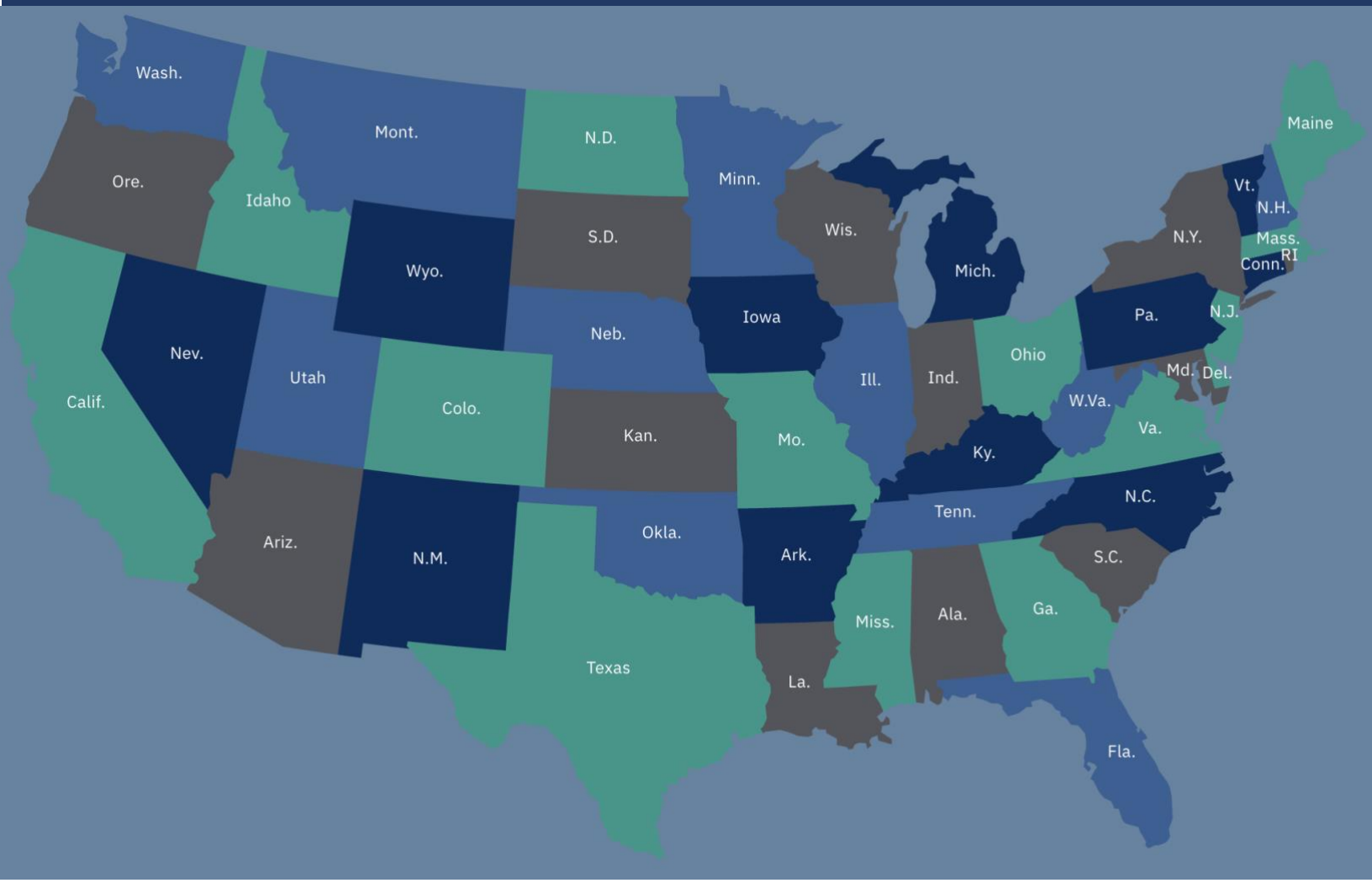

ENERGY INNOVATION
POLICY & TECHNOLOGY LLC®

GETTING STARTED WITH EPS

Using the Energy Policy Simulator to Model State Climate Policy

July 30, 2025

MODELING EFFECTIVE CLIMATE ACTION IN YOUR STATE

Your state can take meaningful climate action. But what would work best?

The Energy Policy Simulator from Energy Innovation models the energy system of your state in fine detail. It features dozens of energy policies that can be modeled in the simulator. Find out for yourself which combination of policies you could propose to reduce carbon emissions at the lowest cost and with the most benefits.

This quick start guide will take you step-by-step to the point where you can start to ask your own questions and find great climate solutions. We'll use the Louisiana model as an example.

Opening the simulator

Let's get started. Visit energypolicy.solutions in your web browser. A desktop computer works best, but tablets are also supported. You'll see a map of all the countries that have EPS models. Click « U.S. States » in the left column and then click Louisiana.

If you click Register to sign up for a free EPS account, you will be able to save and share your policy scenarios, but you can also just skip it for now. Next, click Enter Simulator.

On the left you'll find a menu of policies organized by sector. We start off with « New Scenario » — which starts with the Current Policies scenario before policies are selected. Note that the default is currently a Frozen Policies baseline that reflects the state of U.S. energy policy as of January 2025. Later, we'll cover how to start from an alternate Energy Innovation-provided scenario, which you can find by clicking the down arrow next to « New Scenario » .

On the right you'll see a graph of CO2e emissions (all greenhouse gases converted to their carbon dioxide equivalent) from now until 2050. Click the down arrow at the top right to see a menu of many other available results, including financial and health impacts, electricity, transportation, industry, buildings, and more. For now, we'll stick with total CO2e.

Trying out climate policies

Let's first test a single policy with dramatic results. Click the arrow next to *Electricity Supply* in the policy menu on the left. Choose *Clean Electricity Standard* to open the policy editor. The slider sets an increase in the fraction of electricity generation that must come from carbon-free sources in 2050. Click and drag the black circle to set a CES of 100 percent. EPS calculates 1.7 million equations for each year and then shows the new CO2e curve in the graph.

Click the down arrow next to *Learn about this policy* to read a short description of the policy and guidance for setting it in a reasonable way. Under that are links to the full documentation on the EPS website. Click OK to close the policy editor.

You also have complete control of how a policy is phased in. Try it by clicking the down arrow next to *Buildings and Appliances* and then choosing *Building Component Electrification,* which sets a standard for newly sold building equipment. Let's say we only want to set policies for heating. Uncheck the box at the top left of the building component list. Now check *Heating* for each of the three building types. Drag the slider to set 100 percent heating electrification in 2050.

That didn't shift emissions much on top of the CES 100 percent policy, due to the long lifetimes and therefore slow turnover of building equipment. Let's phase in the policy faster. Click the blue *Customize implementation schedule* link. To fully phase in the policy by 2035, click Add, enter 2035 and 100 percent, and then click OK. Click Save and then OK to complete the change.

Let's look at an ambitious decarbonization scenario that Energy Innovation designed. Click the down arrow to the right of the *New Scenario* policy title. Choose *NDC Scenario* and then click OK. You can discard your changes to *New Scenario*. At the bottom of the policy settings on the left, you can look through all the policies that are included in the scenario. Quite an improvement!

Now let's try another graph. Click the down arrow to the right of the graph name. Choose *Effects by Policy: CO2e Wedge Diagrams* and then click OK. EPS will run the scenario many times to calculate the contribution of each kind of policy to the overall result, which might take a while. Finally, it shows a wedge graph of policy contributions.

You can also build off one of the default scenarios to create your own, modified scenario. For example, click the down arrow again to select the Federal Policy Repeal and Rollback scenario title. This represents a scenario largely aligned with the recent "One Big Beautiful Bill Act," as well as the proposed repeal of several EPA climate rules. Additional guidance on this scenario and how to work with it is documented here. You can now select additional policies to layer on top of this scenario to build your own decarbonization scenario on top of the modified baseline.

Conclusion

To learn more, click *Docs* in the navigation bar at the top. From there you can watch the EPS Video Series. There's a Web Interface Tutorial that shows how to use every feature of the web app, including how to save and share your own scenarios. The Model Overview explains how the model is designed, what input data we use, and what assumptions we made. The Model Components section describes the model structure in exhaustive detail. We hope you enjoy using the Energy Policy Simulator. We can't wait to see what creative policy scenarios you come up with!

