



Skagit County Clean Energy Siting and Permitting

Clean Energy Advisory Group (CEAG) Meeting

August 7, 2026



Presentation Overview

- Outline the differences between code development and development review processes
- Overview of CEAG focus areas
- Overview of uses being studied as part of project

Code Development vs. Development Review

Code Development vs. Development Review

Code development	Development review
✓ Identify where uses may be appropriate	✓ Review application for procedural completeness
✓ Identify the process for evaluating a use	✓ Review application for impacts, mitigation, and compliance with local, state, federal requirements
✓ Connect uses to applicable code sections which are applicable to the use	
✓ Develop code standards and application requirements applicable to future development proposals (where applicable)	✓ Review application for consistency with code requirements. County may require additional information and studies
✓ Complete non-project SEPA/Commerce 60-day notice	✓ Complete SEPA to evaluate project impacts (where applicable)
✓ Complete public process specific to legislative actions	✓ Public notice and opportunities to comment
✓ Once adopted, ensure forms, applications, staff training, and other measures are completed	✓ Appeals process depending on permit process

How Approach Benefits Skagit County

- Applicants know **where** they may **apply** for a use
- Current code classifies uses as utility development
- Applicants understand application requirements
- Provides an alternative process to the EFSEC permit process
- County will receive permit application materials and studies upfront which will address common impacts

CEAG Focus Areas



CEAG Focus Areas

- Where uses may be permitted (zones)
- Permit process for different application types
- Incentives which can facilitate uses and mitigate impacts
- Application requirements and studies
- Important to remember that one of the project goals is local control of permitting (vs. EFSEC process).

Energy Facility Type Overview



Solar

- Can be land use intensive (average of 4 acres per MW of generation) but panels can also be located on structures or developed land.
- Flat, south facing areas most conducive to siting.
- Electrical collection system required. Larger facilities have onsite substations.
- Today's technology focused on PV panels; can be on fixed tilt or tracking system.

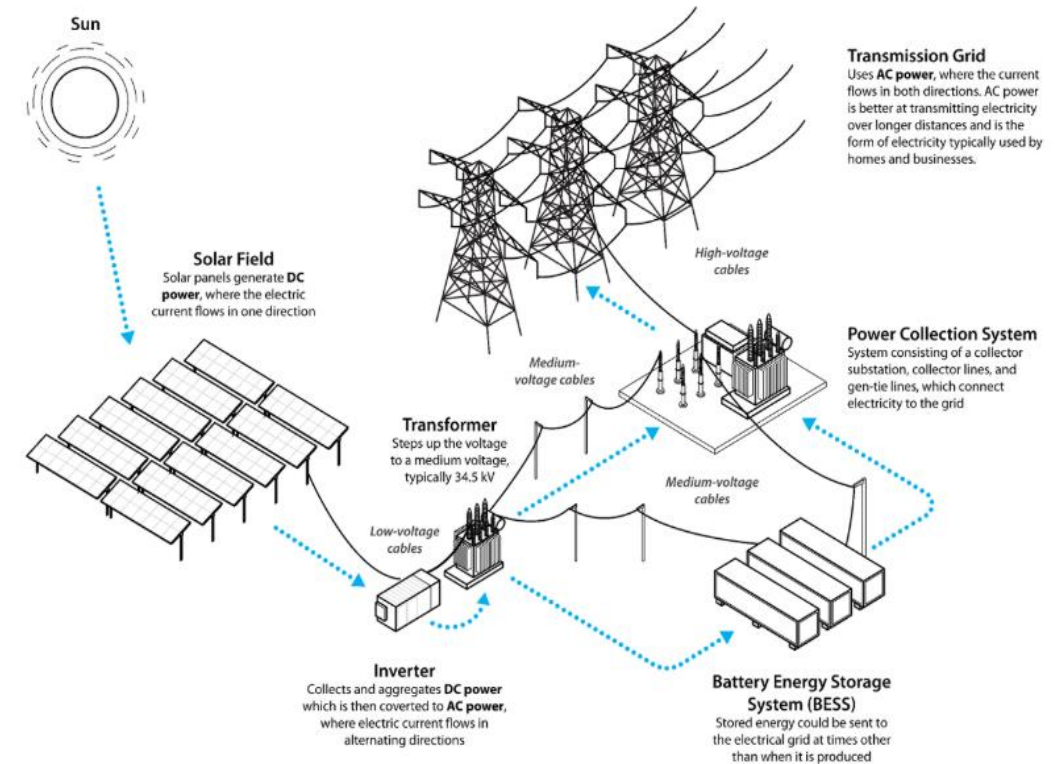


Figure 2-3. Typical components of utility-scale solar energy facilities

PEIS on Utility-Scale Solar

Utility-Scale Solar Energy Facilities

Solar

Concerns can include:

- Glint/glare to roadside surfaces or general visual impacts
- Noise from construction, inverters, transformers, substation
- Change to adjacent land values
- Traffic and road damage during construction

Minimization measures can include:

- Specify maximum tilt restrictions
- Limit land conversion by acreage
- Setbacks, traffic management plan, parking plan
- Encourage multi-use of land, such as solar over pre-existing development

BESS

- Battery chemistry varies and evolves.
- Most BESS are prefabricated systems.
- The self-contained enclosures may be located on a concrete pad, concrete pile, over gravel or within a warehouse-type enclosure.
- Containers for BESS are often around 40 feet by 8 feet by 8.5 feet.
- Should not be located in areas where flooding or standing water can occur.

BESS

- Maintaining setbacks, fire breaks or site wildland fire suppression systems are important to prevent fire from reaching BESS systems.
- Mitigation measures can include impermeable retention basins and/or other secondary containment.
- Noise and visual impacts may require additional mitigation.

Example of a BESS exterior



Example of a BESS interior



Photographs from Puget Sound Energy Glacier Battery Storage Innovation Pilot Project

Fusion SMRs

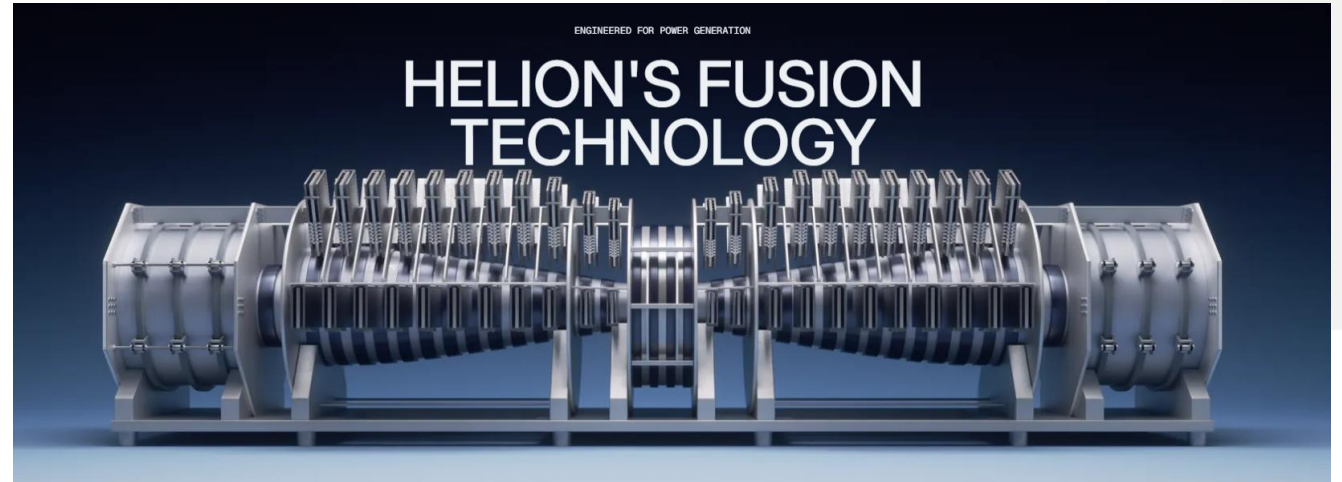
- County considering only Fusion SMR Code. (Fission SMRs must be permitted through EFSEC).
- SMRs are defined as advanced nuclear reactors that are modular in design, meaning components may be factory assembled and transported for installation, and utilize nuclear fusion reactions for fuel generation.
- Manufacturing facilities in Chelan County (Helion Energy) and Richland (Avalanche Energy).

Fusion SMRs (Cont.)

- Siting considerations may include seismic conditions, water availability, safety setbacks, and security setbacks.
- Main operational concern is related to waste at end of operations: tritium or similar radioactive waste can be produced.

Fusion SMRs

Avalanche Fusion



Fusion device components are required to continue to perform and maintain structural integrity while being exposed to acceleration, (vacuum) compression, extremely high temperatures and bombardment by high-energy particles.

Renewable Fuels

State Definition:

- **Biomass and organic waste:** Animal waste, solid organic fuels from wood, forest or field residues, and dedicated energy crops (excluding wood treated with chemical preservatives).
 - **Manufacturing by-products:** Bark, wood chips, sawdust, and lignin derived from pulping or wood manufacturing processes.
 - **Gas recovery:** *Landfill gas and gas captured from sewage treatment facilities.*
 - **Hydrogen:** Renewable and green electrolytic hydrogen produced using renewable resources.
 - **Biofuels:** Biodiesel and ethanol not raised on recently cleared old-growth or first-growth forest lands.
- Can be transported via pipelines as gas or can be cooled and transported as liquid (hydrogen).
 - Can be blended with other standard fuels, used in fuel cells or turbines, or directly combusted.

Renewable Fuels

Considerations:

- Infrastructure required for fuel (pipelines, combustion facility) is beyond scope of project and is not under current review.
- Federal regulation makes beneficial reuse of gas cumbersome – generating facilities are often reclassified by the EPA as energy production facilities vs. the gas being a waste by-product of primary operations
- Beneficial reuse of gas/gas recovery limits air emissions and can provide a valuable local energy source - generally limited to use directly by end user.

Next steps



Next steps

- Focus on key questions and feedback to assist PDS in developing a draft code
 - Aug 28 – Solar and BESS
 - September 11 – Renewable Fuels
 - October 9 – Fusion SMRs