

# Today's Competitive Electricity Markets Are a Strong Foundation for Tomorrow's Grid

Takeaways From [\*“Scalable Markets for the Energy Transition: A New E3 Report”\*](#)



As we confront the challenge of how to reduce carbon emissions while continuing to provide reliable and affordable electricity, we must develop and embrace practical solutions that unleash competition to deliver the best results. The latest report from Energy + Environmental Economics (E3), with partial funding and support from EPSA\*, is an important addition to the conversation and affirms several core EPSA principles: Wholesale electricity markets and competition bring tremendous value to consumers and the grid – and must be allowed to do so to help deliver a sustainable, least cost energy transition.

## Key Findings and Takeaways Include:

### Competitive electricity markets must be preserved.

*To advance energy and environmental goals, the structure of competitive wholesale electricity markets as they exist today should be maintained and enhanced – not upended nor abandoned.*

- “The general structure of existing organized electricity markets in the United States – with separate but related markets for procuring capacity, energy, and ancillary services – should be preserved. These markets properly identify and efficiently procure the capabilities needed to ensure efficient and reliable operation of modern power systems. While E3 identifies needed reforms for each of these mechanisms, the general structure is sound and does not require a major overhaul (pg. 25).”

### Markets facilitate carbon reductions and clean energy development.

*Competitive electricity markets have enabled carbon reductions and brought cleaner energy resources to the grid.*

- Wholesale electricity markets have played an important role in facilitating carbon reductions to date. They have done this by:
  - leveraging the benefits of scale and diversity across broad geographic areas to facilitate the integration of large amounts of wind and solar generation;
  - reducing carbon emissions through more efficient generator dispatch; and
  - hastening the retirement of older, less efficient and more polluting resources by exposing them to the forces of competition (pg. 12).”
- “Wholesale electricity markets have not been a significant barrier; in fact, they have been key facilitators of clean energy development in the U.S. (pg. 25).”

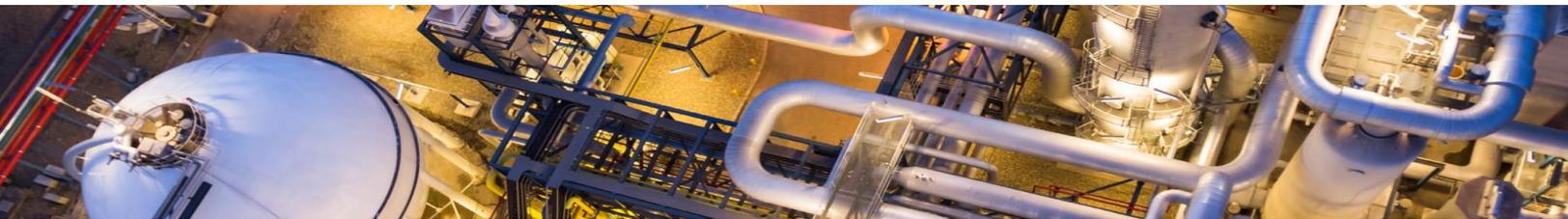
### Capacity markets are needed to ensure reliability.

*Reliable electricity is essential; ensuring resource adequacy must continue to be a key function of electricity markets. Therefore, capacity markets should continue to play an important role in power generation procurement.*

- “Capacity markets should continue to focus on capacity. Reliable electric power supply is critically important for life safety and the functioning of a modern economy, as recent events in Texas and California have reminded us. Ensuring resource adequacy is a key function of electricity markets. Capacity markets do not directly cause carbon emissions; emissions occur only when the resources are dispatched to provide energy and grid services (pg. 8).”
- “While flexibility and clean energy are both important to a well-functioning, reliable power system that also meets clean energy goals, other venues are better suited for procuring these attributes. Meanwhile, resource adequacy remains critical for a modern economy, meaning that capacity constructs continue to have an important job to do (pg. 28).”

## Potential Reforms: BCEM - A well-designed CES

*Economy-wide carbon pricing is the most efficient and effective solution to achieve broad, national emissions reductions. In lieu of political consensus to implement this ultimate goal, E3 has proposed a mechanism to advance similar objectives and pave the way for a transition to carbon pricing: A Bilateral Clean Energy Market (BCEM).*



*The proposed BCEM would contain the following attributes, all of which can be utilized in a well-designed Clean Energy Standard: uniform definition of the clean energy attribute, a single centralized attribute tracking system, and partial credit for lower-emitting resources.*

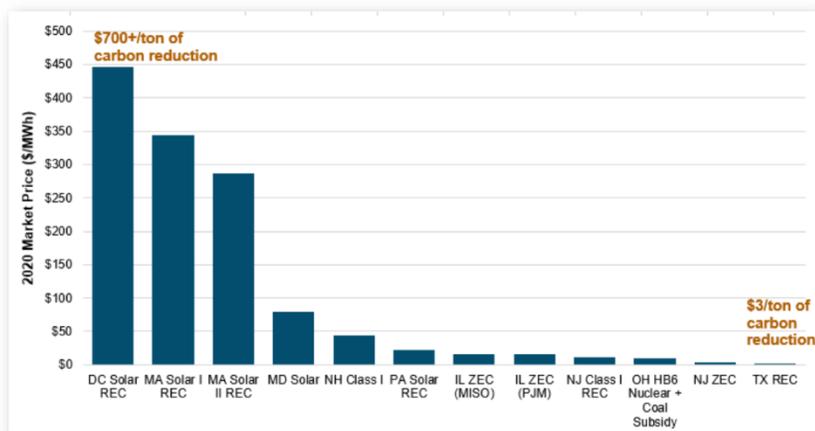
- “The BCEM approach is inherently scalable to the federal level and is consistent with recent policy proposals. In fact, the BCEM offers an ideal mechanism for implementation of a national clean energy standard as contemplated in the Biden administration’s American Jobs Plan and in the Climate Leadership and Environmental Action for our Nation’s (CLEAN) Future Act in the House of Representatives (pg. 47).”
- “A BCEM that accounts for differences in emissions intensity will provide an ideal platform for future carbon pricing policies needed for economywide decarbonization. In fact, a well-designed BCEM creates nearly identical incentives to a carbon price, which allows for a future transition to carbon pricing without disruptive cost shifts that create new winners and losers (pg. 50).”

*State-led, “bottom-up” clean energy policies do not achieve least-cost carbon reductions – and will become increasingly expensive as decarbonization targets become more ambitious.*

- “Today’s mix of bottom-up clean energy policies do not, collectively, achieve least-cost carbon reductions. Today’s smorgasboard of state and local clean energy policies... will become increasingly costly as carbon reductions become more ambitious (pg. 9).”

*Due to lack of uniformity in the definition of the clean energy attribute and fungibility across state lines, today’s clean energy incentives are paying anywhere from \$3 to \$700+ per ton of carbon abatement (Figure 4, pg. 36). A regional price on carbon of just \$10/ton in PJM would reduce emissions by 28% by 2030 ([Least Cost Carbon Reductions in PJM, Energy + Environmental Economics, Oct. 28, 2020](#)).*

Figure 4. Current Market Prices per MWh Vary Widely by Market



“As presently implemented, clean energy standards do not provide incentives for more frequent dispatch of lower-emitting resources over higher-emitting ones. If clean energy standards are the primary policy for carbon reductions, they may result in a missed opportunity to reduce near-term emissions via fuels switching and hasten the retirement of more carbon-intensive resources (pg. 31).”

Source: [Scalable Markets for the Energy Transition: A New E3 Report](#), May 2021, pg. 36

Founded in 1989, **Energy + Environmental Economics (E3)** is a fast-growing energy consulting firm that helps utilities, regulators, policy makers, developers, and investors make the best strategic decisions possible as they implement new public policies, respond to technological advances, and address customers' shifting expectations.

Because E3 works with clients from all sectors of the electricity industry, they provide a 360-degree understanding of markets, planning, policy, regulation, and environmental factors. Just as important, **they are committed to delivering clear, unbiased analyses that help clients make informed decisions.**



**EPSA is the Electric Power Supply Association**, the national trade association representing a diverse group of competitive power suppliers.

Collectively our member companies own and operate **about 150,000 megawatts (MW)** of power generation capacity across the United States and parts of Canada. These companies operate all generation resources and technologies including natural gas, coal, wind, solar, hydropower, geothermal, nuclear, biomass and battery storage.

In all, EPSA member companies have **enough power capacity to meet the needs of 117 million homes.**



## EPSA Member Companies Include:



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*E3 retained full editorial control over the report and is solely responsible for all its contents.*