Low-Carbon Energy Project Siting Improvement
Overview of State Siting Efforts and Agencies

DEPARTMENT OF ECOLOGY
State of Washington

Purpose

The Department of Ecology (Ecology), in partnership with the Department of Commerce (Commerce), is studying how to improve siting, environmental review and permitting processes for low-carbon energy projects in Washington. The study[1] will gather input to develop recommendations for the Legislature to improve permitting and siting processes for clean energy projects, while considering how to reduce impacts to the environment, Tribes, highly impacted communities and vulnerable populations.

This report compiles information to provide background and context for the siting study Advisory Board and Interagency Policy Team, Tribes, stakeholders and the public. It identifies current and planned siting work related to clean energy in Washington and other states. It also provides an overview of state agencies responsible for siting renewable energy facilities.

Current Siting Work in Washington

Washington Transmission Corridors Work Group[2]	Led by Washington Energy Facility Site Evaluation Council (EFSEC)

- Clean energy focus: Electric transmission and distribution facilities.
- The work group will identify areas where transmission and distribution facilities may need to be enhanced or constructed and environmental review options that may be required to complete the designation of transmission corridors. It will recommend ways to expedite review of transmission projects without compromising required environmental protection.
- Timeline: final report due December 31, 2022.

Compatible Energy Siting Assessment (CESA)[3]	Led by Commerce

- Clean energy focus: renewable energy projects.
- CESA is a project funded by the Department of Defense to support early and ongoing civilian-military coordination for compatible siting decisions. It will identify locations

[1] https://ecology.wa.gov/Air-Climate/Climate-change/Reducing-greenhouse-gases/Clean-Fuel-Standard/Low-carbon-energy-siting
[2] https://www.efsec.wa.gov/energy-facilities/transmission-corridors-work-group
[3] https://www.commerce.wa.gov/serving-communities/growth-management/growth-management-topics/military-base-land-use/

where activities overlap and provide guidance for early consultation between the military and developers. The work will include developing recommendations for streamlined processes and mapping resources to assist in clean energy facility siting.

- The work includes developing a mapping tool prototype.
- Timeline: end date is fall 2021.

Clean Energy Transformation Act (CETA)[4]	Led by Commerce

- Clean energy focus: clean electricity supply.
- CETA applies to all electric utilities serving retail customers in Washington and sets specific milestones to reach the required 100% clean electricity supply by 2045. It is intended to provide a roadmap for meeting the state's greenhouse gas emission limits in alignment with the State Energy Strategy[5].
- Timeline: first milestone is 2022, when each utility must prepare and publish a clean energy implementation plan with targets for energy efficiency and renewable energy.

Marine Spatial Plan (MSP)[6]	Led by Ecology

- Clean energy focus: marine renewable energy projects.
- The plan helps address the complex issue of managing a growing number of potential ocean uses. It provides a framework for state agencies and local governments to evaluate new proposed ocean uses. It includes enforceable policies and guidelines that regulate new ocean uses to help protect the coast's unique and sensitive ecological areas and supports sustainable economic, recreational and cultural opportunities.
- Provides an online mapping tool.
- Timeline: ongoing.

Growth Management Act Reform Task Force[7]	Led by Commerce

- The task force will provide recommendations regarding needed reforms to the state's growth policy framework, including the growth management act (GMA), state environmental policy act and other related statutes.
- Timeline: report on activities and recommendations due prior to the 2022 and 2023 legislative sessions.

[4] https://www.commerce.wa.gov/growing-the-economy/energy/ceta-overview/
[5] https://www.commerce.wa.gov/growing-the-economy/energy/2021-state-energy-strategy/
[6] https://ecology.wa.gov/Water-Shorelines/Shoreline-coastal-management/Ocean-management/Marine-spatial-planning
[7] https://app.leg.wa.gov/committeeschedules/Home/Document/235990

Growth Management Act Climate Guidelines[8]	Led by Commerce

- Commerce will develop draft guidelines for use in county and city comprehensive plans and development regulations. The guidelines will describe actions to reduce greenhouse gas emissions and per capita vehicle miles traveled. They may be used for developing and implementing climate change and resiliency plans and policies.
- Timeline: published by June 30, 2023.

Growth Management Act Washington Administrative Code (WAC) Update[9]	Led by Commerce

- Commerce will update the GMA rules to provide cities and counties clear guidance. The process will consider the designation and protection of resource lands of long-term commercial significance which could affect the siting of energy facilities.
- Timeline: complete by June 30, 2022.

Healthy Environment for All (HEAL) Act Implementation[10]	Implemented by state agencies

- The HEAL Act provides a framework for equitable community engagement and public participation and consideration of environmental justice.
- It directs agencies to create and adopt a community engagement plan that includes the use of special screening tools that integrate environmental, demographic and health disparities data, such as the environmental health disparities map. The plan will evaluate and understand the nature and needs of the people who the agency expects to be impacted by significant agency actions to overcome barriers to participation and processes that facilitate and support the inclusion of members of communities affected by agency decision making.
- Timeline: plan due by July 1, 2022.

Streamlined Solar Energy Facility Application[11]	Led by EFSEC

- Clean energy focus: solar energy projects.
- EFSEC developed an application form tailored for solar projects to meet requirements for EFSEC process and the State Environmental Policy Act. The form identifies relevant information and uses screening questions to identify if detailed analysis is needed.
- Timeline: being tested.

[8] http://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Senate%20Passed%20Legislature/5092-S.PL.pdf
[9] https://www.ezview.wa.gov/site/alias__1996/37681/overview.aspx
[10] http://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Session%20Laws/Senate/5141-S2.SL.pdf
[11] No link available at this time

Mapping Tool for Renewable Energy Projects[12]	Led by Department of Natural Resources (DNR)

- Clean energy focus: renewable energy project potential on DNR managed lands.
- Project Plan: To identify least-conflict renewable energy sites, the Clean Energy Program is beginning a project to map DNR trust lands for renewable energy and create a publicly facing map with information on these sites. Stakeholders and Tribes will be invited to provide input and DNR will incorporate information, processes and data from other state energy siting processes. The map will be used as a tool for marketing DNR properties for renewable energy and to gather and analyze data and stakeholder input on specific sites.
- Timeline: Map available by end of calendar year 2022.

Planned Future Siting Work in Washington

Washington Columbia Basin Least Conflict Solar Project[13]	Led by Washington State University

- Clean energy focus: solar.
- The Legislature directed Washington State University's energy program to conduct a least-conflict priority solar siting pilot project in the Columbia basin of eastern and central Washington. This program will engage all relevant stakeholders to identify priority areas where there is the least amount of potential conflict in the siting of utility scale photovoltaic solar and to develop a map highlighting these areas. The program shall also compile the latest information on opportunities for dual-use and colocation of photovoltaic solar with other land values.
- Timeline: Work begins fiscal year 2023.

Siting Work in Other States

- **California**: San Joaquin Valley Least Conflict Solar Project[14]
    - Stakeholder-led process to identify least-conflict lands for solar development in the San Joaquin Valley. Stakeholder working groups used mapping tools to identify opportunity or least-conflict areas and provide context, then these were combined and used to identify composite least-conflict areas.

[12] No link available at this time
[13] http://lawfilesext.leg.wa.gov/biennium/2021-22/Pdf/Bills/Senate%20Passed%20Legislature/5092-S.PL.pdf
[14] https://sjvp.databasin.org/pages/least-conflict/

    - Stakeholder groups included solar industry, agricultural farmland, and environmental conservation, military and agricultural rangeland. The composite information was then shared with 28 Tribes with cultural affiliation to the valley.
    - The project identified 470,000 acres of least-conflict land, amounting to roughly 5% of the 9.5 million acres in the stakeholder study area.
- **Maryland:** Governor's Task Force on Renewable Energy Development and Siting[15]
    - The task force examined renewable energy siting issues and explored development on brownfields, as well as streamlining of state permitting processes. A particular focus was siting of utility-scale solar on farmland.
    - The effort included key state agencies and representatives of the agricultural community and local governments, as well as solar and wind industries.
- **Maryland**: SmartDG+ Map-based Screening Tool[16]
    - Online, map-based screening tool to help developers and officials identify promising areas for location of new wind or solar projects over two megawatts.
    - Includes several individual layers as well as multiple static screening scenarios involving infrastructure proximity, resource availability, and land suitability.
- **Maryland**: Solar Facility Siting Guidance[17]
    - Guidance to local governments on strategies to minimize impacts of utility-scale solar facilities on agricultural lands and ecologically important areas, and to help facilitate the siting of solar facilities on developed lands and brownfields.
    - Information and tools facilitate the development and adjustment of local land use plans and recommendations for solar facility siting to achieve local goals and objectives.
- **Massachusetts**: Solar Massachusetts Renewable Target Program (SMART)[18]
    - Long-term solar incentive program that promotes cost-effective solar development. Uses a tariff-based incentive for installing solar projects with compensation rates adders for energy storage, agriculture, brownfield and low-income communities.
- **New Jersey:** Competitive Solar Incentive Program[19]
    - Developing stakeholder process to set incentive values for grid supply projects greater than 5 megawatts.

[15] https://governor.maryland.gov/energy-task-force/

[16] https://erm.maps.arcgis.com/apps/webappviewer/index.html?id=3c97ba78d94f4ccead1cae201fae540b&level=8

[17] https://planning.maryland.gov/Pages/OurWork/envr-planning/solar-siting/solar-siting-home.aspx

[18] https://www.mass.gov/solar-massachusetts-renewable-target-smart

[19] https://njcleanenergy.com/renewable-energy/programs/susi-program/csi-program

- **New Jersey**: Offshore Wind Strategic Plan[20]
    - Stakeholder process to develop plan for offshore wind projects to meet goal of 7,500 megawatts of energy.
- **New York**: New York State Solar Guidebook[21]
    - Guidance to local government for managing solar energy development. It includes information, tools and step-by-step instructions for small and large solar projects.
- **Oregon**: Territorial Sea Plan[22]
    - Guidance to state and federal agencies to manage uses within the state's territorial sea, from shore to three nautical miles offshore. The plan acts as a coordinating framework from which individual agencies institute regulations and management activities and is led by the Ocean Policy Advisory Council.
    - Designated areas of the territorial sea appropriate for the development of renewable energy facilities and established review standards for siting projects within those designated areas.
- **Oregon**: Oregon Renewable Energy Siting Assessment[23]
    - Assessment to identify high potential renewable energy production areas that are feasible for development that overlap with military training and operations areas, and to review and assess the current development and siting procedures of local, state and federal governments.
    - Plan to develop a mapping and reporting tool with data and information about renewable energy; military training and operational areas; economic development opportunities; land use considerations; and natural, cultural and environmental resources.
- **Texas:** Competitive Renewable Energy Zones Project[24]
    - The Public Utility Commission of Texas and the Electric Reliability Council of Texas designated competitive renewable energy zones and developed a transmission plan to deliver renewable power to customers, while maintaining reliability and economics.
    - The designation of zones focus on large-scale wind resources that could be developed in sufficient quantities to warrant transmission system expansion and upgrades.

[20] https://www.nj.gov/bpu/pdf/Final_NJ_OWSP_9-9-20.pdf
[21] https://www.nyserda.ny.gov/All-Programs/Clean-Energy-Siting/Solar-Guidebook
[22] https://www.oregonocean.info/index.php/territorial-sea-planning
[23] https://www.oregon.gov/energy/energy-oregon/Pages/ORESA.aspx
[24] http://www.puc.texas.gov/industry/maps/Electricity.aspx

Energy Facility Site Evaluation Council (EFSEC)

EFSEC[25] provides a one-stop siting process for major energy facilities in Washington State. These include siting large natural gas and oil pipelines, thermal electric power plants that are 350 megawatts or greater and their dedicated transmission lines, new oil refineries or large expansions of existing facilities, and underground natural gas storage fields. EFSEC's authority does not extend to hydropower plants or thermal electric plants that are less than 350 megawatts.

Energy facilities of any size that exclusively use alternative energy resources (wind, solar, geothermal, landfill gas, wave or tidal action, or biomass energy) can opt-in to the EFSEC review and certification process.

The agency coordinates all evaluation and licensing steps for siting and specifies the conditions of construction and operation. If approved, a Site Certification Agreement is issued in lieu of any other individual state or local agency permits. For facilities under its jurisdiction, EFSEC has been delegated authority by the Unites States Environmental Protection Agency to issue permits under the Federal Water Pollution Control Act and the Federal Clean Air Act.

Other State Renewable Energy Siting Agencies

In general, siting agencies consider a wide range of factors, including existing state and local plans and regulations and the proposed facility's impact on environmental, cultural and Tribal resources. Some agencies also consider need, public interest, alternative energy types, economic impacts and benefits and fuel diversity in siting decisions for projects. Some siting agencies incorporate federal requirements; others are separate from federal processes.

- **Arizona:** Arizona Corporation Commission Power Plant and Transmission Line Siting Committee[26]
    - The committee has jurisdiction over the siting of power plants of 100 megawatts or more, electric transmission lines of 115,000 volts or more and public service corporations engaged in transmission of power and electricity, including wind and solar facilities.
- **California:** California Energy Commission[27]
    - The commission has jurisdiction over the siting of power plants of 50 megawatts and larger and electric transmission lines. The Public Utilities Commission is involved if an investor-owned utility owns the transmission line.
    - The Siting, Transmission and Environmental Protection Division has offices for licensing and compliance, environmental protection, engineering, and strategic transmission planning and corridor designation.

[25] https://www.efsec.wa.gov/
[26] https://azcc.gov/arizona-power-plant/line-siting-committee
[27] https://www.energy.ca.gov/programs-and-topics/topics/renewable-energy

- The Renewable Energy Division includes a Technology and Incentives Office and a Clean Energy Policy Office. The Clean Energy Policy Office works with California's electricity providers and the public to implement programs central to meeting the state's clean energy goals. Energy Commission staff develop the rules and regulations for key policies, provide technical support for other agencies and the public and conduct analyses on the state's clean energy progress.

- **Connecticut:** Connecticut Siting Council[28]
  - The council has jurisdiction over siting of electric generating facilities in the state, including renewable energy facilities with a generating capacity over one megawatt.
  - The law allows a municipal zoning commission or wetland agency to regulate and restrict an electric generation facility's proposed location if it issues orders within 65 days after an application was filed with the Siting Council.
  - A facility developer must obtain a certificate of environmental compatibility and public need from the council before construction. However, using an alternative process, the council can approve certain generating facilities which include facilities with a generating capacity of 65 megawatts or less, such as solar photovoltaic systems and other renewable energy systems.
- **Maryland**: Public Service Commission[29]
  - The commission issues siting approval of power generating facilities over two megawatts and overhead transmission lines greater than 69 kilovolts. It manages the Renewable Portfolio Standard which captures the economic, environmental, fuel diversity and security benefits of renewable energy and establishes a market for renewable energy.
- **Minnesota:** Commerce Department Energy Environmental Review & Analysis Unit[30]
  - Conducts environmental reviews for siting or routing of large energy projects, including large electric power generating plants equal to or greater than 50 megawatts. This includes solar generation facilities and wind farms greater equal to or greater than 5 megawatts.
  - The type of environmental review document varies with facility type and size, but all environmental review documents analyze the potential human and environmental impacts of a proposed project and possible mitigation measures.
- **New Hampshire:** Site Evaluation Committee[31]

[28] https://portal.ct.gov/CSC
[29] https://www.psc.state.md.us/
[30] https://mn.gov/commerce/industries/energy/eera/
[31] https://www.nhsec.nh.gov/

- Conducts review, approval, monitoring and enforcement of compliance in the planning, siting, construction and operation of energy facilities, including wind energy.

- **New York:** Office of Renewable Energy Siting[32]
  - The agency has jurisdiction over siting and permitting for renewable energy projects larger than 25 megawatts and associated transmission facilities. It has authority to issue a single permit for state and local requirements, but applicants are still required to obtain any federal permits or approvals.
  - The agency established procedural and substantive requirements[33] for permit applications for major renewable energy facilities in 2021. It has 60 days from the receipt of a permit application to make a completeness determination. An application is not complete without proof of consultation with the host municipalities and communities. After a completeness determination, draft permit conditions will be issued by the agency for public comment. Municipalities must submit a statement indicating whether the proposed renewable energy facility complies with applicable local laws. The agency must issue a final decision on the siting permit within one year of the date on which the application is deemed complete and within six months if the facility is proposed to be located on brownfield, former commercial or industrial, landfill, former power plant and abandoned or underutilized sites.
- **Ohio:** Power Siting Board[34]
  - The board has jurisdiction over power plants, electric and gas transmission lines, wind and solar facilities.
  - Applications for power plants must include at least two viable sites. Applications for transmission lines must include a preferred and alternative viable site. The board must determine whether the facility is needed and whether it minimizes adverse environmental effects, considering the state of technology and the economics of various alternatives. The board must also consider the effects of the facility on agricultural land. To be approved, the facility must serve the public interest and, in the case of an electric transmission line, be consistent with regional plans to expand the electric grid.
  - County commissioners can adopt resolutions designating all or part of a county as a restricted area, prohibiting construction of a large wind farm or solar facility.
- **Oregon:** Energy Facility Siting Council[35]

[32] https://ores.ny.gov/
[33] https://ores.ny.gov/system/files/documents/2021/03/chapter-xviii-title-19-of-nycrr-part-900-subparts-900-1-through-900-15.pdf
[34] https://opsb.ohio.gov/wps/portal/gov/opsb/home
[35] https://www.oregon.gov/energy/facilities-safety/facilities/Pages/default.aspx

- The council is responsible for overseeing the development of large electric generating facilities, high voltage transmission lines, gas pipelines and other energy projects.
- A proposed energy facility must undergo a review and meet the council's siting standards[36] to receive a site certificate. Standards cover issues such as land use, environmental impacts, noise concerns and cultural and archeological artifacts.
- After issuing a site certificate, the council has ongoing regulatory authority over the construction and operation of the facility.

- **Oregon**: Department of Land Conservation and Development (DLCD)[37]
  - Provides renewable energy siting guidance and rules for wind, solar and offshore energy siting. The rules are intended to direct energy development to lands that have limited value to wildlife and farming. The Oregon Energy Facility Siting Council[38] or the Federal Energy Regulatory Commission[39] makes the siting decisions for large energy facilities and transmission infrastructure.

Publication information

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[36] https://www.oregon.gov/energy/facilities-safety/facilities/Pages/Siting-Standards.aspx
[37] https://www.oregon.gov/lcd/NRRE/Pages/Energy-Siting.aspx
[38] https://www.oregon.gov/energy/facilities-safety/facilities/Pages/default.aspx
[39] https://www.ferc.gov/
[40] www.ecology.wa.gov/contact

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