



# CITIZENS UTILITY BOARD OF OHIO

## Proponent Testimony by Tom Bullock on House Bill 197 Executive Director, Citizens Utility Board of Ohio House Public Utilities Committee September 20, 2023

Chairman Stein, Vice-Chair Blasdel, Ranking Member Weinstein, and members of the House Public Utilities Committee, thank you for the opportunity to submit proponent testimony on House Bill 197 (HB 197), a bill to offer consumers the choice, without mandates, of community solar subscriptions by enabling community solar projects in Ohio, with the additional benefit of providing economic growth in both rural and urban areas. My name is Tom Bullock, and I am executive director of the Citizens Utility Board of Ohio (CUB Ohio).

CUB Ohio is a statewide consumer organization working on behalf of residential and small business utility customers. We are a nonpartisan nonprofit, and we work for cheaper bills, reliable service, transparency, consumer rights, and clean, healthy energy delivered equitably to all consumers.

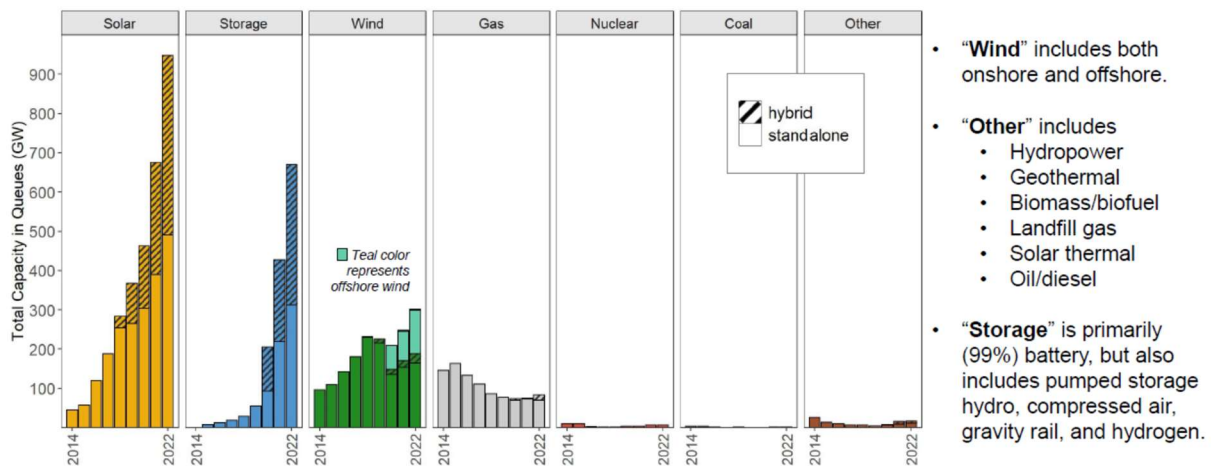
### Why Solar? What Is The National Market Saying About Solar?:

Consumers are interested in solar because, for several years now, it has been the least expensive source of energy, according to the International Energy Agency. Ohio consumers can shop as part of our state’s energy choice policies, and they will benefit from expanding low-cost, affordable solar as a choice in our state.

Aside from consumers, who like choice and low-cost energy options, what is the power generation market saying about solar? A 2023 study by the Berkely National Laboratory shows that the market is clearly and emphatically choosing solar. It found that:

- Developer interest in solar, storage, and wind is strong;
- Proposed capacity is widely distributed across the U.S., with Ohio’s regional grid (PJM) in the top three.

### **Over 2,000 GW (2 TW) of generation & storage capacity active in queues; Especially strong developer interest in solar (~947 GW) and storage (~680 GW), including hybrids**



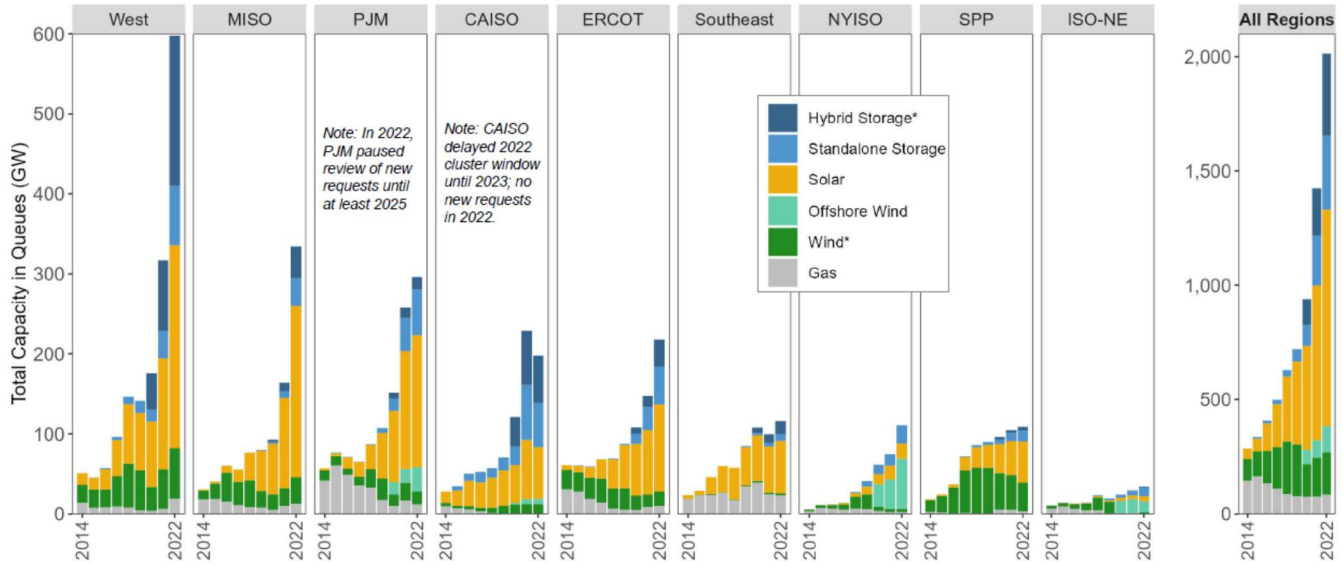
- “Wind” includes both onshore and offshore.
- “Other” includes
  - Hydropower
  - Geothermal
  - Biomass/biofuel
  - Landfill gas
  - Solar thermal
  - Oil/diesel
- “Storage” is primarily (99%) battery, but also includes pumped storage hydro, compressed air, gravity rail, and hydrogen.

See <https://emp.lbl.gov/queues> to access an interactive data visualization tool.



Notes: (1) \*Hybrid storage capacity is estimated for some projects using storage-generator ratios from projects that provide separate capacity data, and that value is only included starting in 2020. Storage duration is not provided in interconnection queue data. (2) Wind capacity includes onshore and offshore for all years, but offshore is only broken out starting in 2020. (3) Hybrid generation capacity is included in all applicable generator categories. (4) Not all of this capacity will be built.

**Active queue capacity highest in the non-ISO West (598 GW), followed by MISO (339 GW) and PJM (298 GW). Solar and storage requests are booming in most regions.**



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Source: "Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection As of the End of 2022", Lawrence Berkely National Laboratory, April, 2023.

This gives us an idea of why energy industry analysts and business leaders see a compelling business case for solar. For instance, earlier this year, Brian Moynihan, CEO of the Bank of America, spoke in Ohio at the City Club of Cleveland and talked about the ability of capitalism to align talent and resources to solve problems and accomplish goals. He raised as an example the solar development, and he reported that private money from business and investors is being leveraged by tax credits, which he described as a successful policy. He noted that what business needs today from government policy is not financial assistance but permitting approvals.

**What HB 197 Does:**

Under current Ohio law, community solar is not permitted. As the bill sponsors describe, HB 197 would remove red tape to open a new market sector in the energy industry, attract economic investment, create jobs, drive innovation, support a stronger and more resilient grid, and provide access to consumers and small businesses affordably priced solar power. Specifically, HB 197 would allow electric customers to subscribe to a community solar facility with a generating capacity of up to 10 megawatts (MW) on a conventional site or 20MW or less on a distressed property site (e.g. a brownfield) to receive bill credits towards their electric bills for electricity produced by the facility. The Public Utilities Commission of Ohio would play an important role in pricing, managing the project queue, and consumer protection.

## Community Solar—and Energy Innovation— Offers Cost Advantages to Companies and Consumers:

CUB Ohio supports community solar since it can make the price of Ohio solar affordable for small business and residential consumers, including low- and moderate-income consumers. In general, CUB Ohio supports consumer access to clean energy that is *affordable* so that, as state government works to improve air quality and reduce the climate impacts of energy generation, it does so in a manner that is within the means of Ohio families and small businesses. Community solar can be an important tool in Ohio to do so.

In addition to lowering electric bills for subscribers, community solar can improve the power grid's reliability and reduce the need for expensive power plants and mitigating transmission costs, capacity constraints, and overall grid congestion, reducing market prices for all.<sup>1</sup>

Fast-dropping wind and solar prices, now ranking nationally among the lowest for any energy source, have helped greatly to make zero-emissions power affordable for large consumers. This has prompted [more than 150 companies across sectors to increasingly choose fixed-cost renewables, contracting 35 GW of wind and solar to power their businesses](#). A sampling of better-known companies include:

- Ohio companies such as Eaton Corporation, Cargill, General Motors, Procter & Gamble, FirstSolar, Budweiser/Anheuser-Busch, Dannon, Campbell's Soup, and Nestle;
- [national companies and iconic products](#) such as Lego, Mars/M&Ms, Walmart, Target, Disney, McDonald's, Johnson & Johnson, and Clorox.

HB 197 would allow not just these large companies, but also medium- and small businesses as well as residential customers, similar price advantages of scale. **Companies today are increasingly working to achieve compliance with Environmental, Social, and Governance (ESG) criteria** in order to comply with bid requirements from companies such as Honda and to attract and keep ethically-focused investors who now make ESG a central element in investment decisions. **Ohio companies positioning themselves to meet these contract requirements may find that community solar provides an affordable option for mid-sized and small Ohio businesses to do so** (whereas utility scale clean power has been a tier dominated by very large companies).

Solar pricing, like most commodities, becomes less expensive as it achieves scale:

- a small solar project at your home or small business that is 10- to 50-KW in size could cost \$2.00 per watt to install;
- a medium-sized 500KW to 5MW solar project might cost \$1.10 to \$1.80/watt; and
- a large utility scale project of 100MW might cost less than \$1.00/watt to install.

Beyond even solar, the market has begun to shift the electric grid from analog to digital. Many new technologies are here or soon arriving, such as smart thermostats, energy storage, two-way power transfer between EVs and the grid, and more. This will unlock new value for consumers and our economy: lower prices, lower environmental impacts, better information, and more control over our monthly bills.

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<sup>1</sup> Overall, expert studies have shown that distributed and diversified resources can help reduce electricity system costs on a national scale, and an Ohio community solar policy would allow many more Ohioans to participate in providing that value. Source: Vibrant Clean Energy, *Why Local Solar For All Costs Less: A New Roadmap for the Lowest Cost Grid* (2020), [https://www.vibrantcleanenergy.com/wp-content/uploads/2020/12/WhyDERs\\_TR\\_Final.pdf](https://www.vibrantcleanenergy.com/wp-content/uploads/2020/12/WhyDERs_TR_Final.pdf).

## What Is Community Solar and How Does It Work?:

Community solar is a program for people who want to offset their electricity usage with solar, without actually purchasing solar panels. This is a great program for renters or people with shaded roofs, and it allows consumers to save money on their electric bills from energy produced by larger, offsite solar projects, similar to how consumers would save on their electric bills if they installed panels on their own property.

The owner of the offsite solar project pays the upfront costs to build, maintain and connect it to the utility's power grid. When consumers sign up for community solar, they are subscribing to a portion of the project's monthly output. The community solar provider will analyze a household's energy demand to determine the subscription size. Each month, consumers pay the community solar provider for the amount of electricity generated by their subscription. The provider then reports the output of their subscription to the utility, and the utility company adds credits to their electric bill equal to that output. To participate in the program, consumers must be an electric customer in the utility territory where the community solar project is built. Consumers who move to a new home or location within the same utility territory can take their subscription with them.

### HOW COMMUNITY SOLAR WORKS

**MANY CONSUMERS ARE INTERESTED IN SOLAR POWER, BUT CAN'T INSTALL PANELS ON THEIR HOME.** Maybe their house has too much shade, or they live in an apartment.

With community solar, you don't have to install panels. **YOU, YOUR NEIGHBORS AND BUSINESSES CAN SUBSCRIBE TO A PORTION OF A COMMUNITY SOLAR GARDEN.**

How you pay for it depends on the offer you sign, but your subscription helps the developer fund the garden. **IN RETURN, YOU GET A CREDIT ON YOUR ELECTRIC BILL** in proportion to your share of the electricity the solar garden produces.

ELECTRIC BILL	
YOUR USAGE	\$
<b>CREDIT!</b>	\$
TOTAL	\$

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There are many reasons why a consumer may not be able to install solar on their own property. They may:

- Lack sufficient space for ground-mounted solar;
- Have a roof whose condition, surface, is not conducive to solar;
- Have a roof whose orientation or configuration is not conducive to solar (lacking sufficient south- or west-facing surface area);
- Have large trees shading the area, making solar unviable;
- Rent their home, lacking legal authority to modify the property upon which they live;
- Live in a large multi-family property, the roof of which will be small compared to the power load;

- Be about to sell their property or face other uncertainty about their ownership status, thereby creating reluctance on the part of the owner to install a solar system; or
- Lack finances to afford construction of a solar system.

For consumers meeting any of the above circumstances, community solar is a great option since it overcomes each one.

**Conclusion:**

Thank you for the opportunity to provide proponent testimony on behalf of HB 197. I am happy to answer your questions.