Energy Efficiency is a Right Now Solution

How does EE help Virginia families?

- The cheapest form of energy is the one never used. While generating facilities- no matter the source- can take years to permit and build, energy efficiency measures can be installed now.
- Weatherization saves low-income homeowners an <u>average of \$372</u> per year in energy costs.
- Energy Star Appliances save between 20-50% on energy bills over older, less efficient appliances.

Jobs: 76,685 EE jobs in Virginia (E4TheFuture 2024)

What about data centers?

- Data Centers can be made more efficient, too. EE measures can make the building more efficient, and even improve some processes, such as IT needs and cooling.
- Demand response programs can address load growth.
 - Ex. virtual power plants

What is Energy Efficiency?

Any appliance, program, or behavior that uses less energy for the same result, which in turn cuts energy bills, reduces pollution, and makes buildings more resilient.

Key Terms

EE Measures

Any changes to a structure that use less energy. These include LED lights, improved insulation, weather stripping around windows and doors, ENERGY STAR appliances, and smart devices.

Weatherization

Started in the 1970s, the federal Weatherization Assistance Program provides no-cost energy efficiency and health and safety improvements to low-income homes. Services often include changing out old, inefficient appliances for new, safer models, adding insulation, and repairing ventilation issues.

Demand Response Programs

Provide consumer incentives to encourage shifting electricity use away from peak (e.g., waking up, getting home from work, extreme hot and cold snaps).



Powering Virginia's Future

Why Does EE Matter?

A typical household saves \$576 per year on their energy and water bills as a result of appliance and equipment standards.

(U.S. Department of Energy)

- The average U.S. household spends \$2,000 annually on energy, and 10%-20% of that is wasted through drafts, leaks, and outdated systems.
- Energy efficiency saves Americans ~\$1.4 billion every year (ACEEE, 2023 prices), making EE a valuable tool in the face of soaring electrical costs.

EE Strengthens Our Economy

"Energy efficiency is America's most abundant energy resource." (ACEEE, Alliance to Save Energy & BCSE)

- Since 1980, advances in energy efficiency have reduced U.S. demand 66%.
- "We've built buildings and appliances that save more, do more, go faster, and last longer while using less energy." — Kara Saul Rinaldi, Testimony before Congress
- Efficiency reduces demand, protecting consumers from rising costs from data centers.