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EnergyVision 2030

Consumer Benefits Companion Brief

Building a Consumer-Centric Energy System

A Transparent Approach That Benefits All

Modernizing the energy system will allow states to grow their economies, create job opportunities, improve the reliability of the energy grid, and provide significant environmental, climate, and health benefits. Implementing these reforms also offers an opportunity to ensure that the benefits of a clean energy future are equitably distributed among residents. Consumers must be at the center of the energy system. Currently they are only expected to act as passive purchasers of energy; in an updated system, consumers should have many opportunities to take on more active roles in decisions that will influence the success of the clean energy future. Consumers can choose to purchase electric vehicles, renewable energy, and upgraded grid technologies. In their homes, businesses, and communities, solar energy, heat pumps, and energy efficiency measures can be installed. To fully attain the potential of these technologies, a clean energy future must benefit all residents and consumers no matter their income level or geographic location. A consumer-centric energy system can provide benefits in all key areas of the system.

Empowering Energy Consumers

Though energy consumers ultimately pay billions of dollars into regional and state energy systems every year, their voices are rarely heard and their interests are not always well represented.

Ensure Basic Consumer Protections

An updated energy system should protect consumers. Basic consumer safeguards must be built into an equitable energy future—from avoiding winter shut off for customers behind on their bills to safeguarding against abuse of energy markets. The rules governing the new system should make consumer protection a basic right.

Bring Consumers into the Decision Making Process

As the future energy system is designed, policymakers need to ensure consumer voices can be heard at the regulatory level. One way to strengthen consumer voices

is through the use of stakeholder councils, which can provide meaningful and informed input into the planning processes and bring together diverse interests to identify, discuss, and address complex issues and provide recommendations, leading to greater buy-in and ownership by those interests in eventual decisions. Several states in the Northeast utilize stakeholder councils for energy efficiency and other aspects of system decision making; these models could be extended to additional areas of the clean energy system.

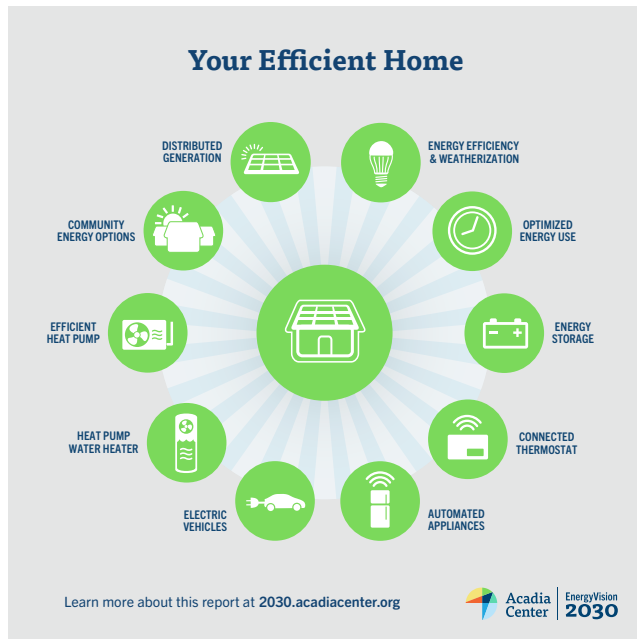


Update Regulations to Incentivize Clean Energy Infrastructure

Current utility regulations were designed for the energy system of a century ago, with large generation stations sending power in one direction to consumers. Today, power needs to flow in multiple directions to be most clean and efficient. Rules and regulations have begun to be revised, but much more work is needed to bring them into step with the clean energy systems of the future.

Consumers need to be compensated for the full value that their clean energy technologies provide to the power grid. Meanwhile, utilities should be incentivized to improve consumer access to clean energy technologies while also upgrading power grids to take advantage of

those technologies. Current regulations allow utilities to earn more money on building traditional infrastructure, like poles, wires, and pipelines, than on distributed resources, which are often a fraction of the cost. This practice ensures that the utilities will continue undervaluing these newer resources. Rules controlling utility monopolies and distributed energy generation need to be revised to ensure that utilities are not using them to distort markets for clean energy.



Plan for a Consumer-Focused Power Grid

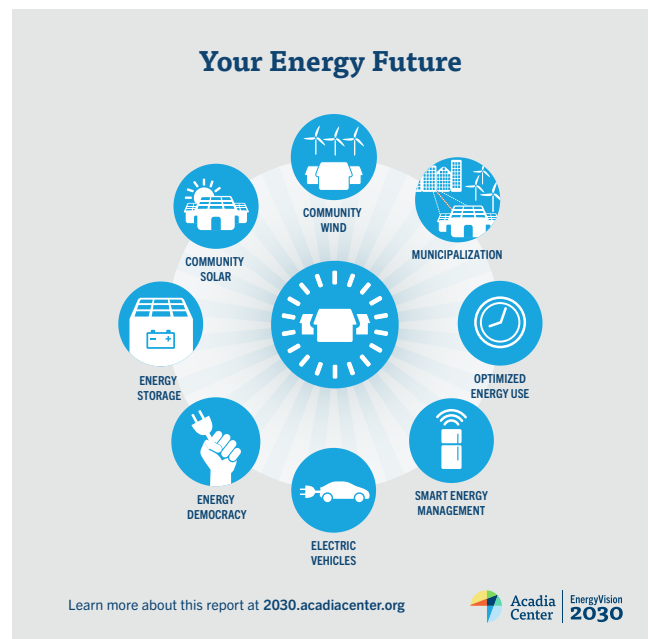
Long-term plans for the grid must be more comprehensive, merging use of traditional poles and wires with new technologies and modern strategies. Utilities should include cost-effective distributed energy resources in their forecasts and consider them when looking for solutions to upgrade the grid. Cost-benefit calculations should be expanded to include the multiple benefits of smart technologies that promote efficiency instead of focusing narrowly on the grid benefits of these resources.

Strengthening Community Engagement

The clean energy system presented in EnergyVision 2030 will promote and support community energy projects. Community energy pulls together community residents, businesses, and other local interests into a localized, mini energy system and offers increased

access to affordable, local energy for all residents. It also expands local job opportunities.

Community-based energy is dynamic and employs a number of clean energy technologies that improve efficiency (like energy efficient lighting and heat pumps) and technologies that generate clean electricity (like local solar and wind farms). Community energy can allow neighbors to aggregate their energy use, buying from suppliers as a group, and even operate independently of the larger grid. Properly planned and designed, community energy systems are more resilient than the traditional grid and take advantage of system efficiencies to offer smarter, more flexible, and more affordable power.



The following steps can help smooth the way for community energy in the Northeast.

Make State-Level Changes to Increase Community Engagement

New approaches are needed to help empower communities to reap the benefits of local energy. States can update zoning regulations and building codes to allow local planning to encourage community energy. As they develop approaches to community energy, states should ensure fair and equal access to programs such as those for energy efficiency and distributed solar, particularly for renters and constituencies who may need additional support, like low- and middle-income communities.

Communities should be empowered with additional decision-making authority in energy system planning and owning distributed energy resources.

Integrate Community Energy into Grid Planning

Utilities and grid operators need to begin to see community energy projects as a resource used within the planning process, instead of something to be planned around. Power generated by community resources can replace generation from power plants and can defer costly upgrades to the system in other areas. Energy storage and variable rates for charging electric vehicles can reduce demand at its peak when it is most expensive. Community energy and microgrids can benefit the larger grid by relieving congestion and improving reliability. The rules that govern how the system is planned need to reflect this new world.

Improving Health Outcomes for All

A low-emissions energy system has benefits beyond preserving the planet and consumer wallets—people’s health will improve, too. Since 2009, New England, New York, and the other states that participate in capping emissions through programs like the Regional Greenhouse Gas Initiative have saved lives as emissions have fallen. Emissions reductions driven by RGGI have meant 8,000 fewer asthma attacks, 39,000 fewer sick days, and \$5.7 billion fewer health expenses.¹

Deep emissions reductions from energy efficiency alone have also provided similar regional and local health benefits. Residential energy efficiency has been shown to improve the overall mental and physical health, including asthma, of building occupants.² These benefits have been observed especially in lower income homes and among people with preexisting conditions.

While local air pollutants from fossil-fueled power plants have been reduced, there is a tremendous opportunity to reduce emissions from vehicles and fossil-fuel heating systems, where pollution control technologies are far less sophisticated than in large power plants. Converting

to electric vehicles and electric heat pumps will dramatically reduce local pollution in addition to reducing GHG emissions more generally.

A modern energy system will give all consumers greater control over their energy supply and how the energy system impacts their environment. This control will allow them to make choices that can improve their families’ health while contributing to a system that will improve health globally.

References

- 1 Abt Associates, “Analysis of the Public Health Impacts of the Regional Greenhouse Gas Initiative, 2009–2014” (2017) <http://abtassociates.com/AbtAssociates/files/7e/7e38e795-aba2-4756-ab72-ba7ae7f53f16.pdf>
- 2 E4The Future, Inc., “Occupant Health Benefits of Residential Energy Efficiency” (November 2016) <https://e4thefuture.org/wp-content/uploads/2016/11/Occupant-Health-Benefits-Residential-EE.pdf>

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