a particularly strong emphasis on any specific type of policy under the Energy Efficiency category.

New Hampshire scores last place in this category with a mere two points. The state gets one point for their Business Energy Efficiency Loan and Energy Efficiency and Clean Energy Districts programs, and another for their Building Requirements for State Funded Buildings program. The lack of any other policies in this category in contrast to the high scores from other states means that New Hampshire has many possible options for how to better encourage energy efficiency, as well as multiple models to emulate.

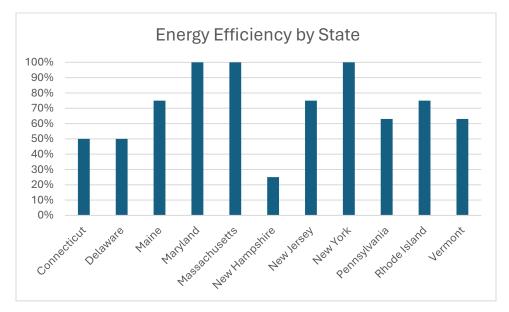


Figure C

4. Availability of Funding

This category had the smallest number of possible points to earn with only six points available. New York had the highest and only perfect six-point score. New Hampshire, Rhode Island, and Vermont all received the median score of four points, and Maryland scored only two points. New York's variety of large-scale funding programs, including a Clean Energy Fund¹⁷, the NY Green Bank¹⁸, and PACE financing¹⁹, as well as a focus on

¹⁷ DSIRE entry: https://programs.dsireusa.org/system/program/detail/5861/clean-energy-fund-cef

¹⁸ DSIRE entry: https://programs.dsireusa.org/system/program/detail/5539/ny-green-bank

¹⁹ DSIRE entry: https://programs.dsireusa.org/system/program/detail/3662/state-of-ny-commercial-pace-financing-program

low-income communities and residents through their Clean Energy Fund facilitated their perfect score in this category.

The three-way tie for the median in this category has one common element: every state here is lacking a Green Bank. This is hardly surprising because out of the states included in this scorecard, only New York, Connecticut, and Delaware scored the Green Bank point.²⁰ Vermont is one of the only states missing PACE financing of any kind, and the other two states are all missing large funding programs aside from just a Clean Energy Fund or PACE.²¹ Vermont is notably different in this case because it has two large loan programs that cover both renewables and energy efficiency: the Agricultural Energy Loan Program²², and the Commercial Energy Loan Program.²³

Maryland's two points are from its PACE program, known as the Maryland Clean Energy Program²⁴, and two cross-category funding programs: the Maryland Smart Energy Communities Grant²⁵, and the Jane E. Lawton Conservation Loan Program.²⁶ Maryland appears to make up for its lack of large funding programs in this category with its large number of smaller incentives of various types in the Renewable Generation/Distribution and Energy Efficiency categories.

²⁰ See Areas For Further Study.

²¹ See **Appendix II**.

 $^{^{22}}$ DSIRE entry: $\underline{\text{https://programs.dsireusa.org/system/program/detail/5513/agricultural-energy-loan-program}$

²³ DSIRE entry: https://programs.dsireusa.org/system/program/detail/5512/commercial-energy-loan-program

²⁴ DSIRE entry: https://programs.dsireusa.org/system/program/detail/3533/maryland-clean-energy-program-local-option

²⁵ DSIRE entry: https://programs.dsireusa.org/system/program/detail/5838/maryland-smart-energy-communities-grant

 $^{^{26}}$ DSIRE entry: $\underline{\text{https://programs.dsireusa.org/system/program/detail/231/jane-e-lawton-conservation-loan-program}}$



Figure D

5. Transportation

No state scored all nine of the possible points in the Transportation category, which trends the lowest out of any of the categories in this scorecard. New York comes the closest with a score of seven points, Maryland scores the median of four points²⁷, and Delaware, Maine, and Rhode Island are all tied for last with a single point each. New York is only missing out on loan and lead by example policies in this category, with one policy covering each of the other points²⁸, except when it comes to rebates, where New York has three separate programs in place, covering both clean vehicles and charging infrastructure.

Maryland puts significant emphasis on both clean medium-heavy duty vehicles²⁹ and grant programs, with two each. This is notable for being more than the highest scoring state in this category got for these indicators, and highlights that a state may excel in some specific areas despite not taking as multi-faceted an approach at a broader level. Maryland also has their Electric Vehicle Service Equipment (EVSE) Rebate

Program³⁰ and their Clean Fuels Incentive Program³¹, which grants them the rebate and EV fleets points.³²

²⁷ This makes it the only category where the median is less than half of the possible score.

²⁸ This makes it one of only two states to earn the toll discount point, along with New Jersey.

²⁹ See Appendix II.

³⁰ DSIRE entry: https://programs.dsireusa.org/system/program/detail/22184/electric-vehicle-supply-equipment-evse-rebate-program

³¹ DSIRE entry https://programs.dsireusa.org/system/program/detail/22183/clean-fuels-incentive-program-cfip

³² See Appendix II.

The bottom three states in this category only got one point each, with Rhode Island's Commercial Scale Renewable Energy Grants³³ getting them the grants point, Maine's Electric Vehicle Rebate Program³⁴ getting them the rebate point, and Delaware having two rebate programs in place for the same point. The large number of states with such a large score indicates that there is a lot more that can be done to advance clean transportation policies throughout the northeastern US, with high scoring states like New York, Massachusetts, and New Jersey serving as possible examples for these states to model their own programs from.

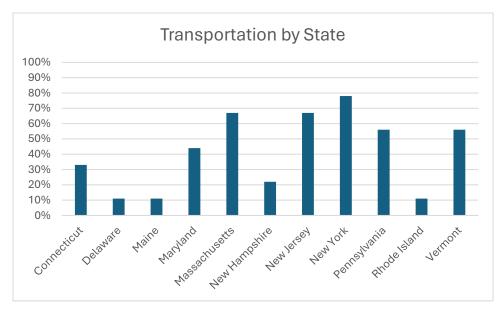


Figure D

Areas For Further Study

The scope of this scorecard is limited purely to examining the variety of policies the northeastern states have put into place. This leaves multiple opportunities for future work. Other regions of the United States could be studied to produce a scorecard like this one, which could give a greater understanding of how states approach clean and efficient energy policy throughout the country. A future scorecard like this one could also examine data from a wider variety of sources than just the DSIRE database, since it

³³ DSIRE entry: https://programs.dsireusa.org/system/program/detail/5362/commercial-scale-renewable-energy-grants-commerce-ri

³⁴ DSIRE entry: https://programs.dsireusa.org/system/program/detail/22181/electric-vehicle-rebate-program

was found that some states would score differently with information from other sources.³⁵

Additionally, this scorecard's lack of focus on efficacy means that future research could focus on that, whether it is within a specific policy category or on a broader level. Several reports of this variety already exist, including the American Council for an Energy Efficient Economy's (ACEEE) State Energy Efficiency Scorecard³⁶, Rocky Mountain Institute's (RMI) State Climate Scorecards³⁷, and the Institute for Local Self-Reliance's (ILSR) Community Power Scorecard.³⁸

Research could also be done to determine if there is a relationship between states casting a wide net policy-wise, as this scorecard examines, and states having a high degree of efficacy in clean and efficient energy policy. Appendix I compiles per capita carbon dioxide emissions statistics from the states in this scorecard to show that this topic bears further investigation. A certain degree of correlation between the emissions statistics and the scorecard rankings appears to be present, but it is nowhere near enough information to draw any conclusions from. Research in this area would prove valuable, as it could signal to states that a wide, multi-faceted approach to clean and efficient energy policy is an effective method for fighting climate change.

³⁵ For example, Maryland and Rhode Island were found to have Green Banks or policies similar enough to count for the point, per State Policy Opportunity Tracker for Clean Energy's website, found here: https://spotforcleanenergy.org/policy/green/infrastructure-bank/. These were not included in this scorecard to keep sources of information consistent.

³⁶ (ACEEE, 2022).

³⁷ (RMI, 2023).

^{38 (}McCoy, 2023).

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Appendix I: Data Tables³⁹

Renewable Generation/Distribution

State	Net	Solar	Wind	Virtual/Commu	Energ	Energy	Solar
	Zero/100	Carv	Carv	nity Net	у	Storage	Specific
	% by	e-Out	e-Out	Metering	Storag	Progra	Progra
	2050				е	ms	ms
	Goal				Goals		
Connecticut	0	1	1	1	1	1	0
Delaware	0	1	0	1	0	0	1
Maine	1	0	1	1	1	1	1
Maryland	1	1	1	1	0	1	1
Massachuse	0	1	1	1	1	1	1
tts							
New	0	1	0	1	0	1	1
Hampshire							
New Jersey	0	1	1	1	1	1	1
New York	1	0	1	1	1	1	1
Pennsylvania	0	1	0	0	0	0	1
Rhode Island	1	0	0	1	0	1	1
Vermont	0	0	0	1	0	0	1

State	Tax	Grants	Rebates	Loans	Renewabl	Renewabl	At Least	
	Incentiv	for	for	for	e/Distribu	e/Distribu	One	
	es for	Renewa	Renewa	Renewa	tion Lead	tion	Equitabl	
	Renewa	ble	ble	ble	by	Permitting	e Policy	
	ble	Energy/	Energy/	Energy/	Example	and	for	То
	Energy/	Distribu	Distribu	Distribu		Access	Renewa	ta
	Distribu	tion	tion	tion		Laws	ble	l
	tion						Energy/	
							Distribu	
							tion	

³⁹ Ones and zeroes are used to show whether a state did or did not get a point for a particular indicator. The policies that grant points for each indicator along with other data can be seen in the separate Excel sheet that comes with this report.

Conn	1	0	0	1	0	0	1	8/
ecticu								14
t								
Delaw	0	0	1	1	1	1	1	8/
are								14
Maine	1	0	0	1	1	0	0	8/
								14
Maryl	1	1	1	1	1	1	0	12
and								/1
								4
Massa	1	1	1	1	0	1	0	11
chuse								/1
tts								4
New	1	1	1	1	0	1	1	10
Hamp								/1
shire								4
New	1	0	1	1	1	1	1	12
Jersey								/1
								4
New	1	0	1	1	0	1	1	11
York								/1
								4
Penns	0	1	1	1	0	1	0	6/
ylvani								14
a								1.0
Rhode	1	1	0	1	1	1	1	10
Island								/1
								4
Vermo	1	0	0	1	0	1	1	6/
nt								14

Energy Efficiency

State	Rebat	Loans	Grant	Tax	Effici	Energy	At	Applia	Tot
	es for	for	s for	Incent	ency	Efficient	Least	nce	al
	Energ	Energ	Energ	ives	Lead	Buildings	One	Stand	
	У	У	У	for	by	Policies	Equit	ards	
				Energ		Beyond	able	Beyon	

	Effici	Effici	Effici	У	Exam	ASHRAE/IEC	Policy	d	
	ency	ency	ency	Efficie	ple	C Standards	for	Feder	
				ncy		(Green	Energ	al	
						Globes/LEE	у	Stand	
						D/Other)	Effici	ards	
							ency		
Connecti	1	1	0	0	1	0	1	0	4/
cut									8
Delaware	1	1	0	0	1	1	0	0	4/
									8
Maine	1	1	0	0	1	1	1	1	6/
									8
Maryland	1	1	1	1	1	1	1	1	8/
									8
Massach	1	1	1	1	1	1	1	1	8/
usetts									8
New	0	1	0	0	1	0	0	0	2/
Hampshi									8
re									
New	1	1	1	0	1	1	1	0	6/
Jersey									8
New York	1	1	1	1	1	1	1	1	8/
									8
Pennsylv	1	1	1	0	1	1	0	0	5/
ania									8
Rhode	0	1	1	0	1	1	1	1	6/
Island									8
Vermont	1	1	0	0	0	1	1	1	5/
									8

Availability of Funding

State	Clean	Green	System	Cross-	PACE or	At Least	Tota
	Energy	Bank or	Benefits	Categor	Equivale	One	l
	Fund or	Equivale	Charge or	у	nt	Equitabl	
	Equivale	nt	Equivalen	Funding		e Policy	
	nt		t Funding	Program		for	
				S		Funding	

			Mechanis	Beyond			
			m	CEF and			
				PACE			
Connecticut	1	1	1	1	1	0	5/6
Delaware	1	1	1	1	0	1	5/6
Maine	1	0	1	0	1	0	3/6
Maryland	0	0	0	1	1	0	2/6
Massachuset	1	0	1	1	1	1	5/6
ts							
New	1	0	1	0	1	1	4/6
Hampshire							
New Jersey	1	0	1	0	1	0	3/6
New York	1	1	1	1	1	1	6/6
Pennsylvania	1	0	1	1	0	0	3/6
Rhode Island	1	0	1	0	1	1	4/6
Vermont	1	0	1	1	0	1	4/6

Transportation

State	Rebates for	Tax	Grants for	Loans for	Transportatio
	EV/Hybrid	Incentives	EV/Hybrid	EV/Hybrid	n Lead by
	Adoption	for	Adoption	Adoption	Example
	and/or EV	EV/Hybrid	and/or EV	and/or EV	
	Infrastructur	Adoption	Infrastructur	Infrastructur	
	е	and/or EV	е	е	
		Infrastructur			
		е			
Connecticut	1	0	1	0	0
Delaware	1	0	0	0	0
Maine	1	0	0	0	0
Maryland	1	0	1	0	0
Massachuset	1	0	1	0	1
ts					
New	0	0	1	0	0
Hampshire					
New Jersey	0	1	1	0	1
New York	1	1	1	0	0

Pennsylvania	1	0	1	0	0
Rhode Island	0	0	1	0	0
Vermont	1	0	1	1	0

State	At Least One	Medium-	Toll	EV Fleets	Total
	Equitable	Heavy Duty	Discounts	Support	
	Policy for	Electric	for Electric	(Non-Lead	
	Transportation	Vehicle	Vehicles	by Example)	
		Policy			
Connecticut	1	0	0	0	3/9
Delaware	0	0	0	0	1/9
Maine	0	0	0	0	1/9
Maryland	0	1	0	1	4/9
Massachusetts	1	1	0	1	6/9
New	0	0	0	1	2/9
Hampshire					
New Jersey	1	1	1	0	6/9
New York	1	1	1	1	7/9
Pennsylvania	1	1	0	1	5/9
Rhode Island	0	0	0	0	1/9
Vermont	1	0	0	1	5/9

Appendix II: Indicator Definitions⁴⁰

Renewable Energy Generation/Distribution

Net Zero/100% by 2050 Goal: A policy indicating a goal of net-zero carbon emissions or 100% of electricity generation coming from renewables by 2050.

Solar Carve-Out: A policy mandating a certain portion of electricity generation comes from solar energy sources (either as a percentage or a set number, typically in megawatts).

Wind Carve-Out: A policy mandating a certain portion of electricity generation comes from wind energy sources (either as a percentage or a set number, typically in megawatts).

Virtual/Community Net Metering: A policy allowing for virtual or community net metering in any form. Virtual net metering is sometimes known as remote net metering and allows an electric customer to net meter with electricity generated somewhere other than where it was consumed.⁴¹ Community net metering is a form of this wherein multiple customers net meter from a shared renewable generation source.

Energy Storage Goals: A policy setting a capacity goal for storage of electricity for later use.

Energy Storage Programs: Policies meant to facilitate increased adoption of energy storage technologies.

Solar Specific Programs: Programs that specifically and primarily concern the adoption and use of solar energy.

⁴⁰ All indicators appear in the same order they do in the data tables.

^{41 (}Mooney, 2022).

Tax Incentives for Renewable Energy/Distribution: Tax incentives of any variety that encourage the adoption of renewable energy or distribution technologies.

Grants for Renewable Energy/Distribution: Grant programs of any variety that encourage the adoption of renewable energy or distribution technologies.

Rebates for Renewable Energy: Rebates (including performance-based incentives) of any variety that encourage the adoption of renewable energy or distribution technologies.

Loans for Renewable Energy: Loan programs of any variety that encourage the adoption of renewable energy or distribution technologies.

Renewable/Distribution Lead by Example: Policies concerning standards for and use of renewable energy and distribution technologies by state governments.

Renewable/Distribution Permitting and Access Laws: Policies concerning permitting processes for renewable energy technologies, such as siting for solar or wind generation, as well as policies aimed to ensure reasonable access to these technologies and their benefits for end users, such as solar easements laws.

At Least One Equitable Policy for Renewable Energy/Distribution: Any policy in this category that specifically aims to benefit low-moderate income people or communities in some way.

Energy Efficiency

Rebates for Energy Efficiency: Rebates (including performance-based incentives) of any variety that encourage the adoption of energy efficiency technologies.

Loans for Energy Efficiency: Loan programs of any variety that encourage the adoption of energy efficiency technologies.

Grants for Energy Efficiency: Grant programs of any variety that encourage the adoption of energy efficiency technologies.

Tax Incentives for Energy Efficiency: Tax incentives of any variety that encourage the adoption of energy efficiency technologies.

Efficiency Lead by Example: Policies concerning standards for and use of energy efficiency technologies and practices by state governments.

Energy Efficient Buildings Policies Beyond ASHRAE/IECC Standards (Green Globes/LEED/Other): Policies that encourage energy efficient construction and renovation of buildings beyond the widely adopted ASHRAE and IECC standards. Green Globes and LEED grant commonly used multi-level certifications for buildings reaching certain standards of energy efficiency. Building policies with these or comparable standards were granted this point. See New York's "Local Option – Real Property Tax Exemption for Green Buildings" on DSIRE for an example.⁴²

At Least One Equitable Policy for Energy Efficiency: Any policy in this category that specifically aims to benefit low-moderate income people or communities in some way.

Appliance Standards Beyond Federal Standards: Many state standards for energy efficient appliances have been pre-empted by federal law. Any state with standards that have not been pre-empted get this point.

Availability of Funding

Clean Energy Fund or Equivalent: Any state policy that broadly funds state clean energy and energy efficiency activities.

 $^{^{42} \} DSIRE \ entry: \ \underline{https://programs.dsireusa.org/system/program/detail/5249/local-option-real-property-\underline{tax-exemption-for-green-buildings}$

Green Bank or Equivalent: Any state entity that primarily acts as a financial institution seeking to advance the energy transition.

System Benefits Charge or Equivalent Funding Mechanism: Any policy collecting a surcharge from utility bills in the state for the purposes of funding state clean or efficient energy programs.

Cross-Category Funding Programs Beyond CEF and PACE: Any policy funding activities in both the Renewable Energy/Distribution and Energy Efficiency categories that is not a Clean Energy Fund or PACE financing.

PACE or Equivalent: Any Property Assessed Clean Energy financing policy on DSIRE, sometimes listed under a different policy name despite not differing in any meaningful way.

At Least One Equitable Policy for Funding: Any policy in this category that specifically aims to benefit low-moderate income people or communities in some way.

Transportation

Rebates for EV/Hybrid Adoption and/or EV Infrastructure: Rebates (including performance-based incentives) of any variety that encourage the adoption of clean vehicles and/or electric vehicle related infrastructure.

Tax Incentives for EV/Hybrid Adoption and/or EV Infrastructure: Tax incentives of any variety that encourage the adoption of clean vehicles and/or electric vehicle related infrastructure.

Grants for EV/Hybrid Adoption and/or EV Infrastructure: Grant programs of any variety that encourage the adoption of clean vehicles and/or electric vehicle related infrastructure.

Loans for EV/Hybrid Adoption and/or EV Infrastructure: Loan programs of any variety that encourage the adoption of clean vehicles and/or electric vehicle related infrastructure.

Transportation Lead by Example: Policies concerning standards for and use of clean vehicles and/or electric vehicle related infrastructure by state governments.

At Least One Equitable Policy for Transportation: Any policy in this category that specifically aims to benefit low-moderate income people or communities in some way.

Medium-Heavy Duty Electric Vehicle Policy: Any policy encouraging the adoption of electric medium-heavy duty vehicles, such as trucks, buses, or some types of construction vehicle. May also include infrastructure for these vehicles.

Toll Discounts for Electric Vehicles: Any policy that reduces or eliminates the road tolls that electric or hybrid vehicles must pay within the state.

EV Fleets Support (Non-Lead by Example): Any policy encouraging the adoption of fleets of electric or hybrid vehicles and/or infrastructure for electric vehicle fleets. Lead by example policies excluded because they generally concern fleets already.