

Policy Design Features for a National Clean Energy Standard

In 2019, the Bipartisan Policy Center began convening a working group of peer organizations to engage in policy discussions around the clean energy transition and advancing deep decarbonization across the U.S. economy. Throughout 2020 to today, the working group has focused on policy design for a national Clean Energy Standard.

This document is a product of the working group discussions with organizations advancing a range of priorities, and so the CES policy design features outlined here do not represent what each organization would necessarily advocate for individually. The working group came together to discuss the real policy decisions necessary to implement an effective CES and has agreed to a shared set of foundational ideas on CES policy design.

Atlantic Council

Matt Bowen, Nonresident Senior Fellow, Global Energy Center

Bipartisan Policy Center

Sasha Mackler, Director, Energy Project
Lesley Jantarasami, Associate Director of Energy and Climate

Clean Air Task Force

Armond Cohen, Executive Director
Conrad Schneider, Advocacy Director

Natural Resources Defense Council

Ben Longstreth, Senior Attorney, Climate and Clean Energy Program

Third Way

Ryan Fitzpatrick, Director, Climate and Energy Program
Lindsey Walter, Deputy Director, Climate and Energy Program

Audubon Society

Michael Obeiter, Senior Director, Federal Climate Strategy
Chloe Koseff, Policy Analyst, Climate

C2ES

Bob Perciasepe, President
Doug Vine, Director of Energy Analysis

National Wildlife Federation

Shannon Heyck-Williams, Director, Climate and Energy Policy
David DeGennaro, Senior Policy Specialist, Climate and Energy

The Nature Conservancy

Jason Albritton, Director of Climate and Energy Policy

Union of Concerned Scientists

Steve Clemmer, Director of Energy Research & Analysis, Climate and Energy Program
Rachel Cleetus, Policy Director, Climate and Energy Program
Jeremy Richardson, Senior Energy Analyst, Climate and Energy Program

Introduction

In the United States, the electric power sector is the second largest source of greenhouse gas emissions behind transportation. Reducing electricity emissions is a priority for advancing economy-wide decarbonization because the power sector is relatively easier and more cost-effective to decarbonize than other sectors and emitting sources from other sectors—including, notably, motor vehicles and buildings—will also likely have to be electrified to a large degree to mitigate climate change. A clean energy standard (CES), sometimes also called a clean electricity standard, is a policy that requires increasing amounts of qualifying “clean” energy sources over a certain time period.¹ The core concept of a CES is similar to a renewable portfolio standard (RPS), though typically a wider array of electricity sources qualify. Both RPS and CES policies have been successfully implemented at the state level.

Though the basic concept of a CES is straightforward, several details of the policy require careful consideration. Because this is a dynamic area of policy development in Congress, our organizations have engaged in dialogue over many months regarding key policy issues, questions, and priorities for a national CES. This document reflects perspectives on a CES policy framework in which compliance with the standard is demonstrated through clean energy credits. We started from our common understanding of the urgency of climate action, the need for durable policy solutions, our shared interest in cost-effective, technology-neutral approaches that encourage innovation and ambition, and our commitment to just and equitable energy transitions for all parts of the country.

We offer our ideas in the following six categories of policy design for a national CES moving through the regular order legislative process. We do not intend for this to be a comprehensive or prescriptive list, but we do consider these topics to be foundational to any national CES policy discussion.

1. Clean energy target, trajectory, and emissions outcomes
2. Baseline (starting point) for the standard
3. Coverage and point of regulation
4. Qualifying clean energy resources and credit tracking
5. Consumer protection and implementation provisions
6. Critical enabling and reinforcing policies

¹ Most CES policies to date are based on a target percentage of clean electricity supplies (can be referred to as a “rate-based” CES). Another approach to a CES is based on a target reduction in electricity sector emissions (called a “mass-based” CES). There are calculation methods to convert between a rate-based target and a mass-based target, so these approaches are not necessarily mutually exclusive.

Policy Design Features for a National CES

1. Target, Trajectory, & Emissions	<p>a. A national CES should be designed to be consistent with net-zero GHG emissions across the economy by no later than mid-century.</p> <p><i>Emissions outcomes are a key aspect of any national CES. Because a CES is a sector-based policy, it will need to work in tandem with other policies to achieve economy-wide emissions reductions. Policymakers should consider design options to ensure achievement or overachievement in terms of expected electricity emissions reductions.²</i></p>
	<p>b. A national CES should reward efforts that go beyond the standard to achieve faster deployment of clean energy resources or make deeper than required emissions reductions.</p> <p><i>Additional emphasis should be placed on actions that advance environmental justice through reducing criteria pollutants in and delivering benefits of new clean energy resources to historically burdened or EJ communities.</i></p>
	<p>c. A national CES should include or be accompanied by mechanisms to incentivize innovation.</p> <p><i>Directed policy support for innovation enables faster commercialization of a range of low- to zero-carbon technologies, which helps lower costs, eases technical challenges of achieving sector-wide decarbonization, and potentially allows for earlier achievement of CES targets.</i></p>
2. Baseline (Starting Point) for the Standard	<p>d. Policymakers should consider all existing clean energy resources when setting the baseline (starting point) for increasing the supply of clean energy under a national CES.³</p>
	<p>e. A national CES should be designed with awareness that entities subject to CES compliance start from different places in terms of their regional clean energy mixes.</p>
3. Coverage & Point of Regulation	<p>f. A national CES should cover all U.S. electricity generation and account for transmission, distribution, and storage losses.</p>
	<p>g. The most straightforward point of regulation for a national CES is at the provider of retail electricity service. Alternatively it could be set at the individual generator level. A national CES should cover all retail electricity service providers (or generators) regardless of size or ownership.</p>

² Such design options could include mass-based targets, interim year targets, or an accelerator mechanism designed to deploy clean resources faster if costs are lower than expected.

³ Policy issues regarding accounting for greenhouse gas emissions in the baseline, particularly for complex energy sources like biomass and natural gas, and addressing environmental and social impacts will need to be addressed as part of the CES framework.

	<p>h. A national CES should allow entities that demonstrate compliance with a more stringent state CES to be deemed in compliance with the national standard. It should also include provisions to avoid double-counting of clean energy credits and preserve the integrity of higher state standards.</p>		
4. Qualifying Clean Energy Resources & Credit Tracking	<p>a. A national CES should have a technology-neutral approach to qualifying for clean energy credits that encourages a rapid modernization of the electric generating fleet while incorporating existing clean resources.⁴</p>		
	<p>b. Options regarding the role of unabated natural gas under a national CES:</p> <p><i>The role of natural gas in a national CES is particularly complex. Our group was divided on this core design question, though we share the common goal/principle to speed the transition away from carbon-emitting coal-fired generation.⁵ We outline here the two prevailing views for policymakers to consider.</i></p>		
	<table border="1"> <tr> <td> <p><u>Perspective A:</u> Establish a natural gas partial crediting threshold. The partial credit could phase out over time, consistent with the ambitious long-term CES target.</p> </td> <td> <p><u>Perspective B:</u> Do not allow partial crediting of unabated natural gas.</p> </td> </tr> </table>	<p><u>Perspective A:</u> Establish a natural gas partial crediting threshold. The partial credit could phase out over time, consistent with the ambitious long-term CES target.</p>	<p><u>Perspective B:</u> Do not allow partial crediting of unabated natural gas.</p>
	<p><u>Perspective A:</u> Establish a natural gas partial crediting threshold. The partial credit could phase out over time, consistent with the ambitious long-term CES target.</p>	<p><u>Perspective B:</u> Do not allow partial crediting of unabated natural gas.</p>	
	<p>c. A national CES should allow international clean electricity imports to qualify for compliance, provided that there are mechanisms in place to address the potential for emissions leakage and/or resource shuffling, and for environmental justice and environmental impact concerns.</p>		
<p>d. Under a national CES, federal credits should be issued and retired separately from state clean energy credits.</p>			
5. Consumer Protection & Implementation Provisions	<p>a. A national CES should be designed to mitigate costs to consumers. Cost containment mechanisms (e.g., credit banking and trading) should provide flexibility options for entities subject to CES compliance but should not undercut the environmental integrity of the CES.</p>		
	<p>b. Policymakers should identify priority uses of any potential revenue from a CES—e.g., low-income bill assistance, environmental justice, supporting workers and communities dependent on fossil fuels, and incentives for energy efficiency and clean infrastructure deployment—although resources outside of CES revenue will be needed to sufficiently support any of these goals.</p>		

⁴ With additional consideration to address varying greenhouse gas emissions reduction benefits and potential environmental justice and environmental impact concerns across technologies.

⁵ Those with Perspective A believe that allowing early partial crediting of natural gas will contribute to faster displacement of higher emitting coal-fired power plants, which in turn reduces criteria air pollution emissions and drives faster local air quality and human health benefits. Those with Perspective B believe that partial crediting could lead to an overreliance on natural gas and could result in stranded assets in future years, and that other policy mechanisms are more effective at addressing the transition away from coal.

	<p>c. To facilitate compliance with a national CES, policymakers should appropriate sufficient funds for relevant federal agencies to provide technical assistance to entities subject to CES compliance. Technical and financial support should also be made available to state and tribal governments that provide oversight of regulated entities.</p>
	<p>d. Policymakers should include compliance and enforcement mechanisms including public tracking, monitoring, and penalties.</p>
<p>6. Critical Enabling & Reinforcing Policies</p>	<p>a. Reforming transmission system planning processes to be better suited to the pace and scale of clean energy deployment should be an urgent priority to reduce the costs and ensure the success of a national CES.</p>
	<p>b. Policymakers should support strategies to proactively reduce and avoid environmental conflicts to expedite the low-impact siting of clean energy and related infrastructure.</p>
	<p>c. Policymakers should support strategies to achieve greater energy efficiency throughout the economy. Energy efficiency and conservation measures are some of the most cost-effective ways to reduce emissions and lower consumer energy bills, and could lower the overall costs of implementing a national CES.</p>
	<p>d. Policymakers should support strategies to reduce upstream methane emissions associated with natural gas production and use, consistent with a goal of net-zero GHG emissions across the economy by no later than mid-century.</p>
	<p>e. Policymakers should support electricity sector innovation that increases the reliability, flexibility, resilience, and affordability of clean electricity in a net-zero economy through a portfolio of policy approaches including financing support, direct funding, early-stage research, supporting regional consortiums, etc.</p>
	<p>f. Policymakers should support strategies to protect against potential increases in localized environmental pollution resulting from a rapid transition of the electric generating fleet to clean energy resources, while prioritizing pollution reductions in historically burdened or EJ communities.</p>
	<p>g. Facilitating an economic transition for fossil fuel communities will be essential as the rapid transition to clean electricity advances. Policymakers should support strategies to help drive new investments to these communities.</p>