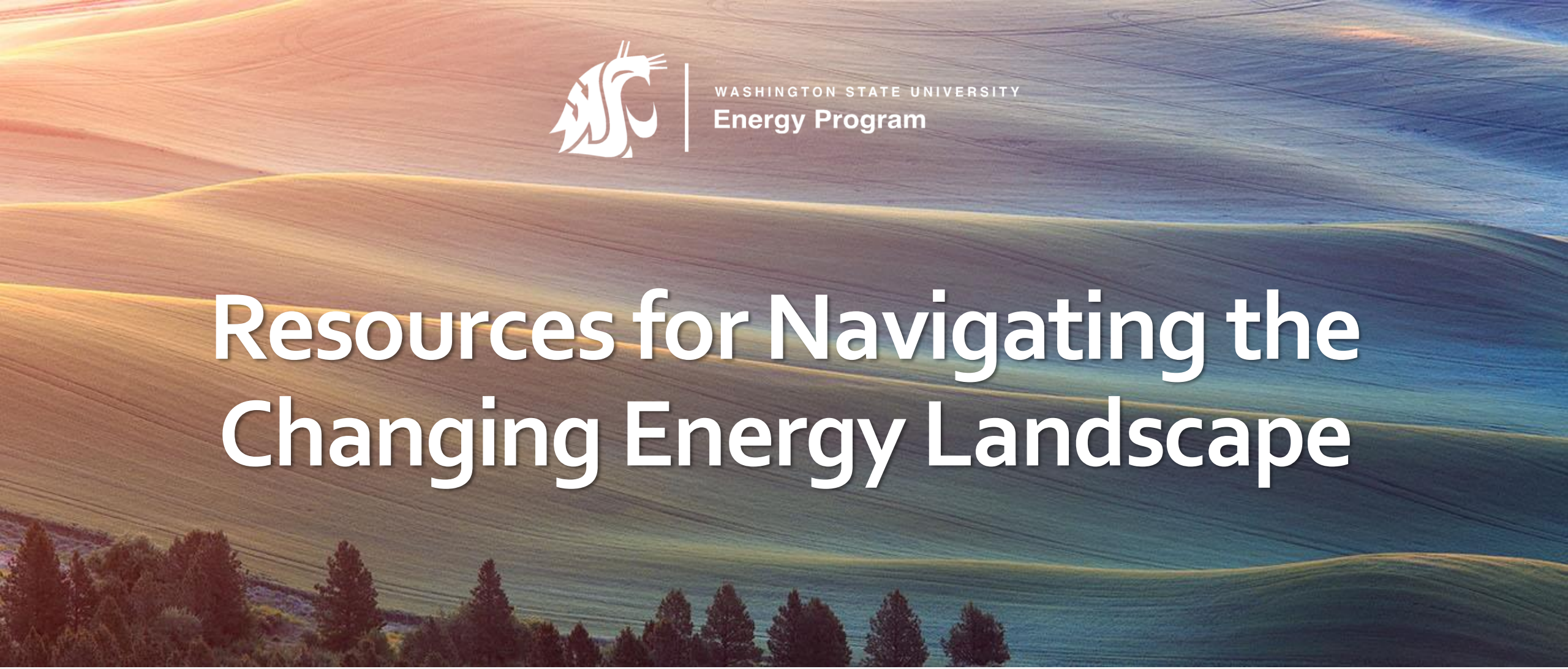


WASHINGTON STATE UNIVERSITY
Energy Program

Resources for Navigating the Changing Energy Landscape

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WSU Energy Program | energy.wsu.edu

The WSU Energy Program

Who Are We?

Our mission: Supporting people and communities across Washington and beyond in energy decision-making to power the future

- Part of the WSU Extension System
- Work state- and region-wide on grants- and contract-funded work

WASHINGTON STATE UNIVERSITY
Energy Program

Programs We'll Cover Today

- Washington Green Transportation Program
- Community Solar Expansion Program
- Energy Code Residential Technical Support
- Department of Energy Northwest Onsite Energy Technical Assistance Partnership



WSU ENERGY PROGRAM'S

Washington Green Transportation Program

Guidance for fleet electrification across the state of Washington

The WSU Energy Program's Green Transportation Program (GTP) aims to reduce fossil fuel use on Washington roads by promoting cleaner alternatives to gasoline and diesel. Our team works with fleets across Washington to transition to alternative fuel vehicles and equipment. We provide education and technical assistance to make the switch to renewable fuel easier and more cost effective.



Available Technical Assistance

- Guidance on vehicle and charging decisions
  - Total Cost of Ownership (TCO) analysis
- Route analysis
- Information sessions and planning resources
- Connections to dealers and potential stacking incentive opportunities
- Infrastructure planning and utility coordination
- General troubleshooting
- Spring 2027 Electric School Bus Accelerator Program

GREEN TRANSPORTATION PROGRAM

Success Story

Central Valley School District faced a challenge with their five electric school buses: their EVSE charging stations were "going to sleep" overnight. This prevented automated morning pre-heating for the buses and batteries, forcing them to draw on battery power during warmup and reducing their operating range. GTP collaborated with OEM engineers, dealers, and EVSE manufacturers to diagnose the issue. Together, they developed and deployed a software fix that keeps the stations connected overnight, ensuring the buses are fully charged and pre-heated before morning routes.



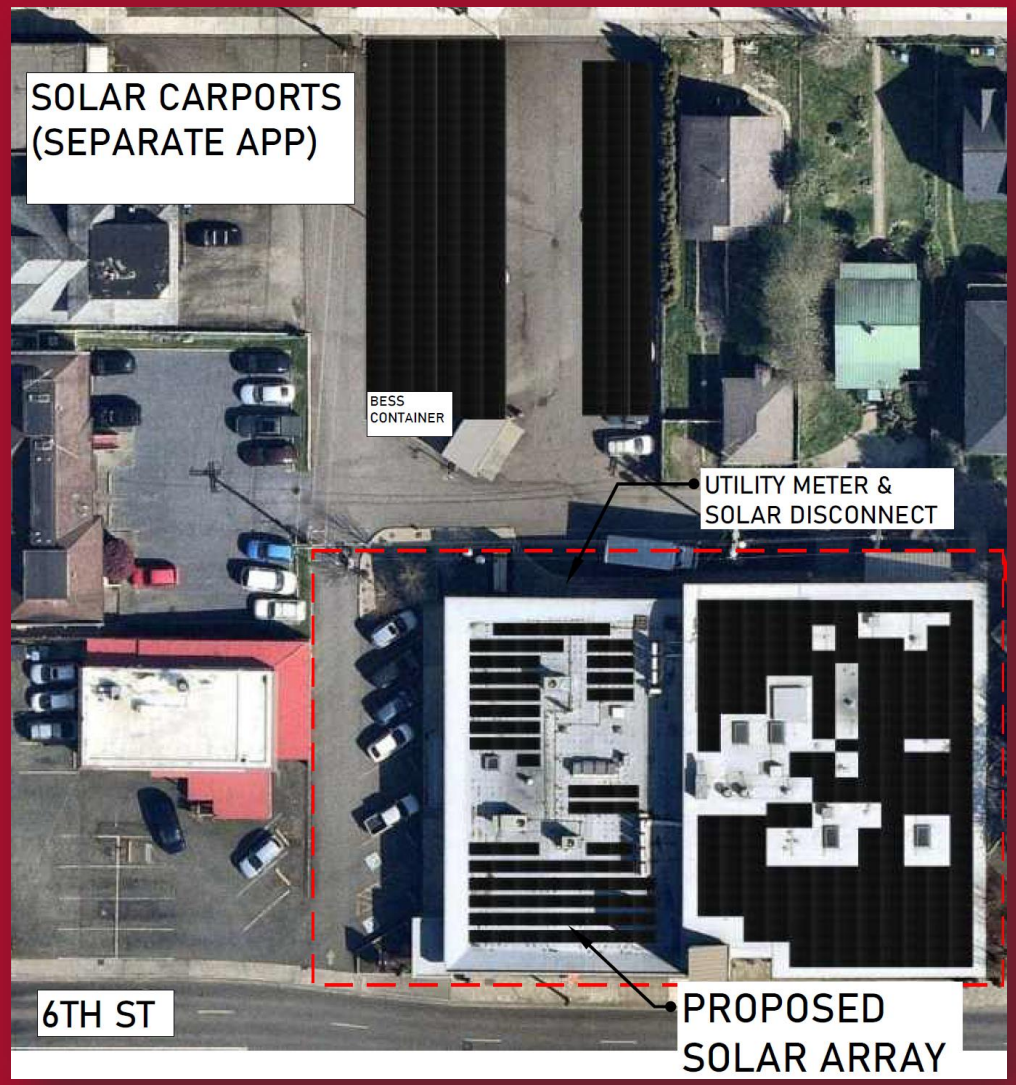
Inside of a single day I knew I was on the right track and was seeing charger and bus perform the way I intended. Thank you for your research and time and please don't hesitate to ask me to share my experience with others.

– Central Valley School District Transportation Shop Manager

COMMUNITY SOLAR EXPANSION PROGRAM

Program Overview

- Washington legislature passed 2SHB 1814 in 2022
- Total Funding: $100 million, $25 million per biennium
- Multiple qualified subscribers or a low-income service provider
- One-time incentive payment
  - Installed costs
  - Proportional funding
  - Provided after project completion
  - Administrative start-up cost
- Program Timeline
  - 2 years for project completion
  - Project initial submissions till June 30th, 2033
  - Project final submissions till June 30th, 2035



Eligibility

- Projects must directly benefit low-income community members
- Administrator: Utility, Nonprofit, Tribal Housing Authority, or Local Housing Authority
- Project size: 12 kWdc to 199 kWdc
- Site Serving Utility
  - Voluntary Utility Participation
  - Annual Limitation

COMMUNITY SOLAR EXPANSION PROGRAM

Application Process Overview



Helpline House (Bainbridge Island)

- Administrator: Nonprofit—Foodbank, services for the unhoused, emergency assistance, and other social services.
- System Metrics:
  - Solar: 99 kWdc
  - Battery: 120 kWh
  - Annual Generation: 87,000 kWh
- Community Impact: Direct battery storage back-up and solar savings support crucial social services for low-income households across Bainbridge Island.



Photo by Mike Seidle Photography

COMMUNITY SOLAR EXPANSION PROGRAM

Current Status

Fiscal Year 2026 July 1, 2025- June 30, 2026	Fiscal Year 2027 July 1, 2026- June 30, 2027	Fiscal Year 2028 July 1, 2027- June 30, 2028	Fiscal Year 2029 July 1, 2028- June 30, 2029	Fiscal Year 2030 July 1, 2029- June 30, 2030
Fully Obligated (no new projects can receive payment)				Funding Available
		Precertification Applications Open		
		Program Updates Applied		

WSU ENERGY PROGRAM'S

Residential Building Science and Codes

"Our team provides support to those who use the residential sections of the Washington State's Construction Codes, our current funding focuses on the residential energy code known as WSECR"



WSU Energy Program - Current or Available Services

- **Residential Construction Code Technical Support and Education**
  - Providing expert guidance and training on Washington State residential construction codes.
  - Thousands of homeowners, developers, builders, designers, engineers, and code officials rely on our services to navigate and comply with Washington's complex construction code requirements.
- **Weatherization and Advanced Program Oversight**
  - Delivering program oversight, technical support, quality assurance, and compliance monitoring for weatherization and advanced energy-efficiency initiatives.
- **Workforce Development and Trades Education**
  - Supporting workforce development through industry-focused education, training, and professional development opportunities within the building and construction trades.



WSU ENERGY PROGRAM'S

- **Professional Certification Programs**
  - Administering university-level certificate programs and industry-recognized certifications in partnership with organizations including the **Washington Association of Building Officials (WABO)**, **Home Builders Association (HBA) of Washington**, and the **American Institute of Architects (AIA)**.
- **Program Management and Technical Consulting**
  - Providing program management, technical consulting, and specification development services in the fields of energy conservation, building performance, and building decarbonization strategies addressing site energy impacts.
- **Customizable Program Solutions**
  - Developing tailored technical tools, resources, and program solutions to meet specific organizational and regulatory needs.
  - Example: The **2021 Washington State Energy Code Residential (WSEC-R) Web Tool**, developed by the WSU Energy Program, provides an accessible, user-friendly platform to support energy code compliance and implementation.



Technical Support Becomes a Technical Solution

The same residential expertise now supports interpretation, documentation, training and web-based compliance.

1. **ANSWER** Residential WSEC-R technical support
2. **TEACH** Training + educational resources
3. **EQUIP** Forms, checklists, sizing + C_3 resources
4. **BUILD** Web-based Residential Energy Code Calculator



Onsite Energy Program

The U.S. Department of Energy's (DOE) Onsite Energy Program provides technical assistance, market analysis, and best practices to help industrial facilities and other large energy users increase the adoption of onsite energy technologies.

battery storage | combined heat and power | district energy | fuel cells | geothermal | industrial heat pumps

renewable fuels | solar PV | solar thermal | thermal storage | waste heat to power | wind

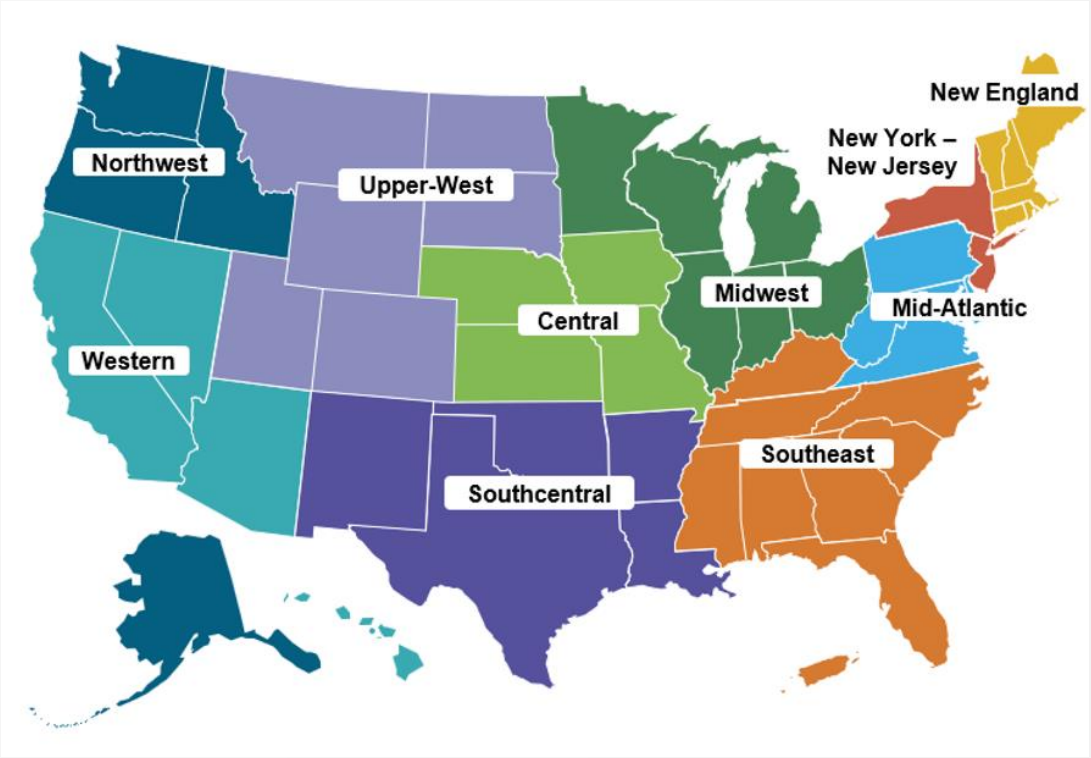


Onsite Energy Technical Assistance Partnerships (TAPs)

DOE's 10 regional Onsite Energy TAPs provide technical assistance to industrial facilities and other stakeholders about technology options for achieving onsite energy objectives. Key services include:

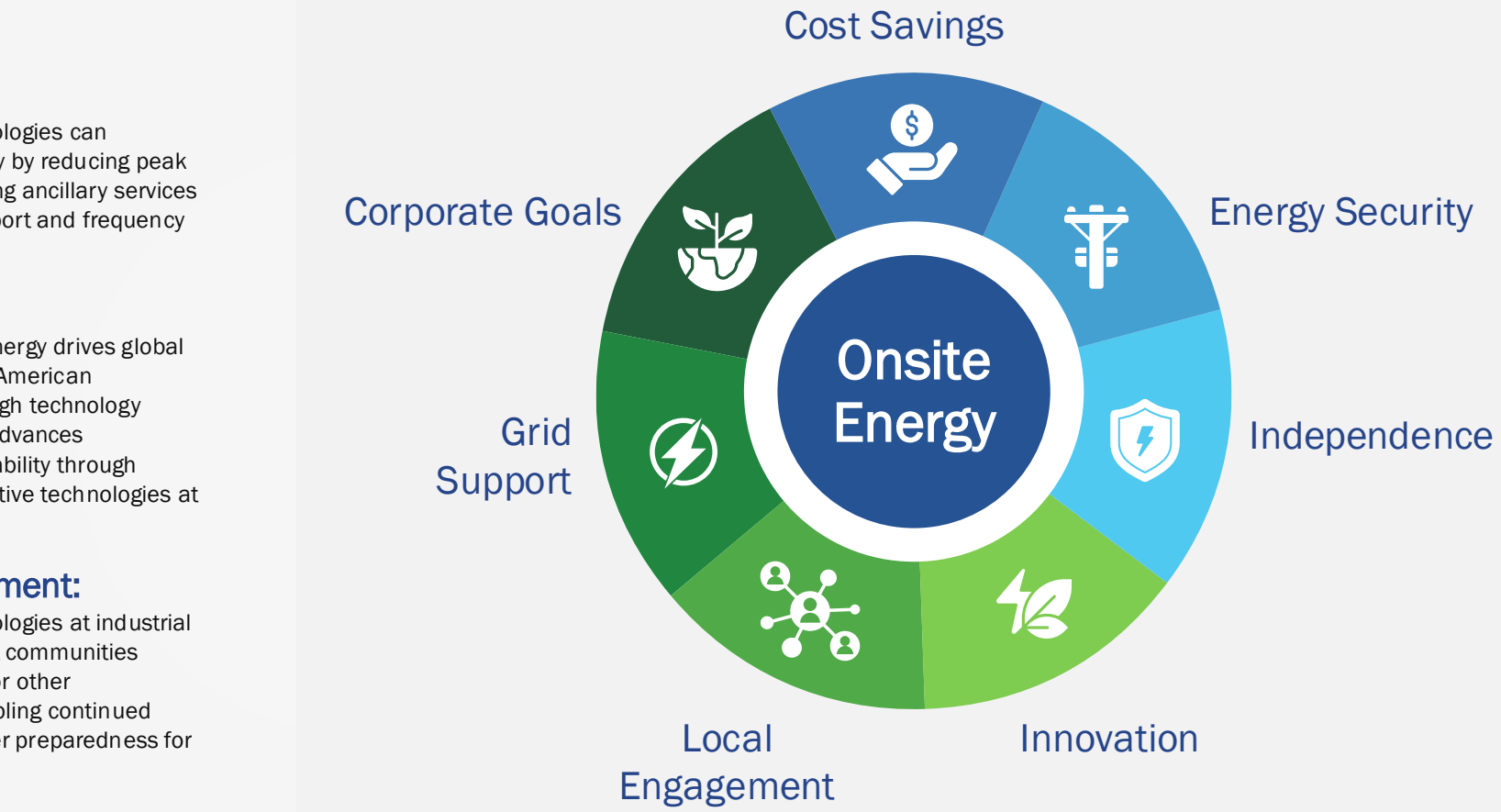
- **Technology screenings** and **data analysis** of economic and operational impacts of installing combined heat and power (CHP) and other onsite technologies.
- **Partnerships** and **engagements** with organizations representing industrial and other large energy users, such as data centers, to advance near-term solutions to energy needs and reduce costs with onsite energy.
- **Technical information** and **resources to educate** state and local government, industry, and other stakeholders to increase industrial competitiveness.

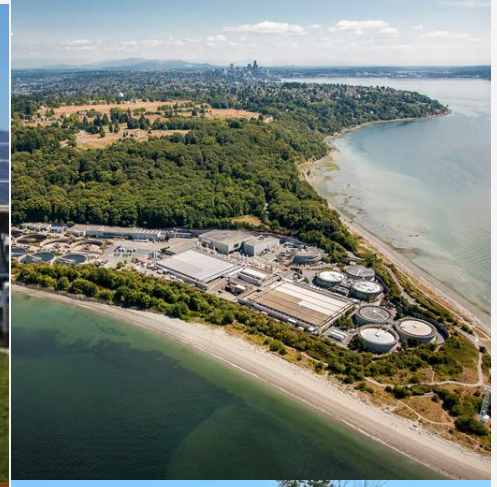
Onsite Energy Technical Assistance Partnerships
U.S. DEPARTMENT OF ENERGY



Onsite Energy Meets End-User Priorities

- **Cost Savings:**
  Significant cost savings can be achieved through utility bill reductions and the sale of excess electricity production back to the grid.
- **Energy Security:**
  Organizations can ensure uninterrupted operations during grid outages or emergencies with onsite energy solutions, enhancing operational reliability and reducing the risk of financial losses.
- **Corporate Goals:**
  Onsite energy deployment provides opportunities to help companies demonstrate corporate responsibility and align with their energy goals and other corporate goals.
- **Independence:**
  By reducing dependence on external energy sources, onsite energy systems enhance energy independence and security, mitigating risks associated with energy price volatility and supply chain disruptions.
- **Grid Support:**
  Onsite energy technologies can enhance grid stability by reducing peak demand and providing ancillary services such as voltage support and frequency regulation.
- **Innovation:**
  Investing in onsite energy drives global competitiveness for American manufacturers through technology modernization and advances affordability and reliability through integration of innovative technologies at the facility-level.
- **Local Engagement:**
  Onsite energy technologies at industrial facilities can support communities during grid outages or other emergencies by enabling continued operations and better preparedness for response efforts.







Other Areas at the Energy Program

- Residential and Commercial Energy Efficiency
- Emerging Energy Efficiency Technologies
- Distributed Energy Siting, Agrivoltaics
- Dairy Anaerobic Digestion
- Green Hydrogen
- Energy Workforce

Our mission: Supporting people and communities across Washington and beyond in energy decision-making to power the future.

Questions?





Visit Our Website

energy.wsu.edu

Contact Our Team

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Contact our Director

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