

Prineville Renewable Energy Project (PREP) Frequently Asked Questions

Q: What is PREP?

A: PREP is a 42 MW, gross capacity, woody biomass co-generation power plant designed to generate renewable, carbon-neutral, baseload power.

Q. What is a co-generation power plant?

A co-generation power plant, also known as a combined heat and power (CHP) plant, is a facility that generates both electricity and useful thermal energy from a single fuel source - in the PREP's case, biomass.

Q: What is the purpose of PREP?

A: PREP aims to improve forest health, reduce wildfire risks, enhance grid resiliency and efficiency while providing renewable energy, and support economic development through job creation.

By thinning forests, the PREP facility will help reduce the risk and intensity of wildfires. This means less smoke in the air, better visibility, and reduced costs for firefighting and repairs. The estimated health benefits of this reduction are between \$2.8-\$18.5 million yearly.

Q: Where does the PREP project currently stand in the approval process?

A: At this point only the property is being considered for inclusion into the Urban Growth Boundary (UGB) expansion. This would allow the proposed PREP to apply for development within a City Heavy Industrial zone. The PREP will require its own application process that will include public hearings and opportunity for community input.

Q. What is the process and timeline for the UGB Expansion?

A. The proposed UGB Expansion is currently undergoing the City's public hearing process. The public hearing will continue at the City Council's May 13, 2025 meeting. The Council must pass the ordinance in two presentations. If the Council votes to approve the expansion, the process will then advance to the County. The County will conduct its own hearings - first before the Planning Commission and then the Board of Commissioners. Dates and times for the County hearings will not be set until City approval is granted.

If approved by both the City and County, the expansion request will move to the Oregon Department of Land Conservation and Development (DLCD) for final review. Timelines at the State level have yet to be determined.

Q. What is the City's notification process for the UGB Expansion?

A. The City follows the public notification requirements outlined in Oregon Revised Statutes (ORS) 197.763, which governs land use hearings and procedures. In accordance with this law, the City notifies affected property owners and nearby residents within 750 feet of the proposed change, publishes notice in the local newspaper, and posts information on the City's website.

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Q: How was the site for PREP selected?

A: The site was chosen based on technical analysis, proximity to existing infrastructure, including the Railway, access to fuel sources, and compliance with industrial zoning and environmental standards.

Q. How long has the PREP project been in development?

A. The proposed PREP project has been under active consideration since 2019. During that time, the City has conducted in-depth reviews of engineering reports, evaluated advanced bioenergy technologies, and engaged in discussions with industry experts and potential partners. The planning process has also included coordination with state and federal agencies, site evaluations, and preliminary environmental assessments to ensure the project aligns with long-term goals for renewable energy, wildfire mitigation, and economic development.

Q: How will PREP control emissions, protect air quality, and address potential pollution concerns for the surrounding community?

A: PREP will use a range of advanced emission control technologies to meet or exceed stringent air quality standards set by the Oregon DEQ and U.S. EPA. These include electrostatic precipitators, which remove over 99% of particulate matter, as well as scrubbers, dust collectors, and systems designed to reduce nitrogen oxides (NOx) and carbon monoxide (CO). Continuous emissions monitoring systems will be installed to track and ensure compliance in real time.

The facility will also use close-coupled gasification cells, a modern biomass technology that efficiently converts wood waste and forest residuals into combustible gas. This process allows for cleaner and more efficient combustion with longer residence times, significantly reducing harmful emissions compared to traditional biomass incineration. These systems are designed to address a wide range of pollutants, including manganese, arsenic, and sulfur dioxide, helping to protect air quality in downtown Prineville and surrounding neighborhoods.

Q: How will PREP address concerns regarding potential groundwater contamination?

A: Extensive environmental reviews, including protections for water resources, are mandated before the project proceeds. Any potential threats to water quality would halt the project.

Q: What baseline environmental testing is planned for water, soil, and air quality on and near the project site?

A: Baseline testing will be conducted for soil, water, and air quality prior to construction to ensure future monitoring can be compared to existing conditions. Testing for soil, water, and air quality will continue during and after construction.

Q Where will the water used by the PREP go?

A: Used water will go to the City's sewer treatment plant. The City's sewer system has sufficient capacity for the proposed PREP project.

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Q: Will there be regular (monthly, quarterly, annual) environmental monitoring of water, soil, and air once the facility is operational?

A: Yes, ongoing monitoring will occur as required by DEQ permits and will be reported to relevant agencies and made publicly available.

Q: What contingency protocols are in place if environmental testing shows elevated levels of pollutants?

A: If pollutants exceed allowable thresholds, operations would be modified or halted, and remediation would occur per DEQ and EPA regulations.

Q: Under what circumstances would the City have the authority to pause or halt operations if contamination occurs?

A: The City can act if the facility violates permit conditions or public health is at risk. Enforcement would involve coordination with DEQ and other regulators.

Q: Are the chemicals used in wastewater treatment compatible with the local sewer infrastructure, and have long-term impacts been evaluated?

A: All chemicals used will comply with standards for sewer discharge and will be vetted through the permitting process.

Q: Will the City monitor compliance with operating permits and take enforcement action if conditions are not met?

A: Yes. Compliance will be monitored by City staff and DEQ, with corrective actions taken as needed.

Q: How and where will residual ash from biomass energy production be managed or disposed of?

A: Residual ash will be managed through a fully enclosed system to ensure environmental safety. The ash is captured and conditioned within an enclosed process and then transferred to secure ash bins for transport by hook trucks. It will be regularly tested to meet regulatory standards. The goal is for the ash to be repurposed for beneficial uses, such as land application or soil amendment. If suitable markets are not available, it may be used as daily cover material at permitted landfills.

Q: What actions will be taken to protect local drinking water and groundwater from potential contamination risks?

A: Protective measures include containment systems, monitoring wells, and stormwater controls subject to DEQ oversight.

Q: How does PREP address wildfire risk?

A: By utilizing forest residuals, the PREP Facility will help lower the risk and intensity of wildfires throughout the region. This means less smoke in the air from uncontrolled fires, better visibility, and reduced costs for firefighting and repairs.

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Q: What fuel sources will PREP use?

A: PREP will use sustainably sourced materials including western juniper residuals, forest treatment residuals, timber harvest residuals, and forest product manufacturing residuals. The fuel supply is anchored by private sources with the goal to be available to support the Ochoco's and surrounding region as the market is developed and matures.

Q: How does PREP impact water resources?

A: By reducing wildfire risks, the project indirectly protects water quality and quantity. Studies indicate that reducing juniper encroachment significantly increases water availability. Water neutrality is achieved when approximately 2000 acres of Juniper has been treated. This plant can process over 3000 acres of Juniper per year.

Q: How much water will PREP use, and will it impact local water availability?

A: PREP's initial estimate is approximately 450 gallons per minute during the hottest day in summer and 315 gallons per minute during wintertime. This is well within the City's ability to supply water, there will be no impact on local water availability.

Q: How does PREP support local energy needs?

A: PREP provides continuous, baseload energy generation, adding reliable power capacity without necessitating significant transmission infrastructure upgrades.

Q: Will PREP negatively impact the local agricultural economy?

A: PREP is intended to complement rather than replace the existing agricultural economy by creating markets for biomass waste and enhancing wildfire prevention measures.

Q: What are the sources of funding for the biomass facility, and how much will be provided by public versus private entities?

A: Funding includes federal and state renewable energy grants and private investment. Local tax funding is not a primary source.

Q: Will the project require the City to expand the wastewater treatment infrastructure?

A: No, there is capacity to serve the PREP project within the current wastewater system. The City has already developed the wastewater treatment system with capacity to serve the projected future growth of the community. This includes the capacity to serve significant commercial and industrial growth.

Q: Have permits already been issued for PREP?

A: Initial permits have been secured to evaluate the project's feasibility using grant funding. Comprehensive environmental reviews and further permitting processes are ongoing.

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Q: Has the City consulted with operators of similar biomass facilities to understand operational lessons and challenges?

A: Yes, lessons from similar facilities were reviewed to help guide design, permitting, and operational standards for PREP. City staff and consultants have visited and reviewed available documentation from other Oregon biomass efforts.

Q: Where will water for the biomass facility be sourced, and has the sustainability of the local aquifer been studied?

A: Water will be sourced from the municipal system. Supply and sustainability have been evaluated in partnership with City utilities and local water studies.

Q: How will compliance and safety be maintained after zoning changes to heavy industrial use, especially without Conditional Use Permit requirements?

A: All operations will still be subject to building, environmental, and safety codes. The zoning change does not waive regulatory oversight.

Q: What impact could the facility's operations have on water supply, given state discharge allowances for wastewater?

A: The facility will comply with wastewater discharge permits. Impact analyses are required to ensure operations do not exceed system capacity or affect regional supply.

Q: How will transportation logistics be managed and how will increased truck traffic be mitigated?

A: Truck traffic will be studied and routes identified that mitigate this traffic. Existing roads and rail infrastructure west of the site will be used. A traffic impact analysis will guide mitigation plans including road improvements if needed.

Q: Why is the railway important to the biomass project?

A: The railway will support the private fuel supply for the PREP. The private fuel supply is critical to making this project "investment grade," so it isn't tied to any federal contracts that can be halted and are not seen as reliable by financial institutions.

Q: What strategies are being considered to address potential impacts to nearby property values and residential quality of life?

A: The facility design includes visual buffers and noise controls.

Q: Will power generated by the biomass facility be distributed locally, within Oregon, or exported out-of-state?

A: Power will be distributed to the regional grid. Local use is prioritized where feasible.

Prineville Renewable Energy Project (PREP) Frequently Asked Questions

Q: What is the rationale and timeline behind the Urban Growth Boundary (UGB) expansion and associated zoning change?

A: The expansion is based on regional planning needs and supported by technical studies. It allows for future industrial development.

Q: What is the position of State of Oregon agencies on the proposed UGB expansion and biomass facility development?

A: State agencies are participating in the review process and will provide input during land use and permitting stages.

Q: Who will own and operate PREP?

A: On December 12, 2023, the Prineville City Council resolved that it was the policy of the City regarding PREP that if the City's goals are obtainable without further involvement or ownership of the Project, the City would provide the work product to a partner that is able to effectively construct and operate PREP.

Q: What jobs will PREP create?

A: PREP is expected to create approximately 20 full-time operational jobs, around 100 jobs in forest management and hauling, and over 250 temporary construction jobs.

Q: Will the PREP cause an increase in local property taxes?

A: No, the PREP will have no impact on local property tax rates.

Q. How can I get more information on PREP?

A: For additional information about the PREP project, including a list of frequently asked questions, visit the City of Prineville's official project webpage:

<https://cityofprineville.com/cityadministration/page/prep-prineville-renewable-energy-project>