Critical Energy Infrastructure (CEI) Hub Policy Project

Proposed Draft

November 2025

THE BUREAU OF
PLANNING & SUSTAINABILITY

Acknowledgments

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www.portland.gov/bps/accommodation

HOW CAN I PARTICIPATE?

1. **Watch the public hearing.** Link to the live stream and recordings at portland.gov/bps/planning-commission.

2. **Testify orally at the Planning Commission hearing.** The hearing will be held on December 16 at 4:00 p.m. The deadline to register to testify for the hearing is Monday, December 15 at 5:00 p.m. The hearing will be held in a hybrid format with options to participate either in person at *1900 SW 4th Avenue, Suite 2500,* or virtually using a computer, mobile device, or telephone. **You must sign up in advance to testify**. To testify before the Commission in person or virtually:

   - Use the QR code to the right to sign up on your mobile device; or
   - Visit the project website at www.portland.gov/cei-hub-policy-project.

   After registering, you will receive a confirmation email containing information about joining the hearing. Individuals have two minutes to testify, unless stated otherwise at the hearing.

3. **Submit written testimony.** We encourage electronic written testimony via the Map App, but written testimony can also be submitted via U.S. Mail or email. Written testimony must be received by the time of the hearing and must include your name. If you wish to receive mailed notice of later hearings on the matter, you must also include your mailing address.

Testimony via U.S. Mail:

Portland Planning Commission
CEI Hub Policy Project Testimony
1810 SW 5th Ave, Suite 710
Portland, OR 97201

Testimony via the Map App:

portlandmaps.com/bps/mapapp
Click on "CEI Hub Policy Project"
then click the "Testify" button.

What happens next?

The Planning Commission will consider public testimony on this proposal. The Commission will then forward a recommendation to City Council for consideration and additional public review and testimony. Thank you for your interest in this work.

Acronyms

AEO – Annual Energy Outlook

BPS – Bureau of Planning and Sustainability

CEI Hub – Critical Energy Infrastructure Hub

CFP – Clean Fuels Program

CPP – Climate Protection Plan

CSZ – Cascadia Subduction Zone

DEQ – Oregon Department of Environmental Quality

EIA – Energy Information Administration (federal)

EOA – Economic Opportunity Analysis

FTSS – Fuel Tank Seismic Stability Program

ODOE – Oregon Department of Energy

ODOT – Oregon Department of Transportation

OSSC – Oregon Structural Specialty Code

RMIP – Risk Mitigation Implementation Plan

SVA – Seismic Vulnerability Assessment

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Section 1: Introduction

This section describes the project purpose and scope and includes introductory information on key issues and past work related to the Critical Energy Infrastructure (CEI) Hub, including existing zoning code regulations for bulk fuel terminal uses.

The CEI Hub is a six-mile stretch of land in northwest Portland located along the Willamette River. It contains facilities that store and distribute fuels as part of a supply chain critical to Oregon's fuel infrastructure, with more than 90% of the state's liquid fuel supply stored at and passing through the CEI Hub via pipeline, barge, or rail.

Project Purpose and Scope

The CEI Hub Policy Project will update Comprehensive Plan policies, the zoning code, and other city regulations related to bulk fuel facilities. The primary purpose of the project is to support safety and risk reduction for existing bulk fuel facilities within the CEI Hub.

The proposed 2035 Comprehensive Plan policy amendments include changes to existing policies and a new set of policies that are intended to create a more focused policy framework for land use and bulk fuel storage development in the CEI Hub.

The proposed Title 33 zoning code amendments will prohibit the expansion of bulk fuel terminal storage capacity and transloading facilities for all types of bulk fuels, including renewable and aviation fuels. The proposed zoning code amendments also include land use reviews that could allow for limited expansion of transloading infrastructure and transfer of storage capacity between sites. The amendments also include provisions requiring that any new storage tanks resulting from replacements or transfers meet a higher safety construction standard.

Other city code amendments will require a 20 percent fuel storage capacity reduction ("drawdown") by 2036 at each bulk fuel terminal in the CEI Hub and clarify that a building permit is required for structural support for "piping carrying combustible, flammable or hazardous materials".

The proposed policy and regulatory amendments must be consistent with Oregon's land use planning laws and rules, and with the adopted Comprehensive Plan. Specifically, in making a legislative change to comprehensive plan policies and land use regulations, the local government must balance and weigh how the amendments are consistent with sometimes competing policy objectives. Portland's 2035 Comprehensive Plan includes goals and policies that support a wide range of guiding principles: economic prosperity, human health, environmental health, equity and resilience. These principles

recognize that implementation of the plan needs to be balanced, integrated and multi-disciplinary, and the influence of each principle helps to shape the overall policy framework of the comprehensive plan. The amendments must on balance be equally or more supportive of the Comprehensive Plan as a whole than the existing language or regulation.

In addition to the policy and regulatory outcomes, the project also supports the convening of other local, state, and federal agencies who regulate facilities in the CEI Hub to further coordination between these partner agencies to address issues that require long-term and multi-jurisdictional planning, such as:

- Emergency management and response
- Relocation and/or dispersal of fuel storage facilities to other locations in the state
- Fuel transportation safety, including rail operations
- Enhanced financial responsibility

CEI Hub Background

The CEI Hub is a six-mile stretch of land in northwest Portland located along the Willamette River (Map 1). It contains facilities that store and distribute fuels as part of a supply chain critical to Oregon's fuel infrastructure, with more than 90% of the state's liquid fuel supply stored at and passing through the CEI Hub via pipeline, barge, or rail.

Located adjacent to Oregon's largest seaport and intersected by major pipelines, interstate rail lines, and freeways, the CEI Hub's location provides strategic access for regional and statewide fuel distribution. Most of the fuel arrives in Portland via the Olympic pipeline and some of it via barge and rail (Figure 1). From the CEI Hub, fuel is distributed to Eugene via pipeline, by barge to Eastern Oregon, and by truck to other in- and out-of-state locations (Figure 2). There is also a dedicated pipeline from the CEI Hub to the Portland Airport for aviation fuel. Approximately 70% of total fuel consumed in Oregon is within the Tri-county and Willamette Valley regions.

Figure 1. Liquid Fuel Routes into Portland – 'Where does the fuel come from?'

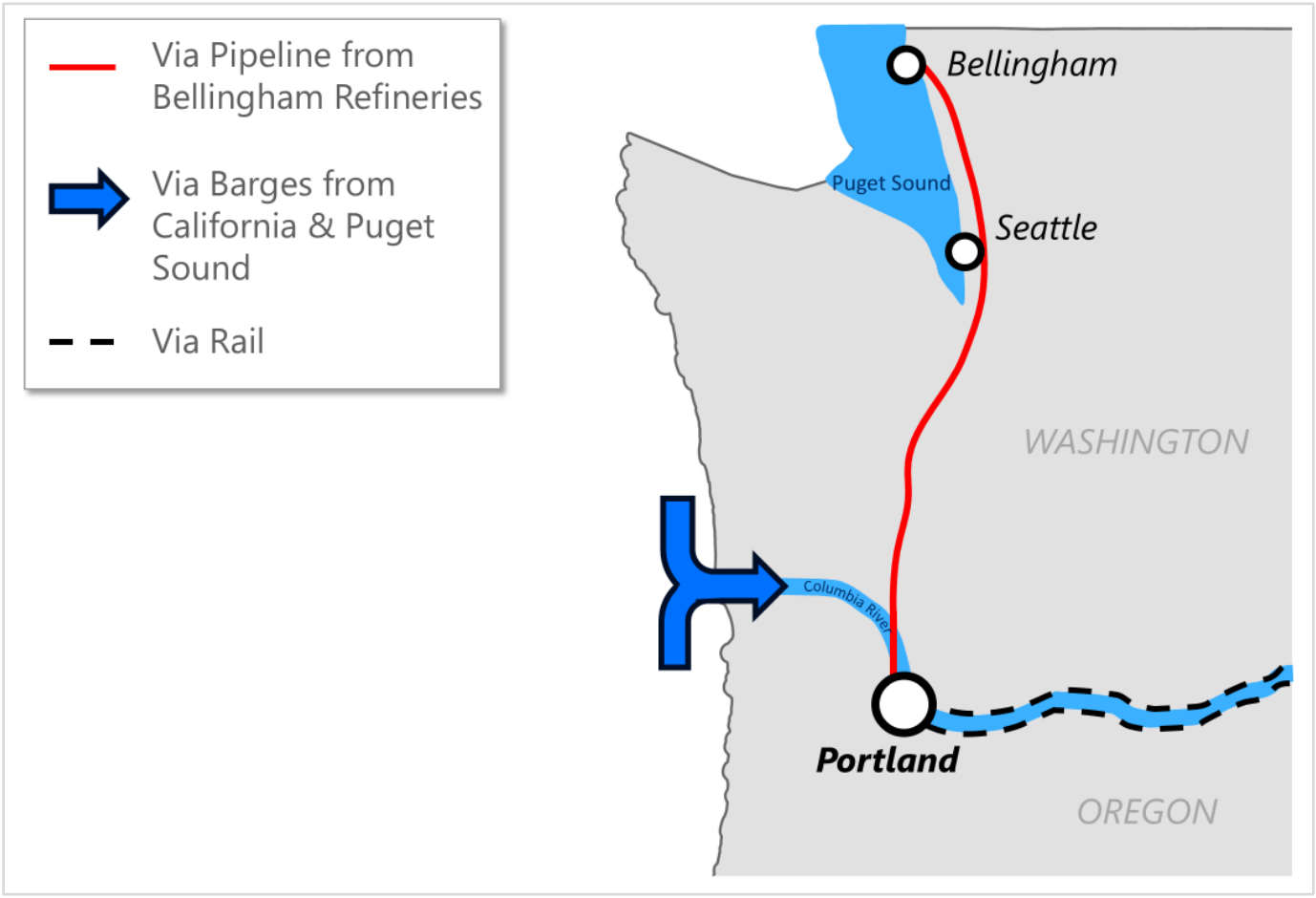
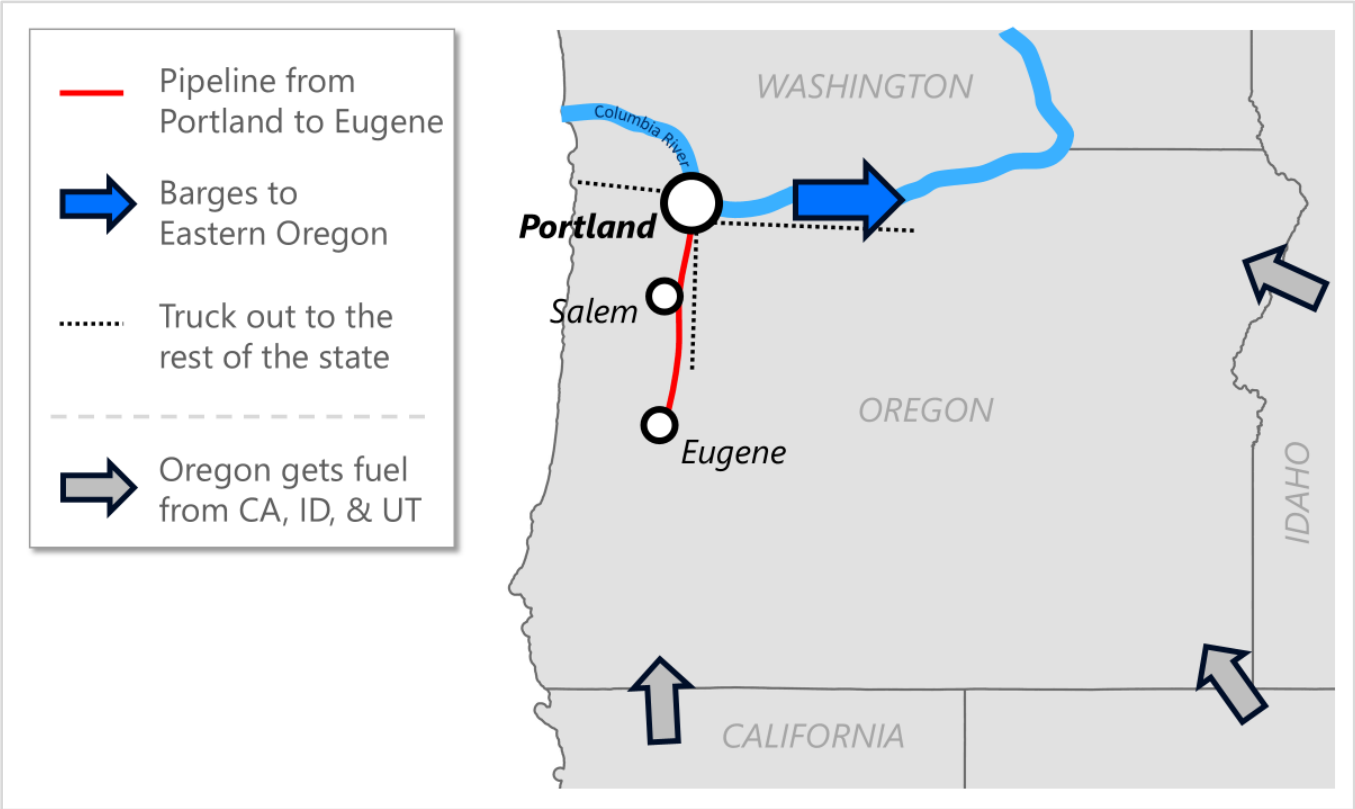


Figure 2. Liquid Fuel Routes Out of Portland – 'Where does the fuel go?'



There are currently eleven bulk fuel facilities in the CEI Hub, classified under the City's zoning code as *Bulk Fossil Fuel Terminals* (Map 1). The City estimates that these facilities collectively have a storage capacity of 396 million gallons (Table 1), of which 315 million gallons is in-service storage capacity for fuel or fuel related products (Table 2). Individual terminals range in capacity from about 7 million to 70 million gallons, with most having more than 20 million gallons of storage capacity. In addition to liquid fuels, the CEI Hub also contains a liquid natural gas facility and facilities producing other non-fuel materials.

Numerous studies have found that the concentration of bulk fuel terminals in the CEI Hub presents significant risks, primarily due to the CEI Hub's location on land with a high risk of liquefaction. In the event of a major earthquake, particularly a Cascadia Subduction Zone (CSZ) event, storage tanks in the CEI Hub are likely to fail, releasing fuel and other hazardous materials. Such a disaster would pose serious threats to human health and to the environment, including waterways, air quality, and adjacent natural areas.

Based on this understanding and related statewide seismic risk and impacts, the State of Oregon enacted Senate Bill 1567 in 2022 that gave the Oregon Department of Environmental Quality (DEQ) the authority to establish the Fuel Tank Seismic Stability (FTSS) Program. This program requires bulk fuel

storage facilities to evaluate seismic risk and develop risk mitigation implementation plans (RMIPs) to strengthen seismic resilience of facilities and minimize risk of damage to employees, surrounding communities and the environment. The CEI Hub Policy Project builds on and aligns with DEQ's requirements. Additional information is provided in Section 4 of this report, under "Coordination with DEQ Fuel Tank Seismic Stability Program".

Read more about hazard issues in the CEI Hub, the project's relationship to state climate action work, and economic impact considerations in Section 5 of this report.

Table 1. Estimated Capacity by Tank Service Status at Bulk Fuel Terminals in the CEI Hub

BULK FUEL TERMINALS	**Total Tank Capacity**	Out of Service Tank Capacity	In Service Tank Capacity
Kinder Morgan - Linnton	20,205,891	6,222,800	13,983,091
BP West Coast/Seaport Midstream	24,661,599	-	24,661,599
NuStar/Sunoco/Shore Terminals	52,920,590	1,971,976	50,948,614
Pacific Terminal Services	11,680,305	20,941	11,659,364
NW Natural Gas Co	7,375,487	-	7,375,487
Kinder Morgan - Willbridge	71,479,929	8,423,141	63,056,788
Chevron USA Inc	47,757,067	474,268	47,282,799
Phillips 66 Company	30,329,641	5,030,521	25,299,120
Zenith Energy Terminals	67,949,902	3,788,568	64,161,334
McCall Oil	38,706,259	-	38,706,259
Shell Oil/Triton West	22,983,912	-	22,983,912
Total	**396,050,582**	**25,932,215**	**370,118,367**

Source: BPS Analysis using data estimates from Multnomah County and DEQ. See Appendix B for more information on data sources and methodology.

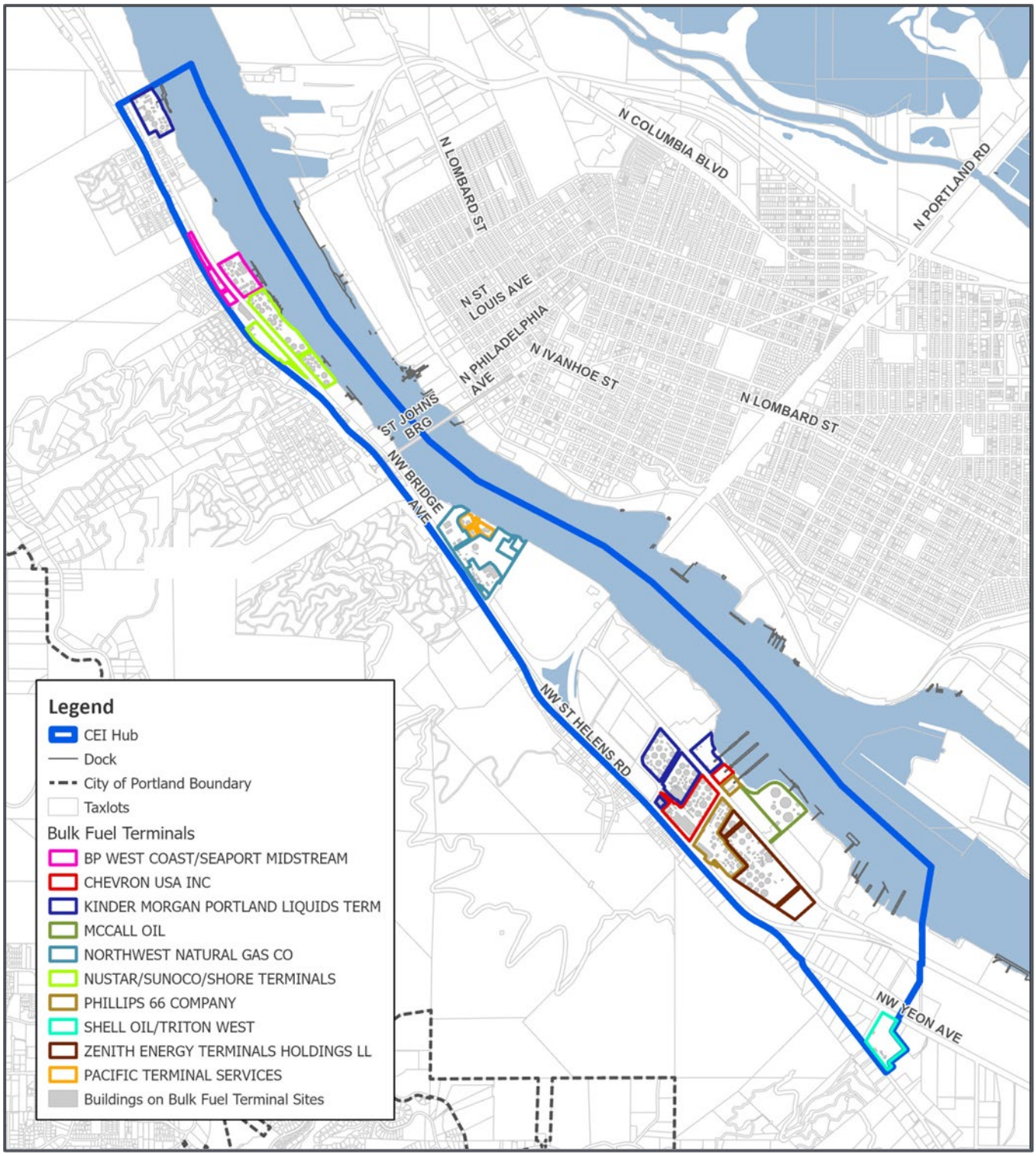
Table 2. Estimated In-Service Capacity by Tank Contents at Bulk Fuel Terminals in the CEI Hub

BULK FUEL TERMINALS	**In Service Tank Capacity**	In Service *Fuel or Fuel Related*	In Service *Non-Fuel or Unknown**
Kinder Morgan - Linnton	13,983,091	13,823,155	159,936
BP West Coast/Seaport Midstream	24,661,599	23,231,771	1,429,828
NuStar/Sunoco/Shore Terminals	50,948,614	50,948,614	-
Pacific Terminal Services	11,659,364	11,659,364	-
NW Natural Gas Co	7,375,487	7,375,487	-
Kinder Morgan - Willbridge	63,056,788	62,362,864	693,924
Chevron USA Inc	47,282,799	37,376,500	9,906,299
Phillips 66 Company	25,299,120	21,677,958	3,621,162
Zenith Energy Terminals	64,161,334	48,787,570	15,373,764
McCall Oil	38,706,259	15,754,368	22,951,891
Shell Oil/Triton West	22,983,912	22,151,136	832,776
Total	**370,118,367**	**315,148,787**	**54,969,580**

** Non-fuel contents primarily include asphalt, water, wastewater, lubricants and motor oils. Unknown contents account for about 2.6 million gallons.*

Source: BPS Analysis using data estimates from Multnomah County and DEQ. See Appendix B for more information on data sources and methodology.

Map 1. CEI Hub with Existing Bulk Fuel Terminals



City of Portland Existing Policy and Regulations

The City of Portland's 2035 Comprehensive Plan and Zoning Code provide the policy framework and regulations to guide and manage land uses in the CEI Hub. These documents establish how bulk fuel storage and distribution facilities are currently governed.

2035 Comprehensive Plan Policies

The Comprehensive Plan includes several policies that provide guidance on issues associated with the CEI Hub. These policies are located primarily within Chapter 3 (Design and Development), Chapter 4 (Design Development), Chapter 6 (Economic Development), and Chapter 7 (Environment). Some of the most relevant existing Comprehensive Plan policies applicable to the CEI Hub are:

- **Policy 3.72 Industry and Port facilities.** Enhance the regionally significant economic infrastructure that includes Oregon's largest seaport and largest airport, unique multimodal freight, rail, and harbor access; the region's critical energy hub; and proximity to anchor manufacturing and distribution facilities.
- **Policy 4.62 Seismic and energy retrofits.** Promote seismic and energy-efficiency retrofits of historic buildings and other existing structures to reduce carbon emissions, save money, and improve public safety.
- **Policy 6.48 Fossil fuel distribution.** Limit fossil fuels distribution and storage facilities to those necessary to serve the regional market
- **Policy 7.4 Climate change.** Update and implement strategies to reduce carbon emissions and impacts and increase resilience through plans and investments and public education.
- **Policy 7.14 Natural hazards.** Prevent development-related degradation of natural systems and associated increases in landslide, wildfire, flooding, and earthquake risks.
- **Policy 9.32 Multimodal system and hub.** Maintain Portland's role as a multimodal hub for global and regional movement of goods. Enhance Portland's network of multimodal freight corridors.

The CEI Hub Policy Project evaluated existing policies that address bulk fuel terminals and proposes a set of CEI Hub-specific policies to provide area-specific direction for the zoning code amendments discussed in Section 2 and 3.

In applying these policies, decision makers (the Planning Commission and City Council) must consider and balance the full range of adopted Comprehensive Plan goals and policies. This approach ensures that project outcomes advance citywide policies for safety, resilience, and climate action while addressing the unique significance, conditions and risks present within the CEI Hub.

Current Zoning Code Regulations

The eleven bulk fuel terminals shown in Map 1 fall under the *Bulk Fossil Fuel Terminal* use category of the City's zoning code, which was adopted by City Council in 2022 as part of the Fossil Fuel Terminal Zoning Code Amendments project.

Current Bulk Fossil Fuel Terminal Use Category Definition

Bulk Fossil Fuel Terminals, as described in Title 33 section 33.920.300, are establishments primarily engaged in the transport and bulk storage of fossil fuels. Terminal activities may also include fuel blending, regional distribution, and wholesaling. Bulk Fossil Fuel Terminals have access to marine, railroad, or regional pipeline to transport fuels to or from the site, and either have transloading facilities for transferring a shipment between transport modes or have transloading facilities and storage tank capacity exceeding 2 million gallons. There is minimal on-site sales activity with the customer present.

The 2-million-gallon storage tank capacity threshold distinguishes a Bulk Fossil Fuel Terminal use from other industrial uses such as Warehouse And Freight Movement or Aviation And Surface Passenger Terminals. The threshold was set to capture regional gateway facilities capable of receiving large fuel shipments by marine, rail or pipeline and having the ability to transfer the fuel from one mode to the other.

Uses Not Classified as Bulk Fossil Fuel Terminals

Some facilities may store or distribute liquid fuels but are not classified as Bulk Fossil Fuel Terminals because their operations occur on a smaller scale or serve specific functions. These include:

- Gasoline stations and other retail fuel sales.
- Distributors that receive and deliver fuels exclusively by truck.
- Industrial, commercial, and institutional operations that store fossil fuels exclusively for on-site use, such as airports, marine terminals, or rail yards.
- Fleet vehicle servicing facilities.
- Facilities that reprocess used petroleum products.

These uses fall under different use categories in the zoning code and are regulated separately from Bulk Fossil Fuel Terminals.

Current Zoning Code Provisions for Bulk Fossil Fuel Terminals

In 2022 through the Fossil Fuel Terminal Zoning Code Amendments project, City Council adopted prohibitions on the development of new Bulk Fossil Fuel Terminals and limits on the expansion of storage tank capacity at existing terminals, as found in Title 33 sections 33.140.100.B.16 and 33.920.300.

Bulk Fossil Fuel Terminal uses are designated as "limited uses" that can continue to operate but are subject to specific restrictions, including the following:

- New Bulk Fossil Fuel Terminals are prohibited.
- Fossil fuel storage tank capacity at existing Bulk Fossil Fuel Terminals is limited to the amount of storage capacity that existed as of August 31, 2022.
- Additional storage tank capacity is allowed at existing terminals only for storing renewable fuel and aviation fuel. There are no limits on the amount of storage capacity that can be added for these fuel types.
- Maintenance, repair and replacement of existing storage tanks is allowed.

The zoning code defines "renewable fuels" as fuels "that are produced from non-petroleum, non-natural gas renewable resources and have less than 5 percent fossil fuel content," and include fuels such as biodiesel, biomethane, and clean hydrogen.

Community Engagement Overview

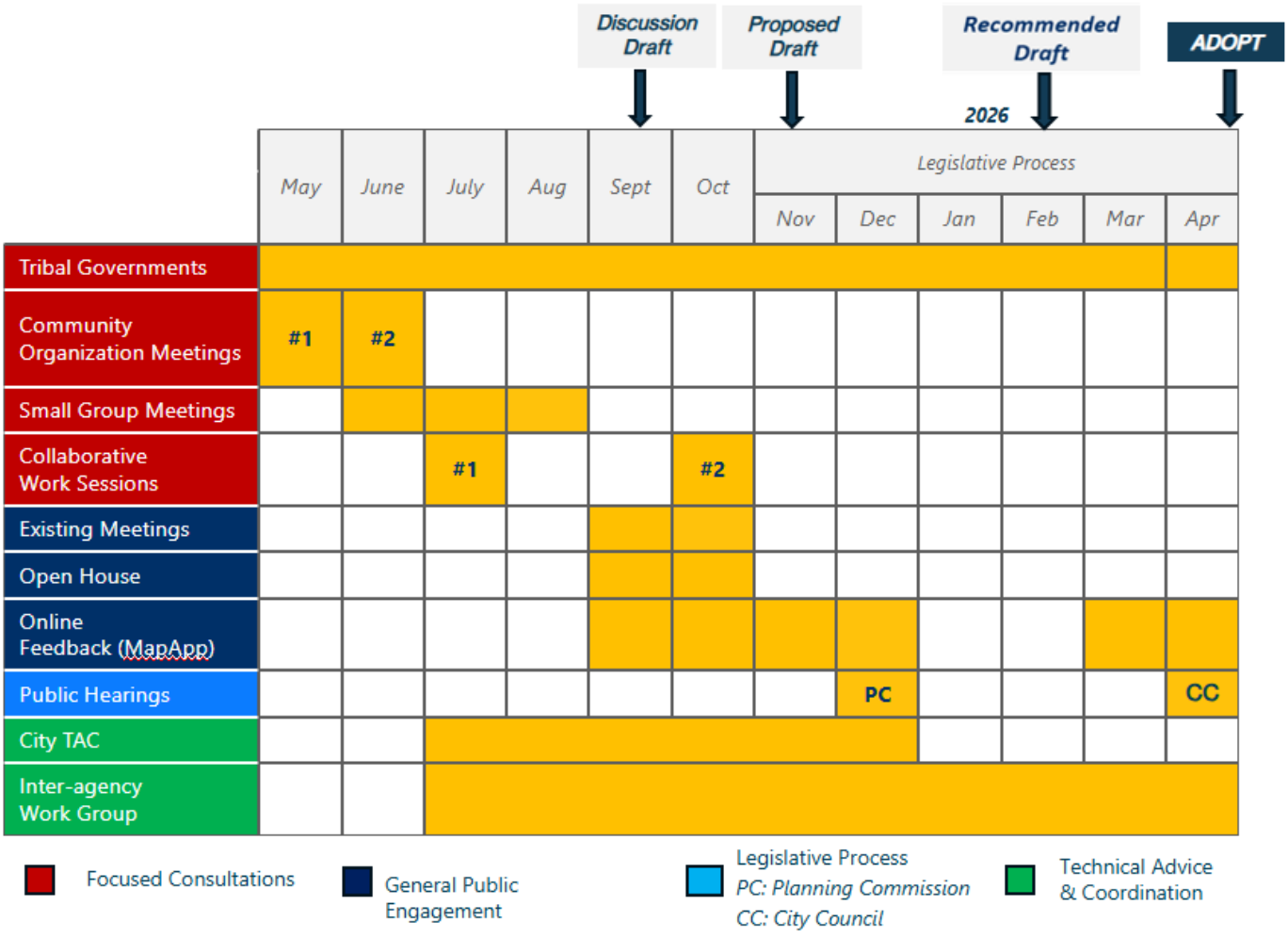
This section outlines the public engagement approach for the Critical Energy Infrastructure (CEI) Hub Policy Project and provides an overview of engagement during the Discussion Draft review phase.

The Community Engagement Framework for the project is guided by early community feedback that emphasized the need for transparency and inclusion in the plan development process. The engagement work is divided into three stages, with Stage 1 leading up to the Discussion Draft, Stage 2 covering the release and comments during the Discussion Draft review phase, and Stage 3 starting with the release of the Proposed Draft and covering the legislative process, which includes the Planning Commission's review and recommendation, and the City Council's review of the Recommended Draft and related testimony.

Appendix A, Community Engagement, provides an overview of all engagement milestones to date as well as early community feedback received during engagement Stage 1, Focused Consultations.

See Figure 3 for additional engagement and timeline details.

Figure 3. Summary of Engagement Milestones and Timelines



Stage 2: Discussion Draft

The CEI Hub Policy Project Discussion Draft was published on September 16, 2025. The primary purpose of the Discussion Draft was to share draft alternative concepts for policy and regulatory changes and seek public feedback to inform staff's work on the Proposed Draft.

After the release of the Discussion Draft on September 16, 2025, the City provided information about the project and invited public feedback through October 17, 2025, via the following methods:

- Launched on September 16, 2025, the **online "Map App" tool** provided community members information about the project, location of the CEI Hub area and opportunity to provide comments and view the comments of others.

- **Mailers** were sent the week of September 16 to all city addresses – both owners and tenants - within a mile of the CEI Hub highlighting the project and providing links to the Discussion Draft and upcoming project related events. (14,549 postcards mailed)
- Two **online project information sessions**, one on September 24 during the lunch hour and one on October 1 in the evening, presented information about the project and the draft alternatives and offered an opportunity to ask questions.
- Two **in-person open house events,** on September 29, 2025, at the Portland Building, and on October 7, 2025, at the St. Johns Community Center, offered an opportunity to learn about the draft alternatives and ask staff questions. An overview handout with frequently asked questions was available in both English and Spanish. A promotional flyer for the second open house was also created and provided to community organizations to share as desired to build awareness and promote the open house opportunity.
- Presentations at **non-city hosted events** offered further opportunities to learn about the project and ask staff questions: on September 24 at the in-person information session hosted by the Working Waterfront Coalition; on September 25 at the in-person Rumble on the River event hosted by 350PDX and other organizations; and on October 2 at an online webinar hosted by Willamette Riverkeeper.
- A **project email** through which questions and comments were submitted to staff.
- The **project website** provided an overview of the Discussion Draft alternatives, an executive summary of the draft and a project FAQ, as well as links to extensive information about project background and pre-Discussion Draft community input, meetings and discussions.

During this phase of engagement, the project team continued to maintain lines of communication with community-based organizations (CBOs) in support of process and content transparency. BPS engagement staff met regularly with representatives from seven CBOs to discuss avenues for public engagement, answer questions and get feedback on planned engagement events.

In a continuing effort to provide opportunities for dialogue between the spectrum of interested parties, a second Collaborative All-Parties Work Session (the first All-Parties Work Session was held in July) was held on October 20, 2025. The meeting was designed to offer the opportunity for a variety of interested parties, from community and environmental organizations to industry and labor representatives, to discuss the alternatives and share their perspectives.

City leadership also continued to reach out to Tribal Nations about the project. Staff met with the Grand Ronde Tribe in October to hear about their interests and share information about the project and process and future meetings are planned to continue to support their involvement and testimony to decision makers.

Finally, in support of developing a Proposed Draft, staff continued to meet with the Technical Advisory Committee and other technical experts (such as DEQ's Fuel Tank Seismic Stability Program and Portland Permitting and Development staff) around seismic upgrades, existing regulations, and fuel demand forecasts.

What We Heard – Comments on the Discussion Draft

During the Discussion Draft comment period staff received a robust public response with over 850 comments. The majority of comments were broader responses to the project and CEI Hub safety issues though some provided specifics on possible policy language and regulatory issues. Almost 450 comments were submitted to the online MapApp. Another 400 or so were submitted directly to the CEI Hub Project's email and consisted largely of a form letter calling for stronger measures to support health, safety, and climate needs, a larger drawdown and rejecting corporate interests in the face of community risk. Themes and excerpts from all of the comments are included below.

Many commenters expressed that only Alternative 4 merited consideration and that its elements should also be strengthened. *Other themes among these comments include:*

- A desire to relocate tanks away from the CEI Hub area.
- Concern that a 17% drawdown is insufficient, and that fuel storage should be reduced at a faster rate, in shorter increments, and include additional targets to 2050.
- Calls for decommissioning of tanks, shutting down facilities and removing fuel from riverside location.
- Calls to treat renewable and aviation fuel same as other dangerous fuels stored in the Hub.
- Calls for the climate impacts of these facilities to also be a consideration.

Some commenters expressed concern about the impacts of limiting fuel storage capacity at the CEI Hub. *Themes from these comments include:*

- Call for policies that allow for additional infrastructure and capacity at the CEI Hub to serve aviation sector needs and support transition to sustainable aviation fuel.
- Disruptions or limitations would directly affect reliability of aviation fuel supply and operations, and increased fuel prices for airlines, increasing airfare and increased cargo costs, hurting regional tourism, business travel, and exports of high value Oregon produced goods.
- Economic impact analysis should be conducted to inform policy changes that would restrict the supply of fuel.
- Concern that regulations that do not reflect site specific seismic information or industry standards could limit and discourage meaningful facilities improvements and impact the availability of critical fuel supplies to businesses and citizens and impact economic vitality.
- Prohibiting expansions of storage capacity and transloading infrastructure, or even reducing existing capacity, would limit the flexibility and ability of terminals to meet market needs.

- Allow new transloading infrastructure to respond to dynamic aviation and renewable markets and ensure facilities can be reconfigured for emerging fuels.

Some commenters offered different perspectives. *Themes among these comments include:*

- Focus on seismic upgrades rather than reducing capacity. There is still need for fuel.
- Reduce storage capacity through policies that reduce demand for fossil fuels and increase demand for renewable energy. A forced reduction in capacity likely raises costs on consumers and harms the economy.
- Drawdown targets should align with progress in renewable energy and the distribution of fuel infrastructure across the state as to not undermine Oregon's energy security plan.
- Incorporate reliability and emergency response considerations alongside seismic and climate objectives.

Some commenters provided other suggestions. *Some examples among these include:*

- Base the drawdown amount on risk reduction, near and long term, not demand forecasts.
- Align the drawdown target with Oregon Department of Energy's Energy Strategy Plan's "lowest cost" pathway to electrification goal of 70 percent reduction in liquid fuels by 2050.
- Expand the definition of "bulk fuels" to cover all flammable and combustible products, not just fuel.
- Require facilities to provide self-sufficient fire water capacity and automatic tank shut off systems.
- Require the removal of unused or aging tanks.
- The owners of the tanks should have insurance or bond and plan to cover spills or explosions.
- Require mandatory facility safety upgrades.
- Build on DEQ's fuel tank seismic stability program.
- Lower the allowed average tank fill levels to support risk reduction.
- Calls for drawdown to be based on fuel volume stored today versus storage capacity.
- Expand neighborhood contact requirements to include neighborhoods potentially impacted by spills, fires, explosions or fumes.
- Require annual reporting on average and median daily fill by tank and terminal.
- Diversify the location of fuel storage to reduce concentration in one area and improve access to fuel in a post-emergency scenario.
- Need for clarity on how the CEI Hub policies will interact with the Land Use Compatibility Statement (LUCS) process if the zoning code is updated.

Section 2: Overview of Proposed Policy and Regulations

Introduction

Given the significant risks associated with fuel storage at the CEI Hub, developing additional policy and zoning code regulations that support reducing the risk from bulk fuel facilities is a key aspect of the project work. In the Discussion Draft, BPS presented four conceptual alternatives for amending the comprehensive plan and zoning code to further limit risks associated with the CEI Hub. Each alternative built upon the Fossil Fuel Terminal Zoning Amendments adopted in August 2022. After receiving input on the conceptual alternatives provided in the Discussion Draft, this section is a high-level summary of the key policy and code amendments.

The key proposal elements are as follows:

- Revise existing and create new Comprehensive Plan policies to support safety and risk reduction in the CEI Hub.
- Prohibit the expansion of in-service storage tank capacity for all fuel types in the CEI Hub.
- Require a reduction ('drawdown') of 20 percent of existing in-service storage tank capacity at all bulk fuel facilities in the CEI Hub by 2036.
- Subject to a discretionary land use review, the following actions may be permitted:
    - Expansion of transloading infrastructure
    - Transfer of existing in-service storage tank capacity from one bulk fuel facility to another
- Allow the replacement, maintenance, and repair of storage tanks, provided these actions do not increase total storage capacity.
- Align with DEQ's Fuel Tank Seismic Stability program to require facility wide seismic improvements.

See Section 3 of this report for the specific proposed policy and zoning code amendment language.

Why not propose to relocate the CEI Hub?

Relocating the CEI Hub would be the most direct way to reduce risks to people and the environment. However, there are no safer places in Portland's industrial districts. As shown in *Map 2. CEI Hub Liquefaction Map*, most of Portland's industrial districts are located in areas with a high liquefaction risk. Additionally, the zoning code does not provide the authority to require the removal or relocation of existing fuel terminals. Beyond questions around whether such a regulation would be legally permissible, relocation is far beyond the scope of what the zoning code can achieve. Instead, the zoning code can manage risks by limiting or restricting development and incentivizing or requiring safety upgrades to existing facilities.

Implementing a program to relocate the CEI Hub outside of Portland is also beyond the City's authority. Doing so would require a state-led initiative with extensive coordination across state, regional, and local governments. Such an effort would involve addressing the costs of decommissioning existing facilities, relocating pipelines, and constructing replacement infrastructure. These activities would require significant funding, complex interagency planning, and likely take decades to accomplish. While relocation could substantially reduce long-term risks, it is not an option that can be pursued through this project.

Importantly, no policies or regulations adopted as part of this project will preclude or interfere with future efforts to relocate or geographically redistribute facilities. In fact, this project is intended to provide a foundation for longer-term coordination on CEI Hub planning and risk reduction. State legislation in support of these longer-term coordination efforts has been proposed in past state legislative sessions but has not yet gained sufficient support. Additional information on state bills that relate to the CEI Hub from the 2025 legislative session can be found in Section 4 of this report.

Summary of Proposed Amendments

The following subsections provide more detailed summaries of the proposal elements related to Comprehensive Plan policies, zoning code, and other city regulations. The summaries include an explanation of the rationale for the amendments. The detailed policy and zoning code amendment language can be found Section 3.

Overview of Proposed Comprehensive Plan Amendments

Revision of Existing Comprehensive Plan Policies

The proposal amends Comprehensive Plan Policy 6.48 to extend the limitation on fossil fuel distribution and storage facilities to include all bulk fuel facilities, while also removing the reference to serve the regional market. This amendment articulates the City's intent to further regulate bulk fuel terminals and serves as a policy basis for expanding limitations on all fuels and to remove references to a market-specific geography that the City does not have the authority to regulate.

- **Existing Policy 6.48 Fossil Fuel Distribution.** Limit fossil fuels distribution and storage facilities to those necessary to serve the regional market.
- **Proposed Policy 6.48 Bulk Fuel Distribution.** Limit bulk fuels distribution and storage facilities.

The proposal also amends Policy 3.72 to remove the CEI Hub from the list of industrial and port facilities to be enhanced, reflecting the proposed limitations on fuel storage capacity. This amendment is proposed in conjunction with the addition of Policy 3.83.c, which recognizes the economic importance of the CEI Hub without encouraging additional growth at the Hub.

- **Existing Policy 3.72 Industry and Port Facilities.** Enhance the regionally significant economic infrastructure that includes Oregon's largest seaport and largest airport, unique multimodal freight, rail, and harbor access; the region's critical energy hub; and proximity to anchor manufacturing and distribution facilities.
- **Proposed Policy 3.72 Industry and Port Facilities.** Enhance the regionally significant economic infrastructure that includes Oregon's largest seaport and largest airport, unique multimodal freight, rail, and harbor access~~;~~ and proximity to anchor manufacturing and distribution facilities.

Proposed CEI Hub-Specific Policies

The proposal also includes the addition of new CEI Hub-specific Comprehensive Plan policies applicable to the geography. The new policy, Policy 3.83, and the geography-specific sub-policies are added to Chapter 3 (Urban Form) of the Comprehensive Plan and provide policy guidance and direction on planning and coordination within the CEI Hub. These new policies are also accompanied by a map, new *Figure 3.10 Critical Energy Infrastructure Hub Policy Geography*, that shows where these policies apply.

Policy 3.83.a prohibits new bulk fuel facilities while allowing for maintenance and safety improvements. This language provides direction for the proposed prohibition on new bulk fuel terminals and the intent to reduce existing storage capacity, while allowing for maintenance and safety improvements.

Policy 3.83.b provides direction to require any new tank, constructed as part of a replacement or capacity transfer, be designed to meet Oregon Structural Specialty Code (OSSC) requirements for Risk Category IV structures until the facility has an approved Risk Mitigation Implementation Plan (RMIP) from the Department of Environmental Quality.

Policy 3.83.c recognizes the continuing economic role the CEI Hub plays in supplying needed fuels.

Policies 3.83.d-g provide direction and support for environmental and watershed protection, future interagency coordination to follow up on emergency response and other CEI Hub-related elements, and development regulations in support of a low-carbon economy.

Policy 3.83 Critical Energy Infrastructure Hub. Support safety and risk reduction in the Critical Energy Infrastructure (CEI) Hub in northwest Portland to foster community resilience and human and environmental health.

> ***3.83.a. Bulk Fuel Storage***: Prohibit new bulk fuel terminals and reduce storage capacity at existing terminals while allowing for maintenance and safety upgrades.
>
> ***3.83.b. Seismic Upgrades***: Require facility seismic safety improvements in conjunction with development at bulk fuel terminals to limit impacts of expected earthquakes or seismic events.
>
> ***3.83.c. Economic Significance:*** Recognize the vital role the CEI Hub plays in the local, regional, and state economy while also striving to minimize the risks associated with fuel storage.
>
> ***3.83.d. Environmental Protection***: Encourage the protection of air and water quality through coordinated planning and regulation.
>
> ***3.83.e. Watershed Protection:*** Support planning, actions, and investments that protect the Willamette River watershed and recognize the many functions the river plays as a natural, recreational, cultural, and economic resource.
>
> ***3.83.f. Interagency Coordination***: Encourage collaboration between City bureaus and other local, state, and federal agencies on mitigation planning and emergency management around the CEI Hub.
>
> ***3.83.g. Energy Transition***: Foster a transition to a low carbon economy.

Overview of Proposed Zoning Code and Other Code Amendments

Title 33: Zoning Code Amendments

The following summarizes the proposed zoning code amendments for ***Bulk Fossil Fuel Terminal*** uses. The summary provides details and rationale for each proposed code amendment and describes how the proposal differs from the existing code requirements. Proposed zoning code amendments can be found in Section 3 of this report. Existing code provisions are summarized in Section 1.

1. **Change the name of the use category from Bulk Fossil Fuel Terminal use to Bulk Fuel Terminal use.** This reflects the intent to regulate the storage of all types of fuel, including renewable and aviation fuels, not just fossil fuel.

2. **Continue to prohibit new Bulk Fuel Terminal uses.**

3. ***Further limit fuel storage tank capacity at existing Bulk Fuel Terminals.*** Fuel storage tank capacity is currently limited to total fossil fuel tank storage capacity on-site as of August 2022. This proposal further limits storage tank capacity to only the in-service tanks with fuel or fuel related contents (see Appendix B) on the date these amendments go into effect. The City has a working estimate of in-service fuel and fuel related storage capacity found in Table 2 in Section 1 of this document. The inventory will be verified and confirmed as part of the drawdown program that is described under 'Other Proposed Regulatory and Programmatic Measures' in this section.

   The amendments functionally prohibit any expansion of fuel or fuel related storage tank capacity within the CEI Hub overall by removing the current code exceptions that allow expansions for renewable and aviation fuels, which pose similar safety and environmental risks as fossil fuels in the event of a spill or structural failure. Maintaining these exceptions, which allow for an increase in storage capacity, would be inconsistent with one of the project's primary goals of reducing public safety risks within the CEI Hub.

4. ***Allow for fuel storage capacity transfers between existing Bulk Fuel Terminals***. The proposed amendments allow for the transfer of in-service fuel or fuel related storage capacity between existing bulk fuel terminals in limited circumstances through a new discretionary land use review. The intent of the transfer review is to provide a limited, conditional mechanism to prevent abrupt losses of needed storge capacity and maintain regional fuel supply reliability if a terminal decides to cease operations. The review requires terminals to demonstrate both a continued need for the transferred capacity that is supported by a fuel demand analysis, and that the transfer results in a net improvement in safety (see Section 3- Code and Commentary for specific review criteria). Additionally, the total capacity transferred must be reduced by 20 percent, meaning that the receiving site will only receive 80 percent of the capacity transferred from the sending site.

5. ***Continue to allow maintenance, repair, and replacement of storage tanks.*** The proposal allows for maintenance and repair of existing storage tanks and allows for replacement of existing storage tanks under the following conditions:

    - Prior to approval of a Risk Mitigation Implementation Plan (RMIP) by the Oregon Department of Environmental Quality (DEQ), storage tanks may be replaced so long as the replacement tank(s) is built in accordance with OSSC requirements for Risk Category IV structures.
    - After the terminal has an approved RMIP, a replacement tank(s) is only permitted when accompanied by a letter from DEQ certifying that the new construction complies with the approved RMIP and the terminal has taken all required steps necessary to date to remain in compliance with the RMIP.
    - The replacement tank(s) is no larger than the tank it is replacing.
    - A bond is posted is to ensure that the tank that is being replaced is demolished once the replacement tank has been built and is up and running. This will ensure that the total storage capacity on the site is not increased.

Comparing Risk Category Definitions: Risk Category designations are defined by the International Building Code (IBC) and adopted into the Oregon Structural Specialty Code (OSSC), which governs building standards statewide. These categories establish performance expectations for buildings and structures under extreme conditions such as earthquakes, high winds, or snow loads.

The spectrum of Risk Categories ranges from Risk Category I (lowest category) to Risk Category IV (highest category). Risk Category IV generally applies to essential or high-hazard facilities such as hospitals, air control towers, and emergency shelters where maintaining function after a disaster is critical. By comparison, Risk Category III provides a level of safety that minimizes structural collapse and loss of life but does less to ensure the building will remain operational following a disruptive event. Lower categories, such as Risk Category II or I, require progressively less stringent design criteria. For example, deep foundations are required if lateral spread during an earthquake is expected to exceed 4 inches for Risk Category IV, compared with 18 inches for Risk Category II. The probability of structural failure also declines with higher risk categories: approximately 10% for Risk Category II, 5% for Risk Category III, and 2.5% for Risk Category IV.

Rationale for Requiring Risk Category IV Designation: Under current Oregon building code, the risk category assigned to a new or replacement tank depends on the quantity of toxic or highly toxic materials it contains. As a result, new tanks could be designed to a lower Risk Category (II or III) if they do not meet Risk Category IV thresholds for highly toxic materials, subject to approval by the building official.

Requiring that all new and replacement tanks meet the OSSC requirements for Risk Category IV structures ensures tanks are designed with stronger foundations, better anchorage, and stricter limits on differential settlement and lateral spread than the lower risk categories. These required design elements significantly reduce the likelihood of tank failure during earthquakes and reflect the critical role of bulk fuel infrastructure in post-disaster recovery.

6. **Limit new, and alterations to existing, transloading infrastructure**. Currently, the zoning code does not regulate transloading infrastructure. Transloading infrastructure is equipment that transfers fuel between storage tanks and the different modes of transportation, and includes equipment such as pipes, rail racks, and other systems. The proposed amendments add a definition for transloading infrastructure and introduce new regulations that limit the development and expansion of transloading infrastructure.

   New transloading infrastructure is permitted in limited circumstances: when constructed in conjunction with new or replacement tanks (such as those built to replace existing capacity or to accommodate transferred capacity), or when approved through a discretionary land use review.

This review will require demonstration that the new or expanded infrastructure provides a clear public benefit, such as reducing risks associated with fuel transfer.

Replacements or repairs of existing transloading infrastructure are allowed.

7. ***Require neighborhood contact for alteration to storage tanks and transloading infrastructure.*** Existing regulations require neighborhood contact for the addition of at least one storage tank on a site with a Bulk Fossil Fuel Terminal. The process requires the applicant to contact neighborhood and other associations in the area via email with details about the project, install at least one sign on the site with project details, and schedule and attend one public meeting. The neighborhood contact process provides an opportunity for people who live, work or otherwise pass by a development site to learn about a project before construction begins. Any feedback provided to the property owner or developer is informal and non-binding. The proposed amendments will require completion of the neighborhood contact process for the following additional actions: demolition of an existing tank; and adding or altering a transloading facility. Additionally, the amendments expand the area where the required neighborhood contact letter must be sent to include the Linnton, Forest Park, Northwest District, St. Johns, Cathedral Park, University Park, and Overlook neighborhood associations.

Other Proposed Regulatory and Programmatic Measures

The following regulatory and programmatic measures involve amendments to other city code titles. The zoning code (Title 33) is only implemented when a development permit is applied for, whereas the proposed drawdown program (Title 17) and the proposed building code (Title 24) provision will apply to all bulk fuel terminals regardless of whether zoning code requirements are triggered. The proposed Title 17 amendments create the components to require a reduction of storage capacity at the terminals or "drawdown". The proposed Title 24 amendments will require a building permit for structural support of piping.

The amendments to Title 17 and Title 24 (summarized below) are not part of the legislative land use process and therefore the specific code amendments will not go before the Planning Commission. These other code amendments will be presented to City Council alongside the Recommended Draft of the comprehensive plan policy and zoning code amendments.

TITLE 17: DRAWDOWN PROGRAM

Require a drawdown of existing liquid fuel storage capacity at bulk fuel terminals. By 2036, each bulk fuel terminal will be required to reduce its total in-service fuel and fuel related storage capacity by 20 percent from its baseline in-service tank capacity that exists on the day these amendments are adopted by City Council. This drawdown requirement applies regardless of any capacity transfers that may occur prior to 2036, as described in proposed zoning code amendment #4.

For example, if a bulk fuel terminal has 10 million gallons of in-service storage capacity on the date that the amendments are adopted, it must reduce its total capacity by 2 million gallons by October 1st, 2036. If that same terminal is approved to decrease its capacity with a transfer to another terminal, it would still be required to reduce its remaining capacity by 2 million gallons, based on its original 2026 baseline capacity.

The 20 percent drawdown rate was calibrated based on fuel demand modeling, including federal and local demand forecasts. The assumptions for the modeling used are provided in Appendix C to this report and are also described in Section 5.

- Components of the drawdown program include:
    - **Inventory:** A verified baseline inventory of in-service fuel and fuel related storage capacity will serve as the basis for calculating the required 20 percent capacity reduction by 2036. To establish this baseline, the City will require all bulk fuel terminals to submit an inventory of existing fuel storage capacity by October 1, 2026. The inventory shall identify the total capacity of both out of service tanks and in-service fuel and fuel related tanks. Following submittal, the BPS will review and verify each facility's baseline capacity. The baseline capacity will also serve as a reference point for tracking facility capacity over time, including monitoring any tank replacements or approved capacity transfers.
    - **Enforcement:** Terminals will be assessed a daily fine should they fail to comply with the 20% drawdown requirement by October 1, 2036.

Rationale for 2036 Drawdown Timeline:

The 2036 drawdown timeline aligns with DEQ's estimated timeline for facilities to complete seismic upgrades under their Risk Mitigation Implementation Plans (RMIPs). Aligning the City's capacity reduction target with DEQ's program allows facilities to account for both required seismic upgrade investments and required capacity reductions in their long-term planning.

Given the uncertainty surrounding future liquid fuel demand and infrastructure needs, this program does not identify reduction targets beyond 2036. The Bureau of Planning and Sustainability will report to City Council in 2027 on the RMIPs, 2031 (5-year) and 2036.

TITLE 24: BUILDING CODE

Require a building permit for structural support of piping. Title 24.10.072.A will be amended to more explicitly state that a building permit is required for structural support for "piping carrying combustible, flammable or hazardous materials" to match the scope of Title 31, Fire Regulations. In practice Portland

Permitting and Development (PP&D) already requires building permits for these elements, but adding this to the requirements of 24.10.072.A will support consistent application.

Title 31.30.040.E requires fire permits "…to install, alter, remove, abandon, place temporarily out of service or otherwise dispose of any equipment or piping in connection with the manufacture, storage, handling, use or sale of flammable or combustible liquids or hazardous materials."

Section 3: Proposed Comprehensive Plan and Zoning Code Amendments

This section presents amendments to 2035 Comprehensive Plan and Title 33, Planning and Zoning. The section is formatted to facilitate readability by showing amendments on the right-hand (odd) pages and related commentary on the facing left-hand (even) pages.

How to read these amendments:

- Language to be added is show in underline.
- Language to be deleted is show in ~~strikethrough~~

Commentary

This is the beginning of the proposed amendments to the 2035 Comprehensive Plan

The goal of the Critical Energy Infrastructure (CEI) Hub Policy Project is to support safety and reduce risks to the community and the environment in the event of a natural or other disaster such as a Cascadia Subduction Zone earthquake. To provide the policy basis for the implementing regulations, the proposal includes a suite of a Comprehensive Plan Amendments. The amendments include revisions to the City's existing policies and creates a new policy section specific to the CEI Hub geography.

6.48 Fossil Fuel Distribution

This amendment changes Policy 6.48 to refer to all bulk fuel distribution, not just fossil fuels. It also removes reference to the regional market to reflect the City's inability to regulate where fuel distribution occurs.

Policy 6.48 ~~Fossil~~ Bulk Fuel Distribution. Limit ~~fossil~~ bulk fuels distribution and storage facilities ~~to those necessary to serve the regional market.~~

Commentary

3.72. Industry and Port Facilities

In previous decisions, City Council has interpreted the verb "enhance", which is not defined in the 2035 Comprehensive Plan, to mean to intensify or improve. This amendment removes the CEI Hub from the list of industrial and port facilities to be enhanced to reflect the policy intent to limit growth of the CEI Hub, except for safety improvements. This amendment is proposed in conjunction with proposed policy 3.83.c, which recognizes the economic value the CEI Hub provides.

Policy 3.72 **Industry and port facilities.** Enhance the regionally significant economic infrastructure that includes Oregon's largest seaport and largest airport, unique multimodal freight, rail, and harbor access; ~~the region's critical energy hub;~~ and proximity to anchor manufacturing and distribution facilities.

Commentary

Table of Contents

This amendment adds the new 3.83, Critical Energy Infrastructure Hub policies to the table of contents.

Table of Contents

Commentary

Table of Contents

These amendments renumber some of the existing Chapter 3 policies in recognition of the addition of the new 3.83, Critical energy infrastructure hub policy and adds a map 3-10 showing the Critical Energy Infrastructure Hub geography to the table of contents.

List of Figures

Commentary

3.83 A-F, Critical Energy Infrastructure Hub.

This amendment adds a new set of policies specific to the CEI Hub geography supporting the reduction of bulk fuel, environmental and human health, and emergency management coordination; while acknowledging the economic value the CEI Hub provides.

Policy 3.83 **Critical Energy Infrastructure Hub.** Support safety and risk reduction in the Critical Energy Infrastructure (CEI) Hub in Northwest Portland to foster community resilience and human and environmental health. *See Figure 3-10 — Critical Energy Infrastructure Hub Policy Geography.*

3.83.a. Bulk Fuel Storage. Prohibit new bulk fuel terminals and reduce capacity of existing terminals while allowing for maintenance and safety upgrades.

3.83.b. Seismic Upgrades. Require seismic safety improvements in conjunction with development at bulk fuel terminals to limit impacts of expected earthquakes or seismic events.

3.83.c. Economic Significance. Recognize the vital role the CEI Hub plays in the local, regional, and state economy while also striving to minimize the risks associated with fuel storage.

3.83.d. Environmental Protection. Encourage the protection of air and water quality through coordinated planning and regulation.

3.83.e. Watershed Policies. Support planning, actions, and investments that protect the Willamette River Watershed and recognize the many functions the river plays as a natural, recreational, cultural, and economic resource.

3.83.f. Interagency Coordination. Encourage collaboration between City Bureaus and other local, state, and federal agencies on mitigation planning and emergency response around the CEI Hub.

3.83.g. Energy Transition. Foster a transition to a low carbon economy.

Commentary

Policies 3.83-3.102

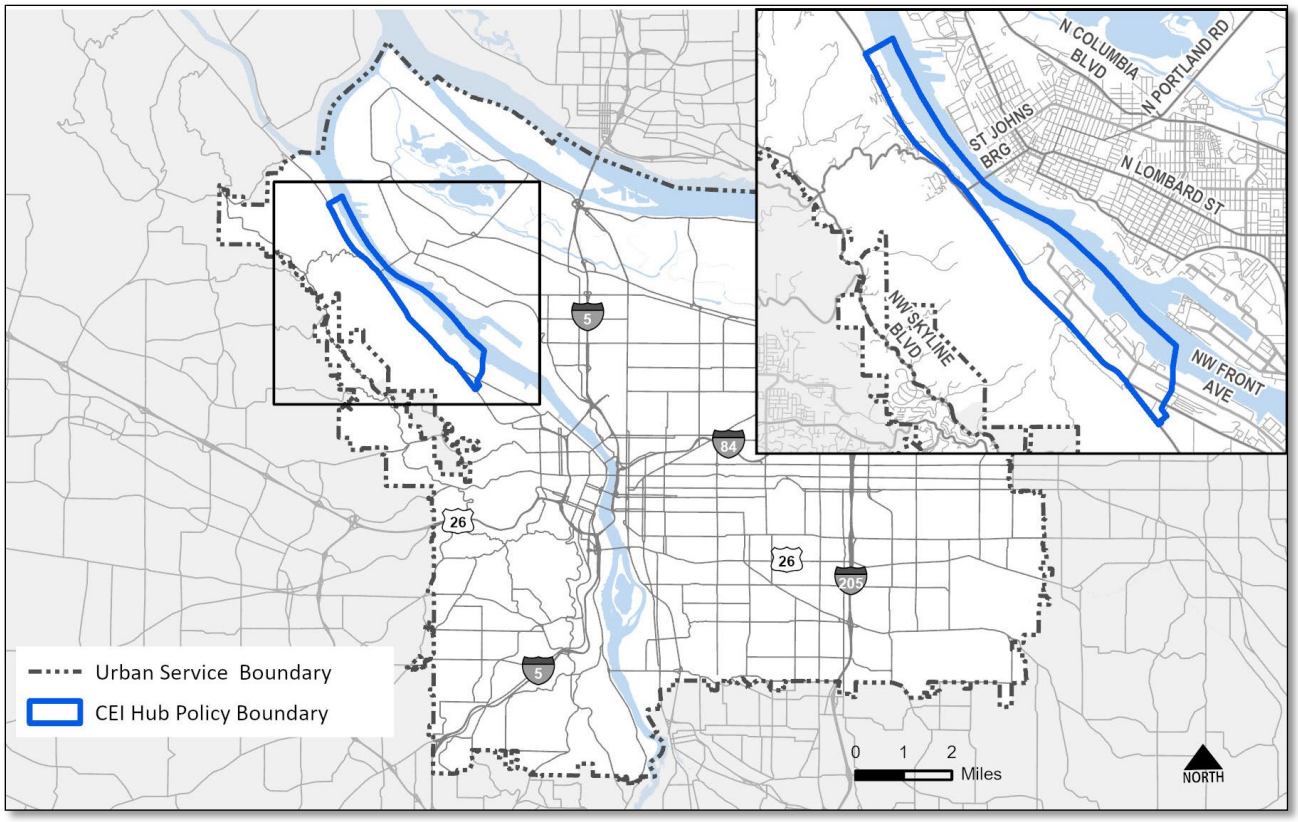
This amendment renumbers Comprehensive Plan Policies 3.83 through 3.102 to account for new Policy 3.83.

[Re-number Policies 3.83-3.105]

Commentary

Figure 3.10 Critical Energy Infrastructure Hub Policy Geography.
This amendment adds a map showing the CEI Hub Geography to which CEI Hub Policy 3.83 applies.

Figure 3.10. Critical Energy Infrastructure Hub Policy Geography



Commentary

This is the beginning of the proposed amendments to Title 33, Planning and Zoning

Table 100-1

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

Table 100-1 **Open Space Zone Primary Uses**	
Use Categories	**OS Zone**
Residential Categories	
Household Living	N
Group Living	N
Commercial Categories	
Retail Sales And Service	CU [1]
Office	N
Quick Vehicle Servicing	N
Vehicle Repair	N
Commercial Parking	N
Self-Service Storage	N
Commercial Outdoor Recreation	CU
Major Event Entertainment	N
Industrial Categories	
Manufacturing And Production	CU [6]
Warehouse And Freight Movement	N
Wholesale Sales	N
Industrial Service	N
Bulk ~~Fossil~~ Fuel Terminal	N
Railroad Yards	N
Waste-Related	N
Institutional Categories	
Basic Utilities	L/CU [5]
Community Service	CU [4]
Parks And Open Areas	L/CU [2]
Schools	CU
Colleges	N
Medical Centers	N
Religious Institutions	N
Daycare	CU
Other Categories	
Agriculture	L[7]
Aviation And Surface Passenger Terminals	N
Detention Facilities	N
Mining	CU
Radio Frequency Transmission Facilities	L/CU [3]
Rail Lines And Utility Corridors	CU

Y = Yes, Allowed L = Allowed, But Special Limitations CU = Conditional Use Review Required
N = No, Prohibited
Notes:

- The use categories are described in Chapter 33.920.
- Regulations that correspond to the bracketed numbers [ ] are stated in 33.100.100.B.
- Specific uses and developments may also be subject to regulations in the 200s series of chapters.

Commentary

Table 110-1

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

Table 110-1
Single-Dwelling Zone Primary Uses

Use Categories	RF	R20	R10	R7	R5	R2.5
Residential Categories						
Household Living	Y	Y	Y	Y	Y	Y
Group Living	L/CU [1]	L/CU [1]	L/CU [1]	L/CU [1]	L/CU [1]	L/CU [1]
Commercial Categories						
Retail Sales And Service	CU [2]	CU [2]	CU [2]	CU [2]	CU [2]	CU [2]
Office	N	N	N	N	N	N
Quick Vehicle Servicing	N	N	N	N	N	N
Vehicle Repair	N	N	N	N	N	N
Commercial Parking	N	N	N	N	N	N
Self-Service Storage	N	N	N	N	N	N
Commercial Outdoor Recreation	N	N	N	N	N	N
Major Event Entertainment	N	N	N	N	N	N
Industrial Categories						
Manufacturing And Production	CU [3]	N	N	N	N	N
Warehouse And Freight Movement	N	N	N	N	N	N
Wholesale Sales	N	N	N	N	N	N
Industrial Service	N	N	N	N	N	N
Bulk ~~Fossil~~ Fuel Terminal	N	N	N	N	N	N
Railroad Yards	N	N	N	N	N	N
Waste-Related	N	N	N	N	N	N
Institutional Categories						
Basic Utilities	L/CU [4]	L/CU [4]	L/CU [4]	L/CU [4]	L/CU [4]	L/CU [4]
Community Service	L/CU [5]	L/CU [5]	L/CU [5]	L/CU [5]	L/CU [5]	L/CU [5]
Parks And Open Areas	L/CU [6]	L/CU [6]	L/CU [6]	L/CU [6]	L/CU [6]	L/CU [6]
Schools	CU	CU	CU	CU	CU	CU
Colleges	CU	CU	CU	CU	CU	CU
Medical Centers	CU	CU	CU	CU	CU	CU
Religious Institutions	CU	CU	CU	CU	CU	CU
Daycare	L/CU [7]	L/CU [7]	L/CU [7]	L/CU [7]	L/CU [7]	L/CU [7]
Other Categories						
Agriculture	L [8]	L [8]	L/CU [9]	L/CU [9]	L [10]	L [10]
Aviation And Surface Passenger Terminals	CU	N	N	N	N	N
Detention Facilities	N	N	N	N	N	N
Mining	CU	N	N	N	N	N
Radio Frequency Transmission Facilities	L/CU [11]	L/CU [11]	L/CU [11]	L/CU [11]	L/CU [11]	L/CU [11]
Railroad Lines And Utility Corridors	CU	CU	CU	CU	CU	CU

Y = Yes, Allowed
L = Allowed, But Special Limitations
CU = Conditional Use Review Required
N = No, Prohibited

Notes:

- The use categories are described in Chapter 33.920.
- Regulations that correspond to the bracketed numbers [ ] are stated in 33.110.100.B.
- Specific uses and developments may also be subject to regulations in the 200s series of chapters.

Commentary

Table 120-1

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

Table 120-1 Multi-Dwelling Zone Primary Uses						
Use Categories	**RM1**	**RM2**	**RM3**	**RM4**	**RX**	**RMP**
Residential Categories						
Household Living	Y	Y	Y	Y	Y	Y
Group Living	Y	Y	Y	Y	Y	N
Commercial Categories						
Retail Sales And Service	L [1]	L [1]	L [1]	L [1]	L [1]	L [10]
Office	L [1]	L [1]	L [1]	L [1]	L [1]	N
Quick Vehicle Servicing	N	N	N	N	N	N
Vehicle Repair	N	N	N	N	N	N
Commercial Parking	N	N	N	N	CU [2]	N
Self-Service Storage	N	N	N	N	N	N
Commercial Outdoor Recreation	N	N	N	N	N	N
Major Event Entertainment	N	N	N	N	N	N
Industrial Categories						
Manufacturing And Production	N	N	N	N	N	N
Warehouse And Freight Movement	N	N	N	N	N	N
Wholesale Sales	N	N	N	N	N	N
Industrial Service	N	N	N	N	N	N
Bulk ~~Fossil~~ Fuel Terminal	N	N	N	N	N	N
Railroad Yards	N	N	N	N	N	N
Waste-Related	N	N	N	N	N	N
Institutional Categories						
Basic Utilities	L/CU [8]	L/CU [8]	L/CU [8]	L/CU [8]	L/CU [8]	L/CU [8]
Community Service	L/CU [4]	L/CU [4]	L/CU [4]	L/CU [4]	L/CU [3]	L/CU [4]
Parks And Open Areas	L/CU [5]	L/CU [5]	Y	Y	Y	L/CU [5]
Schools	CU	CU	CU	CU	L/CU [3]	CU
Colleges	CU	CU	CU	CU	CU	CU
Medical Centers	CU	CU	CU	CU	CU	CU
Religious Institutions	CU	CU	CU	CU	CU	CU
Daycare	L/CU [6]	L/CU [6]	L/CU [6]	L/CU [6]	Y	L/CU [6]
Other Categories						
Agriculture	L [9]	L [9]	L [9]	L [9]	L [9]	L [9]
Aviation And Surface Passenger Terminals	N	N	N	N	N	N
Detention Facilities	N	N	N	N	N	N
Mining	N	N	N	N	N	N
Radio Frequency Transmission Facilities	L/CU [7]	L/CU [7]	L/CU [7]	L/CU [7]	L/CU [7]	L/CU [7]
Rail Lines And Utility Corridors	CU	CU	CU	CU	CU	CU

Y = Yes, Allowed
L = Allowed, But Special Limitations
CU = Conditional Use Review Required
N = No, Prohibited

Notes:

- The use categories are described in Chapter 33.920.
- Regulations that correspond to the bracketed numbers [ ] are stated in 33.120.100.B.
- Specific uses and developments may also be subject to regulations in the 200s series of chapters.

Commentary

Table 130-1

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

Table 130-1
Commercial/Mixed Use Zone Primary Uses

Use Categories	CR	CM1	CM2	CM3	CE	CX
Residential Categories						
Household Living	Y	Y	Y	Y	Y	Y
Group Living	Y	Y	Y	Y	Y	Y
Commercial Categories						
Retail Sales And Service	L [1]	L [1]	Y	Y	Y	Y
Office	L [1]	L [1]	Y	Y	Y	Y
Quick Vehicle Servicing	N	L [1]	L [1]	L [1]	Y	N
Vehicle Repair	N	N	Y	Y	Y	L [4]
Commercial Parking	N	N	L [8]	L [8]	Y	CU [8]
Self-Service Storage	N	N	N	L [3]	L [3]	L [3]
Commercial Outdoor Recreation	N	N	Y	Y	Y	Y
Major Event Entertainment	N	N	CU	CU	CU	Y
Industrial Categories						
Manufacturing and Production	N	L/CU [2,4]	L/CU [2,4]	L/CU [2,4]	L/CU [2,4]	L/CU [2,4]
Warehouse and Freight Movement	N	N	N	L [2,4]	L [2,4]	N
Wholesale Sales	N	N	L [2,4]	L [2,4]	L [2,4]	L [2,4]
Industrial Service	N	N	CU [2,4]	CU [2,4]	CU [2,4]	CU [2,4]
Bulk ~~Fossil~~ Fuel Terminal	N	N	N	N	N	N
Railroad Yards	N	N	N	N	N	N
Waste-Related	N	N	N	N	N	N
Institutional Categories						
Basic Utilities	Y/CU [7]	Y/CU [7]	Y/CU [7]	Y/CU [7]	Y/CU [7]	Y/CU [7]
Community Service	L/CU [5]	L/CU [5]	L/CU [5]	L/CU [5]	L/CU [5]	L/CU [5]
Parks and Open Areas	Y	Y	Y	Y	Y	Y
Schools	Y	Y	Y	Y	Y	Y
Colleges	N	Y	Y	Y	Y	Y
Medical Centers	N	Y	Y	Y	Y	Y
Religious Institutions	Y	Y	Y	Y	Y	Y
Daycare	Y	Y	Y	Y	Y	Y
Other Categories						
Agriculture	L [9]	L [9]	L/CU [10]	L/CU [11]	L/CU [11]	L/CU [10]
Aviation and Surface Passenger Terminals	N	N	N	N	CU	CU
Detention Facilities	N	N	N	CU	CU	CU
Mining	N	N	N	N	N	N
Radio Frequency Transmission Facilities	N	L/CU [6]	L/CU [6]	L/CU [6]	L/CU [6]	L/CU [6]
Rail Lines and Utility Corridors	N	CU	CU	CU	CU	CU

Y = Yes, Allowed
CU = Conditional Use Review Required
L = Allowed, But Special Limitations
N = No, Prohibited

Notes:

- The use categories are described in Chapter 33.920.
- Regulations that correspond to the bracketed numbers [ ] are stated in 33.130.100.B.
- Specific uses and developments may also be subject to regulations in the 200s series of chapters.

Commentary

Among the goal of the Critical Energy Infrastructure (CEI) Hub Policy Project is to support safety and reduce risks to the community and the environment in the event of a natural or other disaster such as a Cascadia Subduction Zone earthquake. To this end, the CEI Hub Policy Project zoning code amendments build on the existing Bulk Fossil Fuel Terminal use prohibitions and limitations, and go further by eliminating the option to expand storage tank capacity for renewable and aviation fuels (i.e.., jet fuel, aviation gasoline, and sustainable aviation fuel), regulate the transloading facilities that move fuel around a terminal between storage tanks and transportation modes, require the highest seismic structural standards when existing storage tanks are replaced, and help facilitate a reduction in the overall storage tank capacity allowed on a terminal site.

33.140 Table of Contents

This amendment reflects the addition of a section containing development standards for Bulk Fuel Terminals.

33.140 Employment and Industrial Zones

140

Sections:

Commentary

33.140.050.B

These amendments expand the circumstances in which neighborhood contact is required for development on a Bulk Fuel Terminal. Currently, Neighborhood Contact II is required when a new storage tank will be built on a terminal site, and the proposal has not gone through a land use review (land use reviews have a separate type of required notification). The process requires the applicant for a permit to contact the neighborhood and business associations in the area via email with details about the project, install at least one sign on the site with project details, and schedule and attend one public meeting. The neighborhood contact process provides an opportunity for people who live, work or otherwise pass by a development site to learn about a project before the work begins. Any feedback provided to the property owner or developer is informal and non-binding.

The amendments to this Subsection will require Neighborhood Contact II when a new tank is built, an existing tank is demolished, or the proposal includes a new, or an alteration to an existing, transloading facility. Neighborhood contact will not be required for alterations to existing buildings or structures that do not contain or transport fuel.

The neighborhood contact steps currently must occur before applying for a permit. The word "building" is being deleted in relation to the type of permit being applied for because demolishing and some alterations to an existing transloading facility does not require a building permit. Demolition requires a demolition permit, and alterations to transloading facilities can require a plumbing or electrical permit. Deleting the word "building" expands the type of permit that neighborhood contact will be required for.

The amendments also add additional neighborhood associations who must receive the letter or email required by the notification step of Neighborhood Contact II. Currently, 33.705.020.B.1 requires a letter or email be sent to all neighborhood associations within 400 feet of a site. Because some of the risks associated with storage of fuel in the CEI Hub can extend beyond 400 feet from a terminal site, notification will be required to be emailed or mailed to neighborhoods surrounding the CEI Hub on both sides of the Willamette River.

33.140.050 Neighborhood Contact in EG and I Zones

A. Purpose. Neighborhood contact is required when a new storage structure for any type of fuel will be built on a Bulk ~~Fossil~~ Fuel Terminal because of the impacts that fuel projects can have on the surrounding community.

B. Neighborhood contact requirement. Proposals meeting the following conditions are subject to the neighborhood contact steps of 33.705.020.B., Neighborhood Contact II. All of the steps in 33.705.020.B must be completed before an application for a ~~building~~ permit can be submitted. For the notification step of Neighborhood Contact II, the required email or letter must also be sent to the Linnton, Forest Park, Northwest District, St. Johns, Cathedral Park, University Park and Overlook neighborhood associations.

1. The proposed development has not been subject to a land use review; and
2. The proposal ~~proposed development~~ is on a site with a Bulk Fuel Terminal and includes one or more of the following:
   a. Demolition of an existing fuel storage tank;
   b. ~~a~~At least one new structure for the storage of any type of fuel; or ~~on a site with a Bulk Fossil Fuel Terminal use.~~
   c. The addition of or an alteration to a transloading facility.

Commentary

Table 140-1

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

Table 140-1
Employment and Industrial Zone Primary Uses

Use Categories	EG1	EG2	EX	IG1	IG2	IH
Residential Categories						
Household Living	L[1]	L[1]	Y	CU [2]	CU [2]	CU [2]
Group Living	L[1]	L[1]	Y	CU [2]	CU [2]	CU [2]
Commercial Categories						
Retail Sales And Service	L/CU [3]	L/CU [3]	Y	L/CU [4]	L/CU [5]	L/CU [6]
Office	Y	Y	Y	L/CU [4]	L/CU [5]	L/CU [6]
Quick Vehicle Servicing	Y	Y	N	Y	Y	Y
Vehicle Repair	Y	Y	Y	Y	Y	Y
Commercial Parking	CU [14]	CU [14]	CU [14]	CU [14]	CU [14]	CU [14]
Self-Service Storage	L [7]	L [7]	L [7]	Y	Y	Y
Commercial Outdoor Recreation	Y	Y	Y	CU	CU	CU
Major Event Entertainment	CU	CU	CU	CU	CU	CU
Industrial Categories						
Manufacturing And Production	Y	Y	Y	Y	Y	Y
Warehouse And Freight Movement	Y	Y	Y	Y	Y	Y
Wholesale Sales	Y	Y	Y	Y	Y	Y
Industrial Service	Y	Y	Y	Y	Y	Y
Bulk ~~Fossil~~ Fuel Terminal	L [16]	L [16]	N	L [16]	L [16]	L [16]
Railroad Yards	N	N	N	Y	Y	Y
Waste-Related	N	N	N	L/CU [8]	L/CU [8]	L/CU [8]
Institutional Categories						
Basic Utilities	Y/CU [12]	Y/CU [12]	Y/CU [12]	Y/CU [12]	Y/CU [12]	Y/CU 12]
Community Service	L/CU [9]	L/CU [9]	L/CU [9]	L/CU [10]	L/CU [10]	L/CU [10]
Parks And Open Areas	Y	Y	Y	Y	Y	Y
Schools	Y	Y	Y	N	N	N
Colleges	Y	Y	Y	N	N	N
Medical Centers	Y	Y	Y	N	N	N
Religious Institutions	Y	Y	Y	N	N	N
Daycare	Y	Y	Y	L/CU [10]	L/CU [10]	L/CU [10]
Other Categories						
Agriculture	L [15]	L [15]	L [15]	L [15]	L [15]	L [15]
Aviation And Surface Passenger Terminals	CU	CU	CU	CU	CU	CU
Detention Facilities	CU	CU	CU	CU	CU	CU
Mining	N	N	N	CU	CU	CU
Radio Frequency Transmission Facilities	L/CU [13]	L/CU [13]	L/CU [13]	L/CU [13]	L/CU [13]	L/CU [13]
Rail Lines And Utility Corridors	Y	Y	Y	Y	Y	Y

Y = Yes, Allowed
L = Allowed, But Special Limitations
CU = Conditional Use Review Required
N = No, Prohibited

Notes:

- The use categories are described in Chapter 33.920.
- Regulations that correspond to the bracketed numbers [ ] are stated in 33.140.100.B.
- Specific uses and developments may also be subject to regulations in the 200s series of chapters.

Commentary

33.140.100.B.16

The amendments to the Bulk Fuel Terminal use limitation are intended to accomplish the following:

1. Reflect the change to the name of the use category from Bulk Fossil Fuel Terminal to Bulk Fuel Terminal.
2. Eliminate the exception that allows additional storage tank capacity to be built on a terminal site for the storage of renewable fuel. The Parametrix capacity analysis conducted to inform the proposed project indicates that there is underutilized capacity in the CEI Hub as whole that could be available to accommodate future needs for additional renewable fuel (See Appendix C). Based on this analysis and consistent with the goal of minimizing risk, the proposed amendment eliminates the exception for renewable fuels, instead relying on existing underutilized capacity to accommodate any future need. While the need for renewable fuels may increase as fossil fuel consumption continues to decline, the modeling scenario representing the highest need for renewable fuel storage indicates that the bulk fuel terminals in the CEI Hub have sufficient storage capacity to accommodate any need for renewable fuel storage, even with the proposed 20 percent drawdown.
3. Further limit the storage tank capacity allowed to only the in-service tanks that exist on the day these amendments are adopted by City Council plus or minus any capacity that is transferred from another site. For more details on fuel capacity transfers please see the commentary and code for 33.870, Bulk Fuel Terminal Reviews. The zoning code currently limits storage tank capacity to the total tank capacity that existed on the site on August 31, 2022, but does not differentiate between storage tanks that are in- and out-of-service. The Oregon Department of Environmental Quality estimates that up to 5% of storage tank capacity in the CEI Hub is out-of-service. This amendment eliminates the possibility that storage tanks that are currently out-of-service are rehabbed and put back into service. As part of the drawdown program, terminal operators will be required to submit an inventory of in-service storage tank capacity, and it will be available for PP&D to consult when necessary to implement or enforce regulations that apply to Bulk Fuel Terminal uses. See Section 2 for more discussion of the proposed drawdown program. The inventory will include in-service storage tank capacity on the date these amendments are adopted by City Council and will be updated to reflect the in-service storage tank capacity as of the drawdown date (October 1, 2036).

33.140.100 Primary Uses

A. [No change]

B. Limited uses. Uses allowed that are subject to limitations are listed in Table 140-1 with an "L". These uses are allowed if they comply with the limitations listed below and the development standards and other regulations of this Title. In addition, a use or development listed in the 200s series of chapters is also subject to the regulations of those chapters. The paragraphs listed below contain the limitations and correspond with the footnote numbers from Table 140-1.

1-15. [No change]

16. Bulk ~~Fossil~~ Fuel Terminals. This regulation applies to all parts of Table 140-1 that have a [16].

a. Existing Bulk ~~Fossil~~ Fuel Terminals. Bulk ~~Fossil~~ Fuel Terminals that existed on ~~August 31, 2022~~[INSERT ADOPTION DATE] are allowed, but are limited as follows:

(1) Prior to October 1, 2036, the total amount of fossil and renewable fuel that can be stored on the site in storage tanks is limited to the ~~fossil~~ in-service ~~-~~fuel storage tank capacity that existed on the site on ~~August 31, 2022~~[INSERT ORDINANCE ADOPTION DATE] plus or minus storage tank capacity transferred to or from the site.

(2) On and after October 1, 2036, the total amount of fossil and renewable fuel that can be stored on the site in storage tanks is limited to 80 percent of the in-service fuel storage tank capacity that existed on the site on [INSERT ORDINANCE ADOPTION DATE] plus or minus storage tank capacity transferred to or from the site.

(3) An inventory of the in-service storage tank capacity that existed on [INSERT ORDINANCE ADOPTION DATE] is maintained and updated by the Bureau of Planning and Sustainability.

(4) Total fossil fuel storage tank capacity on the site in excess of the limits listed above~~capacity that existed on August 31, 2022~~ is prohibited. ~~Adding storage tank capacity exclusively for renewable fuels or to comply with the Renewable Fuel Standard (PCC Chapter 16.60 Motor Vehicle Fuels) is not considered an increase in capacity.~~

(5) Storing coal on the site is prohibited.

b. New Bulk ~~Fossil~~ Fuel Terminals are prohibited.

Commentary

33.140.260 Bulk Fuel Terminals

The Bulk Fuel Terminal standards are intended to support the use limitation on fuel storage capacity on a terminal site while at the same time allowing for continued maintenance, repair and replacement of existing fuel storage and transloading facilities.

33.140.260.B.1 Fuel storage tanks

The new standards for fuel storage tanks are intended to reduce risks associated with storage of fuel.

Standard B.1.a prohibits the addition of new storage tanks on Bulk Fuel Terminal sites except when a new tank will replace an existing tank on the site that will be demolished or will accommodate a capacity transfer from another Bulk Fuel Terminal site, where the overall capacity is reduced.

Standard B.1.b and c allow for the maintenance, repair and replacement of existing in-service storage tanks when:

1. Total in-service capacity is not increased. To ensure that total in-service capacity is not increased when a storage tank is replaced, a performance bond will be required when a permit to build a replacement tank is submitted. The performance bond will ensure that the old tank is removed once the new replacement tank is built and functioning.
2. Prior to a terminal having an approved DEQ Risk Mitigation Implementation Plan, replacement tanks must be built to Risk Category IV seismic resilience standards. The Risk Category IV designation requires buildings and structures to be designed to remain functional after a major earthquake. The standards involve designing with higher seismic loads and stricter drift limits than standard structures to ensure resilience and continued operation after an event. Meeting Risk Category IV seismic resilience standards could include ground improvements when certain soil conditions, such as risk of liquefaction, are present on a site. The CEI Hub contains liquifiable soils.
3. After the terminal has an approved DEQ RMIP in place, the applicant will be required to provide a letter from DEQ stating that the proposed development is consistent with the RMIP, and that the terminal has taken all required steps necessary to date to remain in compliance with the RMIP. DEQ's Fuel Tank Seismic Stability Program is currently working with all of the large-capacity oil and fuel storage and distribution facilities in the CEI Hub to develop RIMPs that outline how each facility will reduce the risk of structural failure during an earthquake, and the potential secondary impacts to employees, nearby communities, and the environment. Each DEQ approved RMIP will require multiple facility upgrades with implementation schedules of no more than 10 years.

33.140.260 Bulk Fuel Terminals

A. Purpose. The Bulk Fuel Terminal standards are intended to:

- Limit the expansion of Bulk Fuel Terminals fuel storage capacity;
- Allow for maintenance, repair and replacement of existing terminal facilities; and
- Support increased safety and resilience of terminal sites.

B. Bulk Fuel Terminal standards. The following standards apply on sites that have a Bulk Fuel Terminal use. Adjustments are prohibited**:**

1. Fuel storage tank standards.

   a. New fuel storage tanks. Adding new tanks to a Bulk Fuel Terminal site for the storage of fossil or renewable fuel is prohibited except as follows:

      (1) Adding a new fuel storage tank to a site is allowed when the new tank will replace an existing tank on the site and the standards of Subparagraph B.1.b are met; and

      (2) Adding a new fuel storage tank to a site is allowed when storage tank capacity is transferred between sites and the transfer is approved through a Fuel Storage Tank Capacity Transfer review. See 33.870, Bulk Fuel Terminal Review.

   b. Replacement of existing fuel storage tanks is allowed when the following are met:

      (1) The storage capacity in the replacement tank is not more than the quantity in the tank being replaced;

      (2) Replacement will not result in an increase in the total amount of fuel storage tank capacity allowed on the site plus or minus storage tank capacity transferred to or from the site through a Fuel Storage Tank Capacity review;

      (3) A performance bond or other surety must be posted in conformance with 33.700.050, Performance Guarantees, to ensure removal of fuel storage tank capacity equal to or greater than the storage tank capacity built as replacement and the removal of the transloading facility associated with the replaced tank;

Commentary

33.140.260.B.2.a

These new standards prohibit adding new transloading facilities to Bulk Fuel Terminal sites except:

- When the transloading facility is for a tank that is being built to replace an existing in-service fuel tank and the new tank meets the standards of B.1.b, which requires meeting seismic stability standards and that the tank being replaced is demolished;
- When the new or existing transloading facility has been approved through one of the Bulk Fuel Terminal Reviews. The Bulk Fuel Terminal Reviews address circumstances when fuel tank capacity is transferred from one Bulk Fuel Terminal to another, and situations when adding new transloading facilities or expanding an existing transloading facility. See additional code and commentary related to 33.870, Bulk Fuel Terminal Reviews, for more detail.

33.140.260.B.2.b

These standards make it clear that maintenance and repair of existing transloading facilities and their components is allowed, but limits replacement to replacing components of existing transloading facilities only when replacement is in-kind and the capacity of the component is not increased. Adding new transloading facilities will require one of the Bulk Fuel Terminal reviews as described above.

A definition of Transloading Facility is also being added to 33.910:

> **Transloading Facility.** Transloading facilities facilitate the transfer of fuel between different modes of transportation such as between pipeline, railcars, trucks and ships/barges. See Fossil Fuel and Renewable Fuel. The components of a transloading facility include:
> - Loading racks;
> - Loading arms and flexible hoses;
> - Pumps;
> - Piping to transport fuel within the facility; and
> - Integrated units that include pumps, valves, meters, grounding equipment, filtration, instrumentation, and control systems for transfer operations.

(4) Until the site has an approved Oregon Department of Environmental Quality (DEQ) Risk Mitigation Implementation Plan (RMIP), the replacement tank must be built to OSSC Risk Category IV seismic resilience standards as certified by a professional engineer of record licensed in Oregon that specializes in structural engineering; and

(5) After the site has an approved DEQ RMIP, the applicant must provide a letter from DEQ certifying that the facility is following the requirements to date of the RMIP and the location and design of the replacement tank, including foundation and transloading elements, meet any requirements of the RMIP.

c. Maintenance and repair of existing fuel storage tanks is allowed when the following are met:

(1) When the maintenance or repair does not result in an increase in the storage capacity of the tank being maintained or repaired; and

(2) When maintenance or repair will not increase the total amount of fuel storage tank capacity on the site above what is allowed plus or minus storage tank capacity transferred to or from the site through a Fuel Storage Tank Capacity review.

2. Transloading facilities.

a. New transloading facilities. Adding new transloading facilities to a site, or expanding the capacity of an existing facility, is prohibited except as follows:

(1) When the new or expanded transloading facility is for a replacement tank and the replacement tank meets the standards of Subparagraph B.1.b;

(2) When the new or expanded transloading facility is approved through a Transloading Facility Expansion review. See 33.870, Bulk Fuel Terminal Reviews; or

(3) When the new or expanded transloading facility is for a new tank that will accommodate a storage tank capacity transfer, and the transfer has been approved through Fuel Storage Tank Transfer review. See 33.870, Bulk Fuel Terminal Reviews.

b. Maintenance, repair and replacement.

(1) Maintenance and repair of an existing transloading facility is allowed;

(2) Replacement of individual components of an existing transloading facility is allowed if the replacement is in-kind without an increase in capacity unless the replacement is approved through a Transloading Facility Expansion review. See 33.870, Bulk Fuel Terminal Reviews.

Commentary

Table 150-1

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

Table 150-1 Campus Institutional Zone Primary Uses			
Use Categories	**CI1**	**CI2**	**IR**
Residential Categories			
Household Living	N	Y	Y
Group Living	N	Y	Y [9]
Commercial Categories			
Retail Sales And Service	CU [1]	Y	L/CU [10]
Office	N	Y	L/CU [10]
Quick Vehicle Servicing	N	N	N
Vehicle Repair	N	N	N
Commercial Parking	N	Y	N
Self-Service Storage	N	N	N
Commercial Outdoor Recreation	N	N	N
Major Event Entertainment	CU	CU	CU
Industrial Categories			
Manufacturing And Production	L [2]	L/CU [2]	CU
Warehouse And Freight Movement	N	N	N
Wholesale Sales	N	N	N
Industrial Service	L [2]	L/CU [2]	CU
Bulk ~~Fossil~~ Fuel Terminal	N	N	N
Railroad Yards	N	N	N
Waste-Related	N	N	N
Institutional Categories			
Basic Utilities	L/CU [3]	L/CU [3]	L/CU [3]
Community Service	L/CU [4]	L/CU [4]	L/CU [4]
Parks And Open Areas	L/CU [5]	L/CU [5]	L/CU [5]
Schools	N	N	L/CU [11]
Colleges	Y/CU [6]	Y/CU [6]	L/CU [11]
Medical Centers	Y	Y	L/CU [11]
Religious Institutions	CU	CU	CU
Daycare	Y	Y	L/CU [12]
Other Categories			
Agriculture	L [7]	L [7]	L [7]
Aviation And Surface Passenger Terminals	N	N	N
Detention Facilities	N	N	N
Mining	N	N	N
Radio Frequency Transmission Facilities	L/CU [8]	L/CU [8]	L/CU [8]
Rail Lines And Utility Corridors	CU	CU	CU

Y = Yes, Allowed
L = Allowed, But Special Limitations
CU = Conditional Use Review Required
N = No, Prohibited

Notes:

The use categories are described in Chapter 33.920.

Regulations that correspond to the bracketed numbers [ ] are stated in 33.150.100.B.

Specific uses and developments may also be subject to regulations in the 200s series of chapters.

Commentary

33.445.400.C.9

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

33.445 Historic Resource Overlay Zone

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33.445.400 Historic Preservation Incentives

A-B. [No change]

C. Incentives. The following incentives are allowed. Adjustments to the incentives are prohibited:

1-8. [No change]

9. Major adaptive reuse. Except for the following primary uses, primary uses not otherwise allowed by the base zone may be approved through historic preservation incentive review. Sites in industrial zones are not eligible for this incentive:

   a. Self-Service Storage;

   b. Bulk ~~Fossil~~ Fuel Terminal;

   c. Basic Utilities;

   d. Waste-Related; and

   e. Detention Facility.

10. [No change]

Commentary

Table 597-2

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

Table 597-2 Maximum Parking Spaces Allowed in the EX Zone		
Use Categories	**Specific Uses**	**Maximum Parking Spaces Allowed**
Residential Categories		
Household Living		1 per unit, except SROs exempt
Group Living		1 per 4 bedrooms
Commercial Categories		
Retail Sales And Service	Retail, personal service, repair oriented	1 per 500 sq. ft. of net building area
	Restaurants and bars	1 per 250 sq. ft. of net building area
	Health clubs, gyms, lodges, meeting rooms, and similar. Continuous entertainment such as arcades and bowling alleys	1 per 330 sq. ft. of net building area
	Temporary lodging	1 per rentable room; for associated uses such as restaurants, see above
	Theaters	1 per 4 seats or 1 per 6 feet of bench area
Office	General office	1.5 per 1000 sq. ft. of net building area
	Medical/Dental office	1.5 per 1000 sq. ft. of net building area
Quick Vehicle Servicing		Not applicable
Vehicle Repair		Not applicable
Commercial Parking		None
Self-Service Storage		Not applicable
Commercial Outdoor Recreation		Not applicable
Major Event Entertainment		Per CU review
Industrial Categories		
Manufacturing And Production		1 per 750 sq. ft. of net building area
Warehouse And Freight Movement		1 per 750 sq. ft. of net building area for the first 3,000 sq. ft. of net building area and then 1 per 3,500 sq. ft. of net building area thereafter
Wholesale Sales, Industrial Service		1 per 750 sq. ft. of net building area
Bulk ~~Fossil~~ Fuel Terminals		not applicable
Railroad Yards		not applicable
Waste-Related		not applicable

Commentary

33.870 Bulk Fuel Terminal Reviews

Two new reviews are being added to the zoning code to address circumstances in the CEI Hub.

The first review, Fuel Tank Capacity Transfer review, will address adding fuel tank capacity to one Bulk Fuel Terminal site to offset the loss of fuel storage tank capacity on another terminal site. Over the next 10 years, DEQ's Fuel Tank Seismic Stability Program will require multiple upgrades to each fuel terminal site in the CEI Hub to reduce the risk of structural failure during an earthquake. In some cases, these upgrades may be too costly and rather than provide the upgrade, a terminal operator may choose to decommission or shut-down an entire terminal. If that situation occurs, and there is still an economic need for the capacity, for example to avoid unintended consequences for regional fuel supply reliability, this review will allow fuel tank capacity to be transferred from one terminal site to another. The approval criteria will require that a current fuel demand analysis show there is a continued need for the storage capacity being transferred and the criteria are also intended to ensure that the transfer improves the safety of CEI Hub overall. In addition, as part of the transfer, the receiving capacity will be 20 percent less than the sending capacity.

33.870 Bulk Fuel Terminal Reviews

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Sections:

Fuel Storage Tank Capacity Transfer Review

33.870.010 Purpose

The Fuel Storage Tank Capacity Transfer Review allows for existing fuel storage tank capacity to be safely transferred between terminal sites when necessary.

33.870.020 Procedure

Fuel Storage Tank Capacity Review is processed through a Type III procedure.

33.870.030 Approval Criteria

The proposal will be approved if the review body finds that the applicant has shown that all of the following approval criteria are met:

A. The transfer of fuel storage tank capacity is between Bulk Fuel Terminals;

B. A current fuel demand analysis shows that there is a continued need in the CEI Hub overall for the storage tank capacity being transferred and the need cannot be accommodated by existing storage tank capacity on the receiving site;

C. The capacity being transferred is from a storage tank on the sending site that was in-service on [INSERT ORDINANCE ADOPTION DATE] and the tank on the sending site is demolished after the transfer occurs;

D. The transferred fuel storage tank capacity will be accommodated on the receiving site in a new fuel storage tank that meets OSSC Risk Category IV seismic resilience standards, or the Oregon Department of Environmental Quality verifies that the site has taken all required steps to date to remain in compliance with approved Risk Mitigation Implementation Plan (RMIP) and the RMIP has been amended to include the new transfer tank; and

E. The location and design of the storage tank on the receiving site is safer than the location and design of the storage tank on the sending site;

F. The capacity of the new fuel storage tank on the receiving site is 80 percent of the storage tank capacity being transferred from the sending site;

G. The seismic risk of transloading facilities associated with the new fuel storage tank on the receive site has been minimized to the extent practicable; and

H. The new storage tank is setback at least 250 feet from the top of bank of the Willamette River.

Commentary

33.870 Bulk Fuel Terminal Reviews

Two new reviews are being added to the zoning code to address circumstances in the CEI Hub.

The second review is intended to address circumstances when expanding an existing transloading facility or adding a new transloading facility to a terminal site will provide a public benefit and minimizes the risks associated with an earthquake or other disaster.

Transloading Facility Expansion Review

33.870.040 Purpose

The Transloading Facility Expansion Review allows for adding new, and expanding existing, transloading facilities on sites with a Bulk Fuel Terminal use when the addition or expansion provides a public benefit and is constructed as safely as possible.

33.870.050 Procedure

Transloading Infrastructure Expansion Review is processed through a Type III procedure.

33.870.060 Approval Criteria

A. There is a public benefit of adding new, or expanding existing, fuel transloading facilities on the site;

B. The public health and environmental risks associated with adding new or expanding existing transloading facilities on the site are minimized to the extent practicable; and

C. The seismic risks of the new or expanded transloading facility have been minimized to the extent practicable or is shown to be in compliance with the site's approved Oregon Department of Environmental Quality Risk Mitigation Implementation Plan that has been amended to include the new or expanded transloading facility.

Commentary

33.910.030 Definitions

The amendments to 33.910 include:

1. Adding references to the other definitions associated with fuel and fuel transloading to the definitions of fossil fuel and renewable fuel; and
2. The addition of a definition of transloading facility.

33.910 Definitions

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33.910.030 Definitions

The definition of words with specific meaning in the zoning code are as follows:

Fossil Fuel. Fossil fuels are petroleum products (such as crude oil and gasoline), coal, methanol, and gaseous fuels (such as natural gas and propane) that are made from decayed plants and animals that lived millions of years ago and are used as a source of energy. Petroleum-based products used primarily for non-fuel uses (such as asphalt, plastics, lubricants, fertilizer, roofing, and paints) are not fossil fuels. See Renewable Fuel and Transloading Facility.

Renewable Fuel. Renewable fuels (such as biodiesel, biomethane, and clean hydrogen) are produced from non-petroleum, non-natural gas renewable resources and have less than 5 percent fossil fuel content. See Fossil Fuel and Transloading Facility.

Transloading Facility. Transloading facilities facilitate the transfer of fuel between different modes of transportation such as between pipeline, railcars, trucks and ships/barges. See Fossil Fuel and Renewable Fuel. Transloading facility does not include interstate pipelines. The components of a transloading facility include:

- Loading racks;
- Loading arms and flexible hoses;
- Pumps;
- Piping to transport fuel within the facility; and
- Integrated units that include pumps, valves, meters, grounding equipment, filtration, instrumentation, and control systems for transfer operations.

Commentary

33.920 Table of Contents

This amendment reflects the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal.

33.920 Description of Use Categories

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Sections:

Commentary

33.920.300 Bulk Fossil Fuel Terminal

The name of the use category is being changed from Bulk Fossil Fuel Terminal to Bulk Fuel Terminal in recognition of the fact that the use limitation in 33.140.100.B.16 is being amended to no longer exempt renewable fuel. In addition, the word "renewable" is being added where necessary to make it clear that the use category includes both fossil and renewable fuel.

33.920.300 Bulk ~~Fossil~~ Fuel Terminal

A. Characteristics. Bulk ~~Fossil~~ Fuel Terminals are establishments primarily engaged in the transport and bulk storage of fossil and renewable fuels. Terminal activities may also include fuel blending, regional distribution, and wholesaling. Terminals have access to marine, railroad, or regional pipeline to transport fuels to or from the site, and either have transloading facilities for transferring a shipment between transport modes, or have transloading facilities and storage tank capacity exceeding 2 million gallons. There is minimal on-site sales activity with the customer present.

B. Accessory uses. Accessory uses may include retail sales of petroleum products, offices, food membership distribution, parking, storage, truck fleet parking and maintenance areas, rail spur or lead lines, and docks.

C. Examples. Examples include crude oil terminals, petroleum products terminals, natural gas terminals, propane terminals, and coal terminals.

D. Exceptions.

1. Truck or marine freight terminals that do not store, transport or distribute fossil fuels are classified as Warehouse And Freight Movement uses.
2. Truck or marine freight terminals that have storage capacity of 2 million gallons or less are classified as Warehouse And Freight Movement uses. However, multiple ~~fossil~~ fuel facilities, each with 2 million gallons of fossil or renewable fuel storage capacity or less but cumulatively having a ~~fossil~~ fuel storage capacity in excess of 2 million gallons, located on separate parcels of land will be classified as a Bulk ~~Fossil~~ Fuel Terminal when two or more of the following factors are present:
   a. The facilities are located or will be located on one or more adjacent parcels of land. Adjacent includes separated by a shared right-of-way;
   b. The facilities share ~~or will share~~ operating facilities such as driveways, parking, piping, or storage facilities; or
   c. The facilities are owned or operated by a single parent partnership or corporation.
3. Gasoline stations and other retail sales of fossil fuels are not Bulk ~~Fossil~~ Fuel Terminals.
4. Distributors and wholesalers that receive and deliver fossil or renewable fuels exclusively by truck are not Bulk ~~Fossil~~ Fuel Terminals.
5. Industrial, commercial, institutional, and agricultural firms that exclusively store fossil or renewable fuel for use as an input are not Bulk ~~Fossil~~ Fuel Terminals.
6. Uses that involve the transfer or storage of solid or liquid wastes are classified as Waste-Related uses.

Commentary

33.920.300.D.7
This exception is being amended to ensure that the storage of aviation fuel on a Bulk Fuel Terminal site in the CEI Hub is no longer exempt from the use category limitations in 33.140.100.B.16.

Currently, storage of fuel in the CEI Hub for eventual use at an airport or other facility listed in D.7 is not counted toward the total storage tank capacity limit on a fuel terminal site in the hub. Aviation fuel is blended and stored in storage tanks on terminal sites in the CEI Hub before being transported via a pipeline to the Portland Airport. Going forward, the blending and storage of aviation fuel will no longer be exempt from the use limitations of a Bulk Fuel Terminal.

This amendment is not intended to affect the storage of fuel at the Portland Airport or any other facility listed in D.7 when the fuel is stored for exclusive use at that facility. After aviation fuel is blended and stored in the CEI Hub, aviation fuel is transferred to storage tanks located at the Portland Airport. Storage of fuel on a site with one of the facilities listed in D.7 will continue to be an accessory activity to the primary use when the fuel is used exclusively at the facility listed. In the case of the Portland Airport, the primary use is Aviation and Surface Passenger Terminals.

7. The storage of fossil or renewable fuels ~~for exclusive use~~ at an airport, surface passenger terminal, marine, truck or air freight terminal, drydock, ship or barge servicing facility, rail yard, or as part of a fleet vehicle servicing facility ~~are~~is not a Bulk ~~Fossil~~ Fuel Terminal~~s~~ when the fuel will be used exclusively at the facility or on the site where the fuel is stored.
8. Uses that recover or reprocess used petroleum products are not Bulk ~~Fossil~~ Fuel Terminals.

33.920.340 Warehouse And Freight Movement

A. Characteristics. Warehouse And Freight Movement firms are involved in the storage, or movement of goods for themselves or other firms. Goods are generally delivered to other firms or the final consumer, except for some will-call pickups. There is little on-site sales activity with the customer present.

B. Accessory uses. Accessory uses may include offices, food membership distribution, truck fleet parking and maintenance areas, rail spur or lead lines, docks, and repackaging of goods.

C. Examples. Examples include separate warehouses used by retail stores such as furniture and appliance stores; household moving and general freight storage; cold storage plants, including frozen food lockers; storage of weapons and ammunition; major wholesale distribution centers; truck, marine, or air freight terminals; bus barns and light rail barns; parcel services; major post offices; grain terminals; and the stockpiling of sand, gravel, or other aggregate materials.

D. Exceptions.

1. Uses that involve the transfer or storage of solid or liquid wastes are classified as Waste-Related uses.
2. Miniwarehouses are classified as Self-Service Storage uses.
3. Establishments that engage in the transfer or storage of fossil fuels, rely on access by marine, railroad or regional pipeline to transport fuels to or from the site, and either have transloading facilities or have transloading facilities and storage capacity exceeding 2 million gallons for fossil or renewable fuels are classified as Bulk ~~Fossil~~ Fuel Terminal uses.

Commentary

33.920.360.D.4

The amendments to this Subparagraph reflect the change in name of the Bulk Fossil Fuel Terminal use category to Bulk Fuel Terminal, and the elimination of the exemption for storage capacity expansion for renewable fuel.

33.920.360 Wholesale Sales

A. Characteristics. Wholesale Sales firms are involved in the sale, lease, or rent of products primarily intended for industrial, institutional, or commercial businesses. The uses emphasize on-site sales or order taking and often include display areas. Businesses may or may not be open to the general public, but sales to the general public are limited as a result of the way in which the firm operates. Products may be picked up on site or delivered to the customer.

B. Accessory uses. Accessory uses may include offices, food membership distribution, product repair, warehouses, parking, minor fabrication services, and repackaging of goods.

C. Examples. Examples include sale or rental of machinery, equipment, heavy trucks, building materials, special trade tools, welding supplies, machine parts, electrical supplies, janitorial supplies, restaurant equipment, and store fixtures; mail order houses; and wholesalers of food, clothing, auto parts, building hardware, and office supplies.

D. Exceptions.

1. Firms that engage primarily in sales to the general public are classified as Retail Sales And Service.
2. Firms that engage in sales on a membership basis are classified as either Retail Sales And Service or Wholesale Sales, based on a consideration of the characteristics of the use.
3. Firms that are primarily storing goods with little on-site business activity are classified as Warehouse And Freight Movement.
4. Establishments that engage in the regional wholesaling of fossil fuels, rely on access by marine, railroad or regional pipeline to transport fuels to or from the site, and either have transloading facilities or have storage capacity exceeding 2 million gallons for fossil or renewable fuels are classified as Bulk ~~Fossil~~ Fuel Terminal uses.

Section 4: CEI Hub Coordination

The CEI Hub is regulated by multiple agencies across local, state, and federal levels. Addressing all risk mitigation and emergency response issues that surround the CEI Hub requires a coordinated, multi-jurisdictional approach.

In July 2025, the Oregon Department of Environmental Quality's Fuel Tank Seismic Stability (FTSS) Program, with support from Portland State University's Civil and Environmental Engineering Department staff, began a series of interagency coordination meetings for the CEI Hub. These coordination meetings are intended to enhance the risk mitigation planning process for fuel facilities regulated by the FTSS program by (1) maintaining communication and situational awareness with interested parties, (2) collecting up-to-date information on the expected status of infrastructure and response operations at fuel facilities following an earthquake, and (3) advancing "outside-the-fence" mitigation activities which are not the responsibility of individual fuel facilities but would improve safety and response operations at fuel facilities (e.g., seismically resilient transportation routes).

Key Jurisdictional Partners

Multiple agencies have regulatory authority over the CEI Hub, each with defined roles and responsibilities related to safety, environmental protection, and emergency response. This section summarizes the current roles of key local, state, and federal agencies as it relates to the CEI Hub.

City of Portland

Several City bureaus have regulatory, operational, and emergency response responsibilities in the CEI Hub area:

- **Portland Bureau of Emergency Management (PBEM)** leads citywide emergency preparedness, response, coordination, continuity, and recovery. PBEM activates and manages the City's Emergency Operations Center (EOC), coordinates recovery planning, and oversees disaster declarations.
- **Portland Fire & Rescue (PF&R)** protects communities through a combination of prevention and all-hazard response to fire, medical, natural disaster, and other emergencies. The City's Fire Marshal also reviews permits for storage tanks over 60 gallons that contain hazardous material and conducts inspections of the facilities every two years.
- **Bureau of Environmental Services (BES)** protects public health, water quality and the environment. BES regulates stormwater and sanitary sewer discharges, is an agent for the Oregon DEQ Industrial Stormwater Discharge Permitting program, responds to illicit discharges, conducts regular inspections at the CEI Hub facilities, regulates new development and redevelopment at CEI

Hub facilities via codes and rules, and completes sewer infrastructure cleaning, repairs and remediation.

- **Bureau of Planning and Sustainability (BPS)** sets the Comprehensive Plan policies and Zoning Code that regulates land uses. BPS also runs the Franchise and Utility Program, which regulates access to the public right-of-way through franchise agreements. BPS also sets the Renewable Fuel Standard for fuel sold within city boundaries.
- **Portland Permitting and Development (PP&D)** reviews applications for any new, expansion, or alteration of a building, structure, or tank at bulk fossil fuel facilities to ensure compliance with City development codes and state building codes. PP&D also enforces structural, seismic, and fire/life safety codes, and conducts post-event building inspections to determine habitability and guide reconstruction.
- **Portland Bureau of Transportation (PBOT)** issues permits for improvements in the right-of-way, (including pipelines) and establishes the freight routes for trucks hauling goods (including fuel) through Portland. PBOT also manages city streets, bridges, and traffic systems in the CEI Hub and leads transportation-related emergency response, including debris clearance and restoration of access.
- **Portland Water Bureau (PWB)** oversees water service permitting, maintains water infrastructure, and coordinates emergency water service during incidents. PWB also repairs damaged systems and has the ability to reroute supply to critical facilities.

Multnomah County and Regional Agencies

Multnomah County and regional partners support broader coordination, infrastructure management, and specialized response:

- **Multnomah County Emergency Management** leads county-level coordination under the Emergency Operations Plan, facilitates disaster recovery planning, and manages public assistance processes.
- **Multnomah County Office of Sustainability** contributes climate and equity-informed planning for long-term recovery.
- **Regional Disaster Preparedness Organization (RDPO)** facilitates regional coordination, mutual aid, and resource prioritization.

State Agencies

State agencies regulate CEI Hub facilities, provide technical expertise, and coordinate large-scale response and recovery:

- **Governor's Office** declares emergencies, coordinates state-level response, and requests federal assistance.
- **Oregon State Fire Marshal (OSFM)** enforces the Oregon Fire Code, regulates bulk fuel storage, and coordinates HazMat response teams.
- **Oregon Department of Environmental Quality (DEQ)** regulates air and water quality, approves oil spill contingency plans, and oversees cleanup operations through multiple programs. DEQ also oversees and administers the Fuel Tank Seismic Stability program.
- **Oregon Department of Transportation (ODOT)** maintains Highway 30 and other state routes serving the CEI Hub, manages traffic during emergencies, and coordinates infrastructure restoration.
- **Oregon Office of Emergency Management (OEM)** leads statewide disaster coordination, manages the State ECC, and administers recovery programs in partnership with FEMA.
- **Oregon Army National Guard**, including its CBRN Enhanced Response Force Package, provides logistical support, site security, and specialized decontamination.
- **Oregon Department of Energy (ODOE)** provides input on energy policy, seismic vulnerability, and fuel supply planning. ODOE also coordinates fuel restoration, energy resilience planning, and public communication related to energy infrastructure recovery.
- **Oregon Building Codes Division (BCD)** adopts and enforces statewide building and seismic codes, oversees local implementation of these codes, and guides reconstruction standards and expedited permitting after disasters.
- **Oregon Department of Geology and Mineral Industries (DOGAMI)** plays a critical role in hazard assessment and risk communication. The agency provides hazard mapping, earthquake and landslide risk data, and geologic information during disasters, and contributes technical expertise to post-disaster risk reassessment.

Federal Agencies

Federal agencies provide regulatory oversight, technical support, and large-scale disaster assistance:

- **U.S. Department of Transportation (USDOT)**, including the Pipeline and Hazardous Materials Safety Administration and Federal Railroad Administration, regulates hazardous material transport and rail/pipeline safety.
- **U.S. Army Corps of Engineers** manages permits for work in navigable waters and supports emergency engineering and debris removal.
- **Federal Emergency Management Agency (FEMA)** deploys incident teams, coordinates federal resources, and administers recovery assistance programs.

- **U.S. Coast Guard** regulates marine facilities and serves as Federal On-Scene Coordinator for oil spills in navigable waters.
- **U.S. Environmental Protection Agency (EPA)** co-leads environmental compliance with DEQ, acts as on-Scene Coordinator for inland spills, and oversees hazardous material remediation.
- **U.S. Geological Survey (USGS)** provides hazard monitoring and technical analysis to inform recovery.

Coordination with DEQ Fuel Tank Seismic Stability Program

BPS is coordinating closely with DEQ to ensure that the CEI Hub Policy Project aligns with and supports the objectives of DEQ's Fuel Tank Seismic Stability Program (FTSS). This program requires large-capacity oil and fuel storage and distribution facilities to assess and mitigate seismic risks to their fuel tanks with the express purpose of protecting public health, life safety and environmental safety against fires and release of fuel products.

DEQ FTSS Program Specifics

Under the program, facilities must submit Seismic Vulnerability Assessments (SVAs) that evaluate the likelihood of tank failure during a major earthquake and the potential secondary impacts to employees, nearby communities, and the environment. Once SVAs are reviewed and approved by DEQ, facilities must prepare a Risk Mitigation Implementation Plan (RMIP) within six months. Each plan identifies the specific measures a facility will take to reduce risk, such as tank retrofits, replacement, or containment improvements, and must be fully implemented within 10 years of DEQ's approval of RMIP. DEQ does not prescribe uniform mitigation measures; instead, requirements are determined on a facility-by-facility basis, recognizing differences in tank design, age, and site conditions.

The performance objective for both new and existing tanks is that the maximum allowable uncontained spill (MAUS) to the ground during a seismic event is 42 gallons per tank. New tanks built to Risk Category IV standards under the Oregon Structural Specialty Code are considered to meet this objective. DEQ enforces compliance and may assess penalties of up to $12,000 per day for violations.

Program rules were adopted in September 2023, and facilities submitted their SVAs in June 2024. Each facility's progress depends on the completeness and complexity of each facility's assessments and plans. Some facilities are already in the process of approving RMIPs, while others are still refining their SVAs in response to DEQ feedback.

More information about the program is available here.

CEI Hub Policy Project Alignment

The CEI Hub Policy Project is designed to complement, rather than duplicate, DEQ's Fuel Tank Seismic Stability Program. This project aligns with DEQ's program in the following ways:

- To maintain clarity and consistency, the CEI Hub Policy Project's proposed amendments do not introduce additional seismic upgrade requirements that could duplicate or conflict with DEQ's program. DEQ remains the primary regulator responsible for ensuring facilities retrofit or replace tanks through facility-specific RMIPs. These RMIPs, overseen and approved by DEQ, are tailored to site specific conditions, comprehensive in scope, and already on an aggressive implementation timeline.
- Given that some RMIPs are still under development, facilities currently need only meet existing seismic code requirements, which are less stringent than the standards anticipated under DEQ's program. To maintain alignment with DEQ's seismic safety objectives and ensure tanks are built to a higher level of resilience in the interim, the proposed amendments require that any new tank permitted through replacement or capacity transfer be designed to meet OSSC requirements for a Risk Category IV structure. Once a facility's RMIP is approved, the construction requirements for new tanks will follow the standards specified in that plan.
- The proposed 20% capacity drawdown by 2036 aligns with DEQ's anticipated schedule for completing seismic upgrades at facilities, allowing operators to coordinate required seismic improvement and capacity reductions in their long-term planning.

Emergency Management & Response

While emergency management and response are critical components of reducing risks associated with the CEI Hub, most actions in this area fall outside the scope of the CEI Hub Policy Project. As noted earlier in this report, the CEI Hub Policy Project focuses on supporting risk mitigation through the zoning code, primarily regulating what facilities can build on their sites. Emergency planning, preparedness, and response require operational, logistical, and interagency coordination that extends beyond what can be accomplished via amendments to the Comprehensive Plan and zoning code. Effective emergency planning will require additional resources.

Businesses located in the Critical Energy Infrastructure (CEI) Hub also have major responsibilities in emergency response, particularly in preventing spills and mitigating damages. These businesses are responsible for seismic upgrades and the development of emergency response plans.

Emergency management and response responsibilities are held by the following agencies:

- **Local**: Portland Bureau of Emergency Management (PBEM) and Portland Fire & Rescue

- **Regional**: Multnomah County Emergency Management and Multnomah County Office of Sustainability
- **State**: Governor's Office and Oregon Office of Emergency Management (OEM)
- **Federal**: Federal Emergency Management Agency (FEMA) and the U.S. Coast Guard

Through small group discussions, Technical Advisory Committee meetings, and interagency meetings with these agencies, various needs have been identified to strengthen local and state capacity to respond to a major emergency, particularly in the aftermath of a Cascadia Subduction Zone (CSZ) earthquake. The consensus among agencies involved in the ongoing discussions is that addressing many of these needs will require both financial commitment and coordinated planning from facility operators. Some examples of these needs include:

- Securing targeted funding for staffing to plan, implement, and maintain these emergency plans and measures
- Establishing an early warning system for incidents and hazards associated with the CEI Hub.
- Establish dependable evacuation and access routes within the CEI Hub
- Stabilizing west hills slopes and reinforcing Highway 30 to withstand a CSZ earthquake to ensure Highway 30 remains a dependable evacuation and access route.
- Installing seismically triggered safety measures such as shut-off valves on pipelines
- Increasing the capacity of slurry pits to manage fuel spills
- Advocating for seismic upgrade requirements to federally regulated infrastructure

The City will continue to coordinate with partner agencies to support and advocate for improvements in emergency preparedness and response.

State Issues

The CEI Hub supplies fuel to roughly 90% of Oregon, making its vulnerabilities a statewide concern, not just an issue specific to Portland. Impacts to the CEI Hub resulting from a major disaster would disrupt fuel access across the state. While Portland can address some of the local risks, many of the significant safety and fuel resiliency challenges, such as redistributing critical fuel storage facilities to more places across the state, require state-level coordination, authority, and resources.

The following 2025 bills, none of which passed, reflect the type of state-led efforts that could begin to address these broader risks and build a more resilient statewide fuel system. The City will continue to

advocate for these state-led efforts, working with legislators and agencies to advance policies and investments that address these broader risks.

- **HB 3450 – Energy Storage Transition Plan**: Recognizes that Oregon's primary fuel storage is concentrated in a seismically vulnerable location. If a major earthquake strikes, much of the state's fuel infrastructure could fail. This bill directs state leaders to develop a plan for strengthening and transitioning fuel storage systems to be more resilient in the face of natural hazards, with consideration of financial assurance requirements to fund these changes.
- **HB 2949 – Financial Assurance**: Recognizes that a disaster at the CEI Hub would create significant cleanup and recovery costs. This bill seeks to require fuel and hazardous material operators to maintain sufficient financial responsibility to cover potential spill-related expenses, reducing the financial burden on state and local governments in the aftermath of such an event.
- **HB 2152 – Geographic Diversity of Fuel Reserves**: Addresses the over-reliance on the CEI Hub for statewide fuel reserves. By diversifying and expanding reserves across multiple locations in Oregon, this bill aims to reduce the risks posed by the Hub's concentration of fuel and ensure better emergency access in the event of a disruption.
- **HB 2151 – Seismic Risk Mitigation**: Recognizes that implementing seismic safety requirements and emergency planning for vulnerable fuel infrastructure requires sustained funding and staffing. This bill seeks to increase resources for state programs that can mandate seismic upgrades and strengthen emergency preparedness around high-risk facilities like the CEI Hub.

Section 5: Background Information

This section covers additional background context related to the CEI hub. Brief sub sections below provide high level overviews of documented natural hazards in the CEI Hub area; related risk assessment studies; further description of bulk fuel terminals, those in operation in the Hub and other uses with fuel storage citywide; and economic analysis elements and fuel demand projections as related to the CEI Hub and the preliminary alternatives.

Hazards

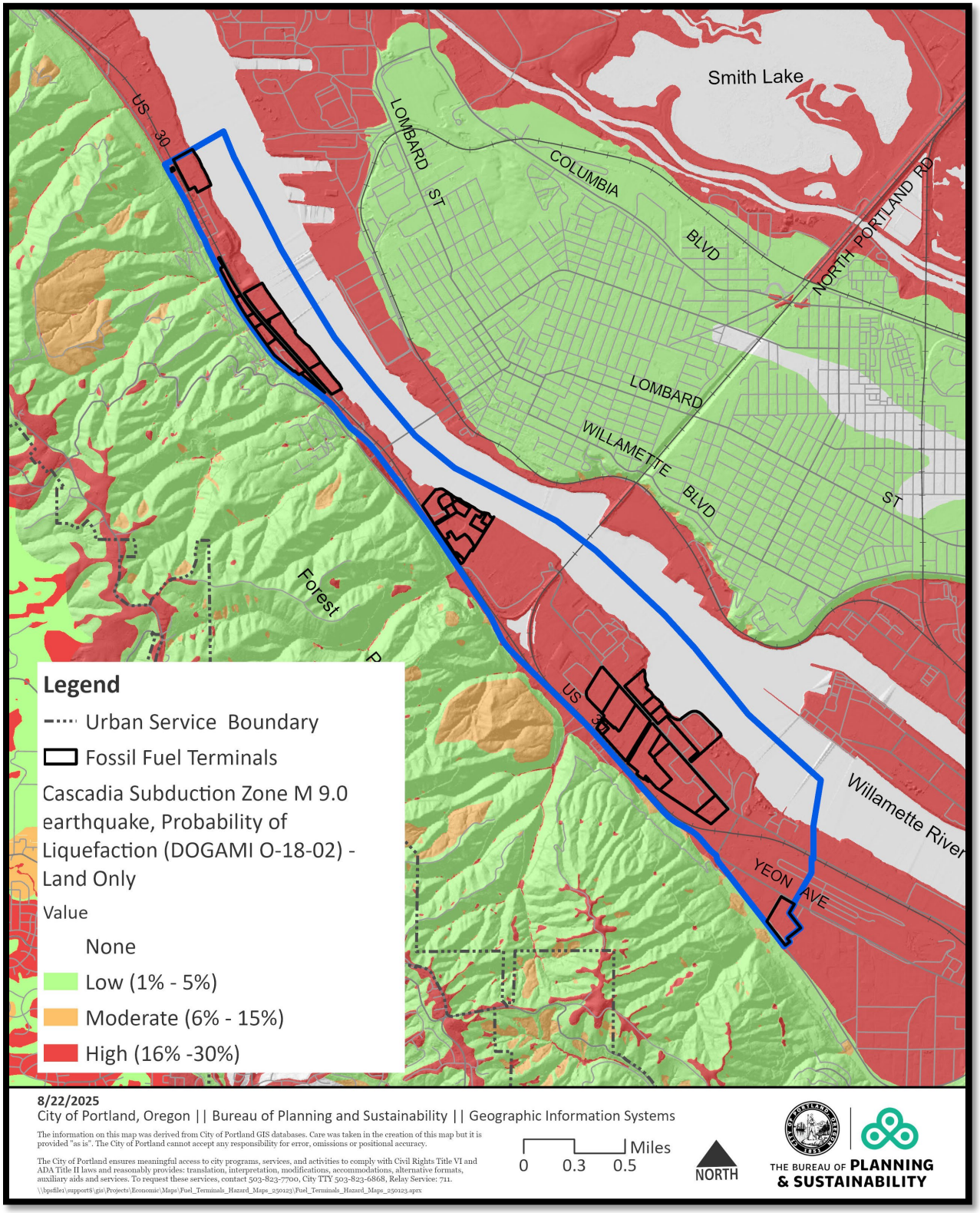
The area along the Willamette River where the CEI Hub is located is vulnerable to a number of natural hazards. This section provides an overview of hazards in the CEI Hub area.

Liquefaction Risk

Earthquake hazards in the state of Oregon and Pacific Northwest are well established and specific earthquake hazards related to the CEI Hub area are further documented in the 2013 *Earthquake Risk Study of Oregon's Critical Energy Infrastructure Hub*, prepared by Oregon Department of Geology and Mineral Industries (DOGAMI). In their report, Oregon DOGAMI found that the CEI Hub is located in an area where soils are largely composed of silt, river dredge material or artificial fill and are vulnerable to liquefaction risk and lateral spreading during an earthquake. While different sites may have some variation in soil types, all sites within the CEI Hub are highly vulnerable in a Cascadia Subduction Zone (CSZ) earthquake due the liquefaction hazard.

Liquefaction: According to the US Geological Survey (USGS) liquefaction takes place when "loosely packed water-logged sediments at or near the ground surface lose their strength in response to strong ground shaking. Liquefaction occurring beneath buildings and other structures can cause major damage during earthquakes." Impacts such as the ground surface subsiding, fracturing, and sliding horizontally are possible. The vulnerability to extensive impacts applies to storage tanks and land-based piping, pumps and other transloading equipment. It also extends to facilities in the river, such as docks and transloading pipes and structures.

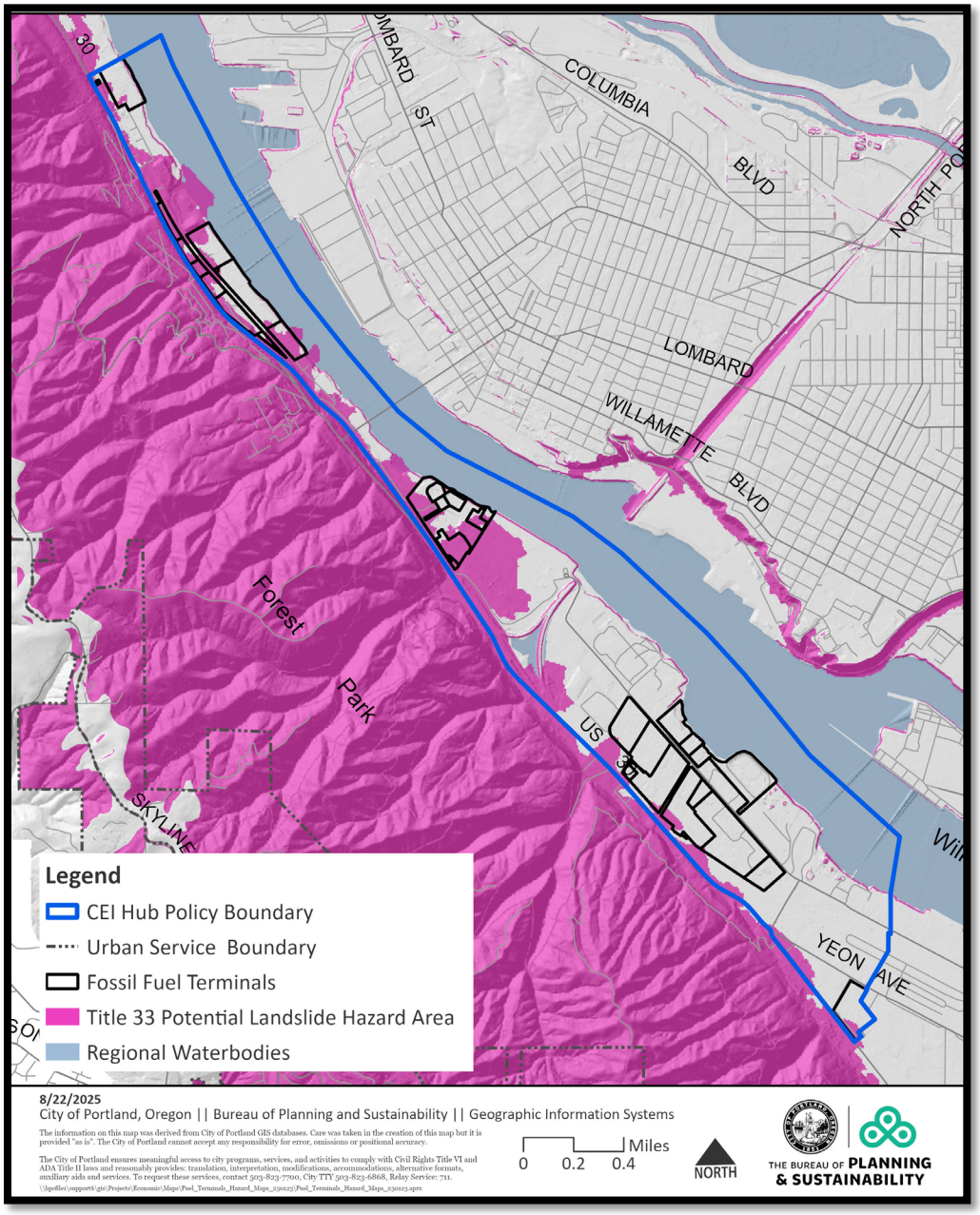
Map 2. CEI Hub Liquefaction Map



Landslide

Beyond the lateral spread or earth movement on flat areas, the hillsides adjacent to the CEI Hub are designated as a landslide hazard due to steep slopes, geology and/or historic landslide activity. Landslides can be triggered by seismic activity, heavy rainfall, or other ground disturbing activities.

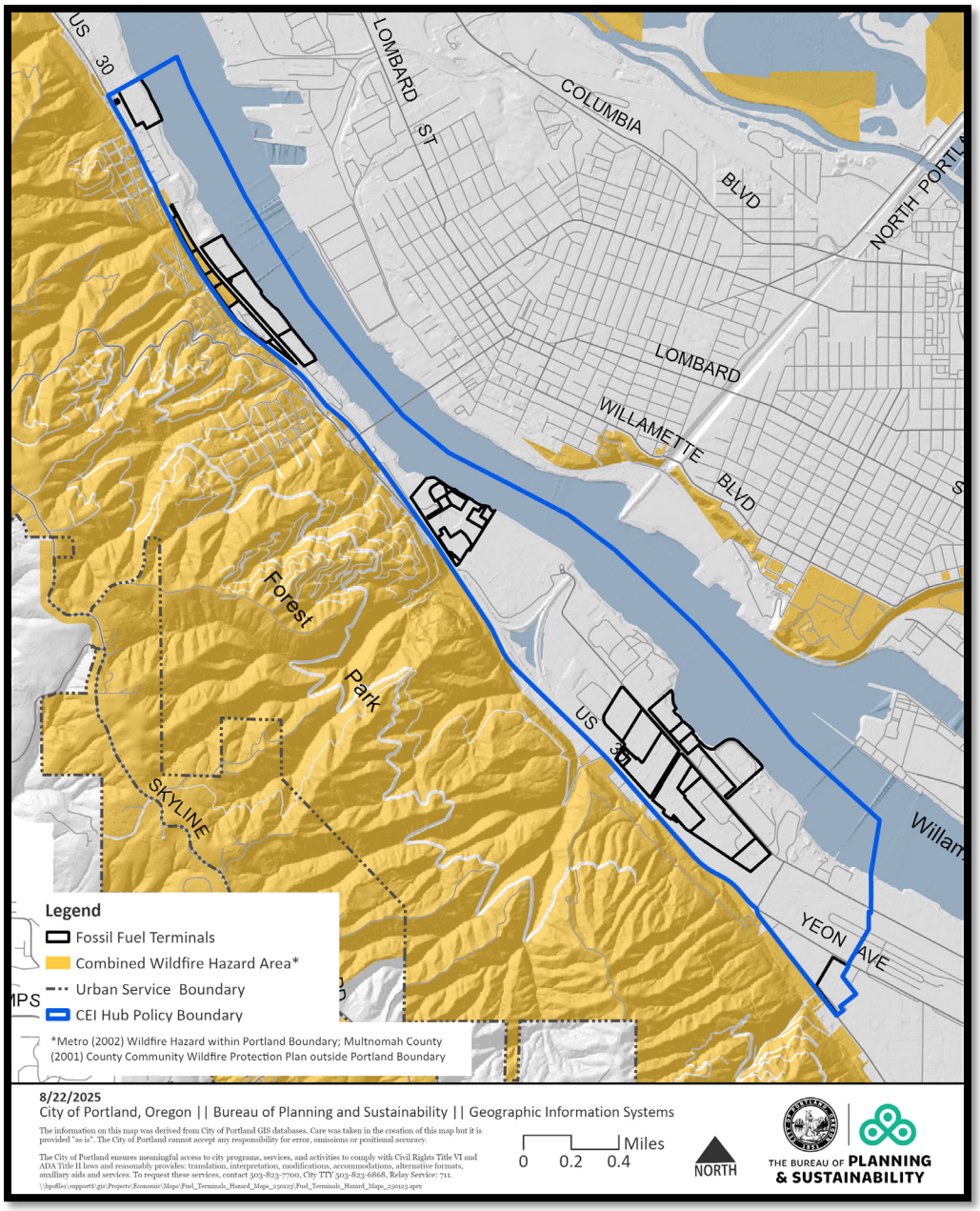
Map 3. CEI Hub Landslide Hazard Map



Wildfire

The area west of and adjacent to the CEI Hub is designated as a wildfire hazard area. The hazard area mainly covers the forested slopes of Forest Park but also includes residential areas. This hazard interfaces with the CEI Hub in two ways. There is the risk of wildfires that start in Forest Park spreading to the CEI Hub causing a conflagration and there is the risk of a fire starting in the CEI Hub area spreading into Forest Park.

Map 4. CEI Hub Wildfire Hazard Map



Risk Assessment

Risk is defined as when the possibility for danger, such as the hazards noted above, intersects with something of value such as human life or environmental health. A growing understanding of the severity of the hazards and risks associated with the CEI Hub have led to many studies in recent years that further investigate and analyze the risks faced by the surrounding community, environment and region. These studies and assessments have focused on various aspects of the challenges facing this location, including better understanding earthquake-caused fuel tank failures and vulnerability[1], level of possible fuel releases and economic impact[2], possible impacts to life safety and emergency response[3], and exploration of mitigation and risk reduction ideas[4]. These studies are part of the legislative record that can be found here. Based on information in these studies and assessments, below is a brief overview of some of the risks and issues related to the CEI Hub.

Vulnerability to hazards

According to the 2022 risk assessment report prepared for Multnomah County and the City of Portland[2], over 90% of the active fuel storage tanks in the CEI Hub were built prior to 1993, the first year that the American Society of Civil Engineers seismic design standards were required. Meaning that most of the tanks are not built to any seismic design standards and are therefore more vulnerable to failure in the event of a magnitude 8 or 9 Cascadia Subduction Zone (CSZ) earthquake. The volume of fuel stored in these tanks also adds to the vulnerability. The 2022 risk assessment report also found that there are over 600 tanks of varying sizes, "holding a combined active storage tank capacity of at least 350.6 million gallons."[1] Such large numbers amplify the vulnerability of the facilities and the impacts in the event of a CSZ earthquake.

Potential Impacts

Impacts to human health and safety: The CEI Hub is located adjacent to or near many residential areas. Impacts to these residential areas are multifaceted and would directly impact human lives in the face of a CSZ earthquake. A few of the most critical impacts and risks include exposure to toxic air, fire

[1] *Liquid Storage Tanks at the Critical Infrastructure (CEI) Hub: Seismic Assessment of Tank Inventory*, Peter Dusicka, PhD, PE and Gregory Norton, 2019

[2] *Impacts of a Cascadia Subduction Zone Earthquake on the CEI Hub*, Multnomah County Office of Sustainability and the City of Portland Bureau of Emergency Management with ECONorthwest, 2022

[3] Risk of Earthquake-Induced Hazardous Materials Release in Multnomah County, Oregon: Two Scenarios Examined, Luke Hanst, PSU, Institute for Sustainable Solutions, Oct. 2023

[4] Critical Energy Infrastructure Hub: Assessment Findings, Oregon Solutions, May 2019

danger, and isolation with lack of assistance and interruption to basic needs (including water and electricity) during an emergency.

Impacts to natural resources: The CEI Hub is located between Forest Park and the Willamette River. Fuel flow into the river as a result of tanks rupturing in a CSZ earthquake would cause substantial long-term impacts to natural systems and wildlife habitat. Similarly, a fire resulting from earthquake triggered fuel spills and spreading into the adjacent forested hills would also have significant resource and habitat impacts.

Impacts to local emergency response: The CEI Hub is located between Highway 30 and the Willamette River, a location with limited access, which has implications for providing emergency response to residents and businesses in the area and to the fuel tank sites in the event of a CZE earthquake. Impacts to the transportation system (roads and access) may make it hard to get in or out of the area. Impacts to other infrastructure systems in the area, such as telecommunications infrastructure (cell phone towers) and the water systems (pipes), could further hinder emergency response. Beyond access, fuel spills a the CEI Hub could impact the amount of fuel, including aviation fuel, available for emergency response needs.

Impacts to post-earthquake recovery and fuel access: The CEI Hub has a role in storing and transporting fuel for Portland and the region. Tank failures and spills along with facility and operation disruptions could impact availability of fuel post-disaster recovery efforts as well.

Economic Impact Analysis

The economic impact of additional regulations on Bulk Fuel Terminals is dependent on two factors:

1. **Economic Development Plans (Direct Impacts)**

   How do Bulk Fuel Terminals factor into Portland's economic development plans? Bulk fuel terminals are not a significant employer, nor are they a traded sector or target industry that is a focus for economic development. In addition, according to the Economic Opportunity Analysis, bulk fuel terminal uses are not expected to experience significant growth that would result in an increase in land demand. As a result, further regulating bulk fuel terminals is not expected to have a significant impact on Portland's economic development strategies or projected employment growth.

2. **Fuel Demand Forecasts (Indirect Impacts)**

   Will the proposed regulations limit access to fuel needed to support the local, regional, and state economy? Current forecasts project that non-aviation fuel demand is generally declining. In addition, an analysis conducted by Parametrix Consulting (Appendix C) shows that terminals

are not operating at full capacity and therefore have the ability to accommodate any additional storage needs. Based on these forecasts and Parametrix's report, it is unlikely that the proposed regulatory amendments will have substantial impacts on fuel availability.

See below for further detail on direct and indirect economic impacts.

Economic Development Plans

Regulating bulk fuel terminals, including restricting the expansion of those terminals, is not expected to have a significant impact on Portland's economic development strategies or employment growth. Bulk fuel terminals are not a significant employer, nor are they a traded sector or target industry that is a focus for economic development. Bulk fuel terminals as a use are not expected to experience significant growth that would increase industrial development or result in an increase in land demand. Furthermore, the CEI Hub Policy project will update Comprehensive Plan policies and zoning code regulations but do not involve any zoning map changes. The existing bulk fuel terminal sites are currently planned and zoned for industrial uses and no Comprehensive Plan land use designation or zone changes are proposed, retaining the existing industrial land capacity of those underlying sites.

2024 Advanced Portland Strategy

Bulk fuel terminals are not identified as a target industry in the Advance Portland strategy.

The target industries identified in the Advance Portland strategy —Athletic & Outdoor, Green Cities, Metals & Machinery, Food & Beverage and Software & Media—overlap significantly with the city's industrial and office geographies. These sectors often require specialized sites: flexible industrial buildings, innovation-ready office space, freight access, and utility infrastructure. These target industries are not dependent on the continued growth of bulk fuel terminals.

Further, Greater Portland Inc, the regional economic development agency, does not identify bulk fuel terminals as a target industry. Their target industries are apparel & outdoor, metals & machinery, computers & electronics, food & beverage, clean technology, design & media, bioscience and software. Business Oregon, the state economic development agency, does not identify bulk fuel terminals as a target industry. Their target industries are advanced manufacturing, business services, food & beverages, forestry & wood products, high technology, and outdoor gear & apparel.

Employment Growth

Historically, as an industry, fuel distributors in Portland have not had high levels of employment or job growth. In 2023, these businesses accounted for only 1,329 jobs, which is 0.3 percent of Portland's 430,000 jobs (Table 3). Fuel distributors are defined by the following NAICS industry codes:

- 424690 - Other Chemical and Allied Products Merchant Wholesalers

- 424710 - Petroleum Bulk Stations and Terminals
- 424720 - Petroleum and Petroleum Products Merchant Wholesalers
- 493190 - Other Warehousing and Storage, which includes bulk petroleum storage

Table 3. Fuel Distributor Employment by Year

Year	Employment
2008	1,190
2013	1,121
2018	1,061
2022	1,255
2023	1,329

Source: BPS analysis of QCEW data

Economic Opportunity Analysis

The 2035 Comprehensive Plan demonstrates compliance with Statewide Planning Goal 9 (Economic Development). The adopted Economic Opportunities Analysis (EOA) is a key component of the city's long-range planning, providing the foundation for how Portland plans for job growth over the next 20 years. It helps ensure that Portland has enough development capacity in the right locations to support a wide range of employment, from advanced manufacturing and logistics to neighborhood-serving retail and major institutions.

The City's acknowledged EOA analyzed and demonstrated adequate growth capacity for a diverse range of employment uses, which are organized into different geographies that represent business district types with a distinct mix of business sectors and building types. In each of the geographies, the City analyzed the future land demand for employment growth and the developable land supply to accommodate that growth. The EOA analyzed future demand for industrial land in four different broad geographies: Harbor Access Lands (which includes all or a portion of nine of the existing bulk fuel terminals; Harbor and Airport Districts (which includes all or a portion of five of the existing bulk fuel terminals); Columbia East (no existing bulk fuel terminals) and Dispersed Employment (no existing bulk fuel terminals). The future demand for industrial land is primarily based on generalized employment growth for the mix of businesses in these geographies.

The 2016 EOA future land demand includes an estimate for marine terminal capacity based on future cargo/commodity flow forecasts. Bulk fuel terminals handle "liquid bulks", which are primarily petroleum products. Estimates of existing cargo capacity are difficult to obtain, particularly for privately owned marine terminals, like the bulk fuel terminals. ECONorthwest (2012) prepared an estimate based on historical data for total cargo volumes for the years 2000 and 2010. For private marine terminals, the

assumption was that recent historical peaks are a reasonable estimate of maximum existing capacity. Based on that capacity estimate, ECONorthwest found that no additional land is needed for new liquid bulk terminals in Portland through the year 2040. The EOA demand analysis did not distinguish between types of liquid bulks, such as specific land needs associated with expanding aviation fuel or renewable fuels. Instead, the EOA analysis addressed overall liquid bulk demand and capacity, aggregating the increase of some bulk types and reduction in others.

The bulk fuel terminal regulations apply to only one type of business that makes up a minority part of the businesses found in Portland's industrial districts. The other industrial uses continue to operate under the current development standards. Because this project will not result in map amendments, these sites will continue to have industrial land use designations, and, therefore, there will be no impact to Portland's industrial land capacity.

Fuel Demand Forecasts

Parametrix Consulting Fuel Pathways Modeling

The City contracted with Parametrix Consulting (Parametrix) to analyze fuel demand for the state of Oregon relative to the fuel storage capacity currently available at the CEI Hub (Appendix C). The forecast utilized the City's tank capacity inventory (Appendix B), along with Community Right to Know fuel data to produce four scenarios based on different policy and market assumptions. The four scenarios (one reference scenario and three policy-based scenarios) account for different levels of policy implementation to provide projections of fuel demand needs through 2050. In contrast to the ODOE scenario modeling and US Energy Information Administration (EIA) forecasts, the fuel pathways modeling connects demand forecasts directly to the existing fuel storage capacity and fuel volumes stored at the CEI Hub, allowing for an evaluation of storage needs relative to existing capacity, instead of basing the proposed policy and regulatory amendments solely on anticipated demand

STORAGE TANK CAPACITY AND FUEL STORED

There is no official inventory of out of service and in-service storage fuel storage capacity at the CEI Hub. BPS utilized inventories from ECONorthwest and the Oregon Department of Environmental Quality (DEQ) to estimate that the CEI Hub has 370 million gallons of total in-service storage capacity, with approximately 315 million gallons of the overall capacity utilized for fuel or fuel-related products (Appendix B). The inventories will be updated as part of the proposed drawdown program where all bulk fuel facilities will be required to submit an inventory of all in-service and out service tanks by October 1, 2026. This inventory, to be verified by the City, will serve as the basis for the proposed drawdown program.

The proposed zoning code changes limit storage capacity for liquid fuels and fuel additives. As such, storage capacity for non-fuels is not included in the modeling. Additionally, while throughput information is proprietary and therefore unavailable to the City, the modeling work completed by

Parametrix provides estimated capacity impacts for one month, four-week, and three- week dwell times, which refer to how long fuel is stored prior to distribution. The modeling results and methodology are attached as Appendix C.

RATIONALE FOR DRAWDOWN:

To calibrate the proposed drawdown percentage, BPS selected the "Delayed Progress" scenario as the basis for the fuel storage drawdown percentage. This scenario is more conservative on the modeling assumptions (further detailed in Appendix C) regarding potential delays in key policy targets including the rate of electrification, SAF usage, and diesel reduction to provide a buffer due to the uncertainty in both the market and policy environments. As Community Right to Know fuel storage data shows that CEI Hub Bulk Fuel Terminals are not, on average, using the maximum storage capacity available, the drawdown percentage is based on demand relative to fuel storage utilization rate. The "Delayed Progress" scenario anticipates 68% of the existing fuel storage capacity at the CEI Hub will be needed, assuming a one-month average dwell time. A review of available resources, including state guidelines for above ground tank application, and installation and industry standard practices, shows that fuel tanks are typically filled to a maximum of 90% of the total capacity before overflow protection processes are initiated. The estimated 68% utilization rate plus the 10% of maximum capacity used as overflow prevention leaves an additional 22% of anticipated capacity that will remain un-utilized. This number supports the proposed 20% drawdown percentage, while taking into account tanks that may not be filled to the full 90% level.

While the bulk fuel terminals at the CEI Hub supply over 90% of Oregon's transportation fuel, the proposal is not expected to harm the economy by restricting fuel supply. Even under the most conservatively modeled scenario where growth in fuel demand is unchecked, only 91% of existing fuel storage capacity at the CEI Hub is anticipated to be needed by 2035. The Federal Energy Information Administration (EIA) Annual Energy Outlook, the Oregon Department of Transportation (ODOT) Revenue Forecast, and the Oregon Office of Economic Analysis (OEA) Clean Fuels Forecast support the conclusions reached by the model, indicating that future demand for liquid fuels out to the year 2050 is not projected to exceed the historic peak consumption; and, according to some forecasts, is expected to be significantly less than the current volumes. While there is a built-in level of uncertainty regarding demand trends, the findings from the fuel modeling support the conclusion that there is sufficient fuel storage capacity available, and that the proposed fuel storage cap and 20% drawdown is unlikely to have significant long term economic impacts. To further support the conclusions found in the fuel pathways modeling scenarios, an analysis of other state and federal programs and forecasts, some used as assumptions in the model, is provided below.

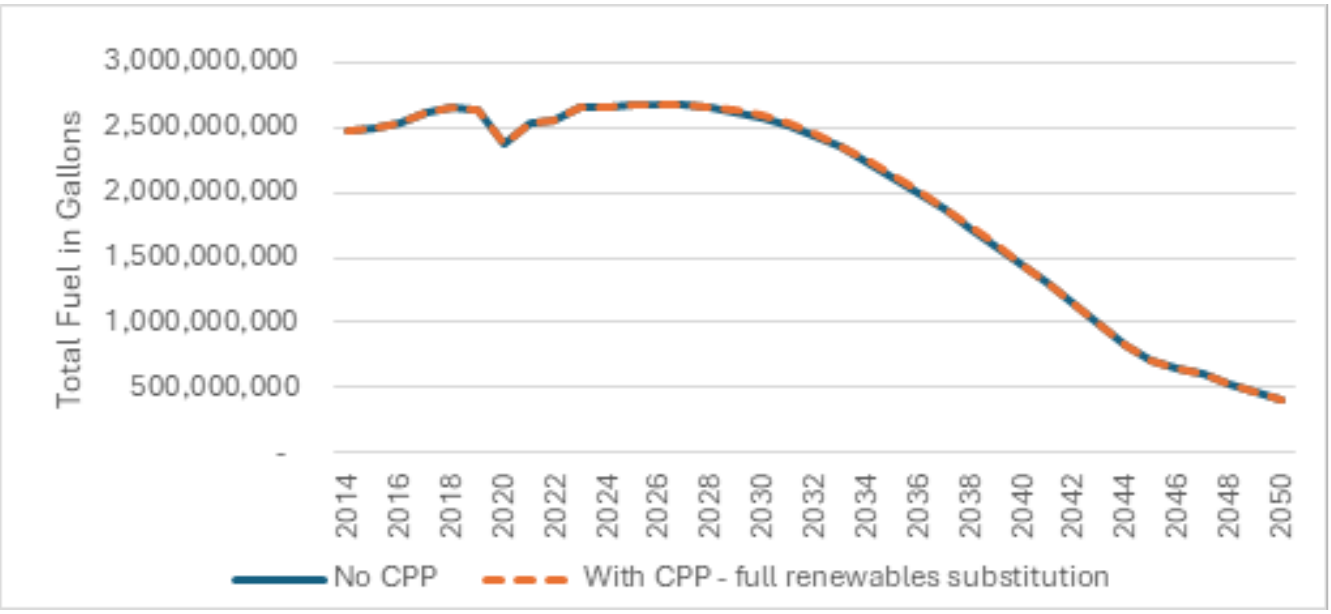
State of Oregon Climate Program Impacts

The State of Oregon has two programs (the Clean Fuels Program (CFP) and the Climate Protection Program (CPP)) that have potential impacts on liquid fuel usage. To better understand both the scale of

impact the proposed drawdown may have on the implementation of the state programs, and the impacts of the CPP and CFP on fuel storage capacity needs at the CEI Hub, the scenario modeling completed by Parametrix includes demand forecasts taking the impact of these programs into account.

The CPP directly regulates liquid fuel suppliers who produce over 25,000 metric tons of carbon dioxide or equivalents. The program establishes a declining cap on greenhouse gas emissions, requiring a gradual reduction in emissions reaching 50% by 2035 and 90% by 2050 relative to a 2017-2019 baseline. The CPP forces fuel suppliers to reduce emissions by either reducing the amount of fossil fuel sold (which can include blending fossil fuels with renewables), purchasing credits from another fuel supplier, or purchasing Community Climate Investment (CCI) credits to offset the emissions. The fuel demand modeling completed by Parametrix evaluates the impact of the CPP on fuel demand, finding that there is unlikely to be any difference between the total fuel demand with and without the CPP due to the net decrease in total fuels used (Figure 4). This is likely to be the case for two reasons: the overall reduction into fossil fuels used means that even a small uptick in renewables will still result in a net fuel reduction, and because companies may elect to purchase CCI credits instead of directly replacing fossil fuels with renewables. This analysis further supports the conclusion that a reduction of existing storage capacity at the CEI Hub will not have substantial impacts on fuel availability.

Figure 4. Anticipated Fuel Demand under CFP and CPP



Source: Parametrix CEI Hub Scenario Tool (Appendix C)

The Clean Fuels Program is a market-based program that aims to reduce the carbon intensity of transportation fuels like gasoline and diesel. The CFP requires the average carbon intensity of transportation fuels in Oregon to be reduced by 37% below 2015 levels by 2035. Analysis of CFP impacts focused on whether further reduction of fossil fuel demand over time is likely to lead to a

substantially greater demand for renewable fuels, thereby creating a need to maintain storage capacity at the CEI Hub for renewable fuel storage. Like the CPP, analysis of the CFP found that that the program is likely to only marginally increase demand for renewable fuels. Under the "Current Adopted Policies" scenario, which assumes the state's CFP goals are met and demand for renewables increases moderately, shows that the moderate increase in renewable fuel demand by 2035 is likely to be drastically outpaced by the overall reduction in demand in liquid fuels due to electrification, fuel prices increases, fuel efficiency improvements, fewer vehicle miles traveled, and an overall reduction in quantity of drivers. Even in the most aggressive scenario, in which use of renewable fuels is maximized, the projected reduction in total liquid fuels used means that even a minor growth in renewable fuels will not result in additional needed capacity. The anticipated fuel demand under the "Current Adopted Policies" scenario is shown in Table 4 below, with the anticipated fuel demand under the "Renewable-fueled Growth" scenario is shown in Table 5.

Table 4. Anticipated Fuel Demand under "Current Adopted Policies" Scenario

Oregon Annual Fuel Volumes (million gallons) ***Current Adopted Policies Scenario***	**2023**	**2030**	**2035**	**2040**	**2050**
Fossil Fuel Volume	2,286	1,964	1,516	1,002	336
Renewable Fuel Volume	366	615	605	454	79
Total Liquid Fuel Volume	2,653	2,579	2,121	1,456	415
Change in renewable fuel volumes from 2023 levels		**68%**	**65%**	**24%**	**-78%**

Table 5. Anticipated Fuel Demand under "Renewable Fueled Growth" Scenario

Oregon Annual Fuel Volumes (million gallons) ***Renewable Fueled Growth Scenario***	**2023**	**2030**	**2035**	**2040**	**2050**
Fossil Fuel Volume	2,286	2,011	1,717	1,414	926
Renewable Fuel Volume	366	679	936	1,205	889
Total Liquid Fuel Volume	2,653	2,690	2,653	2,619	1,815
Change in renewable fuel volumes from 2023 levels		**85%**	**155%**	**229%**	**143%**
Change in total liquid fuel volumes from 2023 levels		**1%**	**0%**	**-1%**	**-32%**

A more detailed analysis of CFP and CPP impacts is provided as Appendix D to this report.

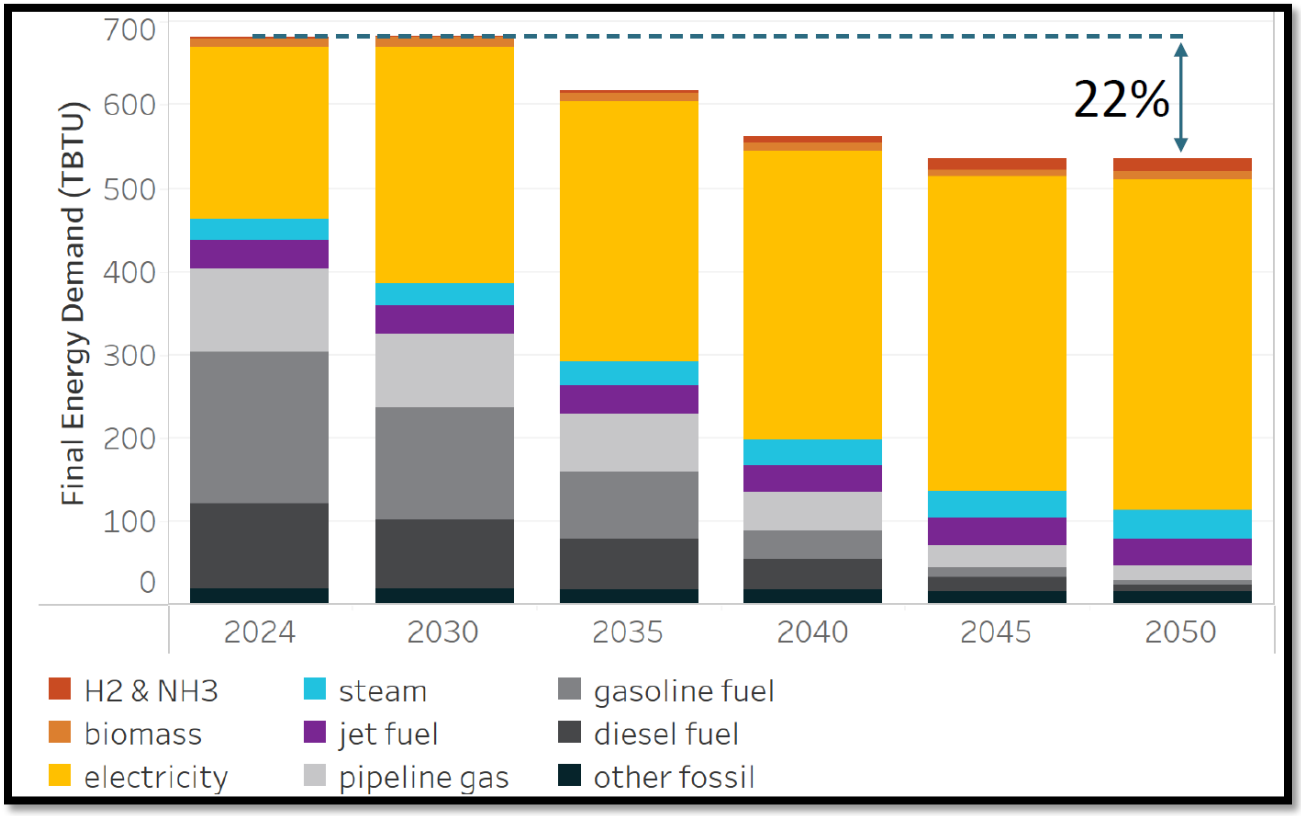
2025 Oregon Energy Strategy

As required by HB 3630, the Oregon Department of Energy (ODOE) has begun to model alternative pathways intended to identify policy options for reaching the state's clean energy goals. The model includes multiple pathways towards achieving the desired outcomes, including a reference scenario acting as the baseline (least cost) pathway. While the pathways generated by the model do include a

transport and fuels sector input, the overall energy inputs considered fall under a much wider umbrella than those applicable to the CEI Hub.

The Oregon Energy Strategy Technical Report includes a broad breakdown of anticipated energy demand by sector under the reference scenario. The chart below (Figure 5), taken from the technical report, shows a projected decrease in fossil fuel demand in the reference scenario, mostly tied to electricity demand doubling by 2050. It also shows a residual demand for jet fuel and other fossil fuels. While it is important to note that modeling done in the technical report represents the lowest-cost pathway towards achieving the State of Oregon's policy goals and is not meant to act as a demand forecast, the reference scenario does align with federal forecasts projecting a general decline in demand for liquid fuels.

Figure 5. ODOE OES Technical Report Reference Scenario



2025 Energy Information Administration Annual Energy Outlook

The US Energy Information Administration (EIA) produces the Annual Energy Outlook, which provides long-term energy projections. The 2025 edition includes projections to 2050, and reflects current trends in energy production, delivery, and consumption technology, as well as economic and demographic trends (Table 6). The report includes assumptions regarding macroeconomic growth, world oil prices,

and technological progress, and shows that the US energy intensity (energy consumed per dollar of GDP) continues to decline, even as the U.S. economy continues to expand.

Petroleum and other liquids remain the most-consumed fuel in the AEO 2025 Reference case. The transportation sector is the largest consumer of petroleum and other liquids, particularly motor gasoline and distillate fuel oil (diesel). The report finds that gasoline remains the dominant light-duty vehicle (LDV) fuel, but consumption is expected to significantly decline out to 2050. Sales of conventional motor gasoline vehicles are expected to decrease through the projection period because of increasing sales of battery-electric vehicles (BEVs), hybrid-electric vehicles (HEVs), and plug-in hybrid-electric vehicles (PHEVs). Jet fuel consumption is expected to grow. This growth arises from increases in air transportation outpacing increases in aircraft fuel efficiency.

US EIA data does not report non-fossil biofuels, such as ethanol or biodiesel, separately. Total petroleum data includes the volumes of fuel ethanol and biodiesel blended with motor gasoline and distillate fuel oil, respectively.

Table 6. US Total Energy Consumption, All Sectors, Selected Sources

Select Sources	2025	2035	2050	Compound growth 2021-2050
Gasoline	16.48	13.29	9.14	-2.2%
Jet Fuel	3.57	3.81	4.39	0.9%
Distillate Fuel Oil	9.02	7.71	6.72	-1.0%
All Petroleum	37.52	33.68	30.19	-0.8%
Natural Gas	31.61	31.70	35.27	0.4%

Source: Total US energy consumption, Reference Case, 2025 AEO Table 2 (quadrillion Btu per year) https://www.eia.gov/outlooks/aeo/tables_ref.php

The EIA also divides the national forecast into regional forecasts, providing a more localized data point to compare consumption trends and forecasts closer to conditions in Oregon. Petroleum consumption in the Pacific region, defined by the EIA as Washington, Oregon, California, Alaska, and Hawaii, is forecasted to decline faster than the national forecast.

Table 7 shows that there is a significant decline in gasoline consumption and distillate fuel oil, with a more modest decline in natural gas. Jet fuel continues to be the fuel type that is forecasted to increase in demand. The Pacific region growth rate for jet fuel is higher than the national rate.

Table 7. Pacific Region, Total Energy Consumption, All Sectors, Selected Sources

Select Sources	2025	2035	2050	Compound growth 2021-2050
Gasoline	2.196	1.483	0.876	-3.5%
Jet Fuel	0.894	0.967	1.117	1.7%
Distillate Fuel Oil	1.221	1.084	0.978	-0.7%
All Petroleum	5.095	4.212	3.658	-1.2%
Natural Gas	3.109	3.258	3.075	-0.3%

Total energy consumption, Pacific region, Reference Case, 2025 AEO Table 2.9 (quadrillion Btu per year) https://www.eia.gov/outlooks/aeo/tables_ref.php

Table 8. Oregon, Calculated Total Energy Consumption, All Sectors, Selected Sources

Select Sources	2023	2035	2050	Compound growth 2021-2050
Gasoline	0.163	0.106	0.074	-3.5%
Jet Fuel	0.030	0.037	0.047	1.7%
Distillate Fuel Oil	0.102	0.937	0.844	-0.7%
All Petroleum	0.345	0.298	0.249	-1.2%
Natural Gas	0.327	0.315	0.301	-0.3%

BPS calculation based on 2025 AEO Pacific Region Reference Case and US EIA 2023 State Energy Data System (SEDS) (quadrillion Btu per year) https://www.eia.gov/state/seds/sep_use/notes/use_print.pdf

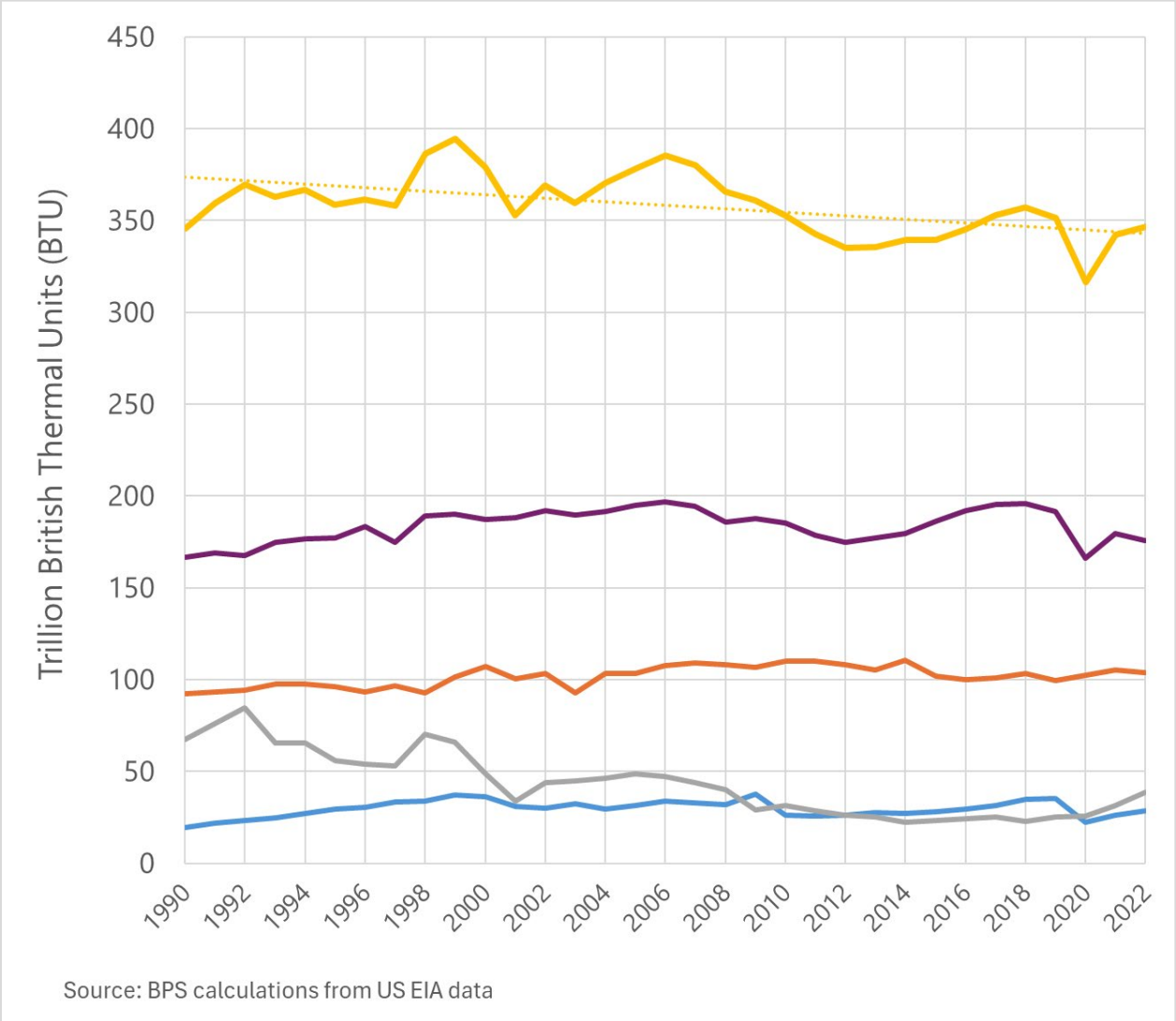
US EIA state profile and energy estimates

US EIA State Energy Data System (SEDS) is a comprehensive data set of annual time series estimates of state-level energy use by major economic sectors, energy production and consumption data that are defined as consistently as possible over time and across sectors for analysis and forecasting purposes. For Oregon, historic trends dating back to 1990 show that the energy consumption for all petroleum products remains below historic highs (Figure 6). Gasoline accounts for 55% of petroleum consumption,

but energy estimates since 1993 also include fuel ethanol blended into motor gasoline, which makes it difficult to determine the total fossil fuel content of that fuel type.

Historic trends from the EIA's SEDS shows petroleum fuel consumption in Oregon has been flat for the last 32 years (Figure 6).

Figure 6. Petroleum Fuel Consumption in Oregon, 1990-2022



Source: BPS calculations from US EIA data

Petroleum consumption in Oregon peaked in 1999 at 395,000 billion BTU (Figure 6). The BPS forecast for Oregon, based on the US EIA regional forecast, calculates total petroleum consumption at 249,000 billion BTU in 2050, which is significantly less than the 1999 peak consumption (Table 8). In addition, most (66%) of the increased consumption of petroleum in 2050 can be attributed to the 17,000 billion BTU increase in jet fuel consumption. Since 2004, 11 tanks, including five that hold petroleum products,

have been built, adding 23 million gallons of storage capacity to the terminals. These long range (2050) forecast trends are consistent with the short-term state forecasts.

Climate Action and Carbon Reduction Goals

The City of Portland has adopted ambitious climate plans and targets since the 1990s. The 2020 Climate Emergency Declaration (Resolution No. 37494) commits Portland to achieving a 50% reduction in carbon emissions below 1990 levels by 2030 and net-zero carbon emissions by 2050. These are science-based targets recognized by the international scientific community and shared by cities across the globe.

The Climate Emergency Declaration also directs the City "to adopt new policies and development standards to further prevent expansion of new fossil fuel infrastructure, reduce fossil fuel consumption, reduce risk to the community and the environment, and encourage the adoption and use of clean, renewable fuels.

While the project's goals are not intended to specifically address climate impacts, the proposed regulations support the City's climate action and carbon reduction goals by prohibiting further expansion of fuel storage of any type. While the proposal includes limitations on renewable fuel storage in addition to fossil fuel storage and there is a chance that the need for renewable fuels may tick up as fossil fuel consumption continues to decline, the modeling scenario representing the highest need for renewable fuel storage ("Renewable-Fueled Growth") indicates that bulk fuel facilities at the CEI Hub have sufficient storage capacity to accommodate any need for renewable fuel storage, even with the proposed 20 percent drawdown. These conclusions are supported by the analysis of impacts of the state Clean Fuels Program and Climate Protection Program detailed in Appendix D, which states that the overall decline in need for liquid fuels offsets a need for additional fuel storage capacity resulting from an increase in renewable fuel usage. Therefore, the proposed policy and regulatory changes align with the City's climate action and carbon reduction goals.

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About City of Portland Bureau of Planning and Sustainability
The Bureau of Planning and Sustainability (BPS) develops creative and practical solutions to enhance Portland's livability, preserve distinctive places, and plan for a resilient future.

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