

# Fossil Fuel Facilities Proposed Code Changes

VANCOUVER  
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**Vancouver**  
WASHINGTON

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Planning Commission Workshop

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# Presentation Overview

- Fossil Fuel Moratorium Background
- Council Direction and Prior PC Review
- Overview of Fossil Fuel Sector – BERK Consulting
- Proposed Changes to VMC 20 VMC, Land Use and Development Code
- Proposed Next Steps
- Discussion

# Fossil Fuel Facility Moratorium Background

- Enacted June 2020, most recently extended on June 6, 2022; set to expire November 6, 2022, unless extended
- Moratorium applies to new or expanded large-scale fossil fuel facilities engaged in:
  - Distribution, extraction, refinement, processing, transshipment and bulk storage (over 2 million gallons) of fossil fuels used for energy production
  - Includes coal, petroleum, natural gases (methane, propane, butane, etc.)
  - Does not apply to storage or use of petroleum for commercial sales or industrial processes (e.g. fertilizer or plastics manufacturing, asphalt plants, etc.), or maintenance or repair of existing facilities

# Prior Council Direction

In order to promote public safety and environmental protection and implement climate-friendly policies, amend Title 20 VMC to:

- Prohibit new large-scale fossil fuel facilities in all zoning districts
- Provide definitions for regulated fossil fuels and large-scale facilities consistent with moratorium
- Consider whether expansion of existing large-scale fossil fuel facilities should be allowed and, if so, what standards should apply
- Desire for regulations to be as simple as possible

# Prior Planning Commission Review

Planning Commission workshops held on:

- May 25, 2021
- July 27, 2021
- March 8, 2022

# Introducing BERK Consulting

- BERK is an interdisciplinary consultancy integrating strategy, planning, and policy development; financial and economic analysis; and facilitation, design, and communications.
- BERK assisted Whatcom County and City of Tacoma in developing their fossil fuel use regulations
- Lisa Grueter, Principal, brings land use planning expertise including SEPA and code development
- Jason Hennessy, Senior Associate, brings expertise in financial policy analysis





# Statewide Context

## Oil Movement and Infrastructure in WA State

- Eastern WA has no refineries and is supplied by pipelines from Utah
- Western WA is primarily supplied by the state's five refineries or from marine tanker deliveries from other domestic and foreign sources.
- The state's refineries are supplied with crude oil by pipeline, rail, and marine vessels.
  - By marine: Alaska
  - By pipeline: Canada
  - By train: North Dakota, Wyoming, Canada
- In recent years, several proposed new oil facilities have been pursued and subsequently abandoned in Vancouver, Grays Harbor, and Anacortes in the face of public opposition.



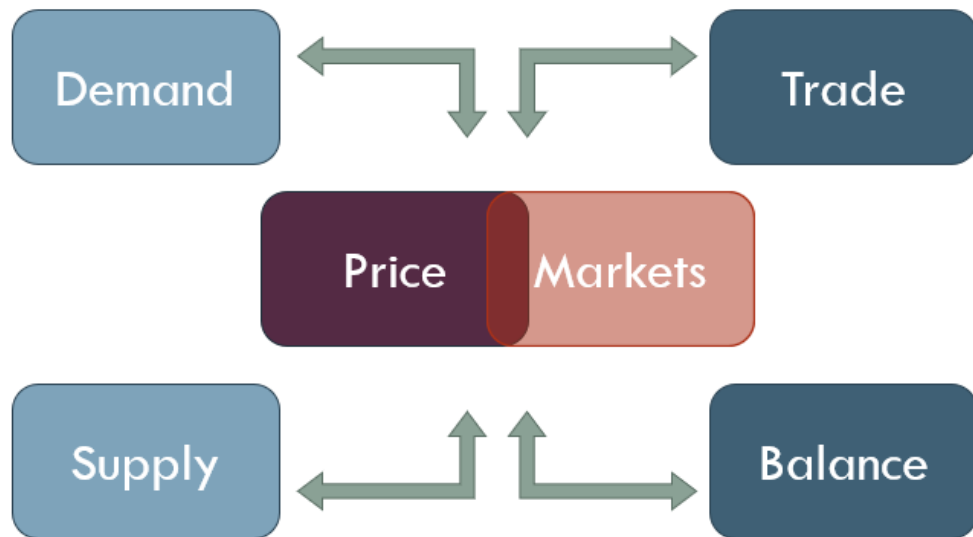
Note: The refinery located in Aberdeen is a biodiesel plant and not a petroleum refinery

Source: Department of Ecology, 2019.

# Fossil Fuel Prices

## Drivers

- **Demand:** Clear seasonal patterns
- **Supply:** The number of refineries has decreased in the U.S.
- **Markets:** Costs reflect both current demand and expectations of future demand
- **Trade:** The U.S. both imports and exports crude oil
- **Balance:** Refineries anticipate demand



Source: BERK, 2022, Adapted from: U.S. Energy Information Administration (EIA), "What Drives Petroleum Product Prices," 2022.

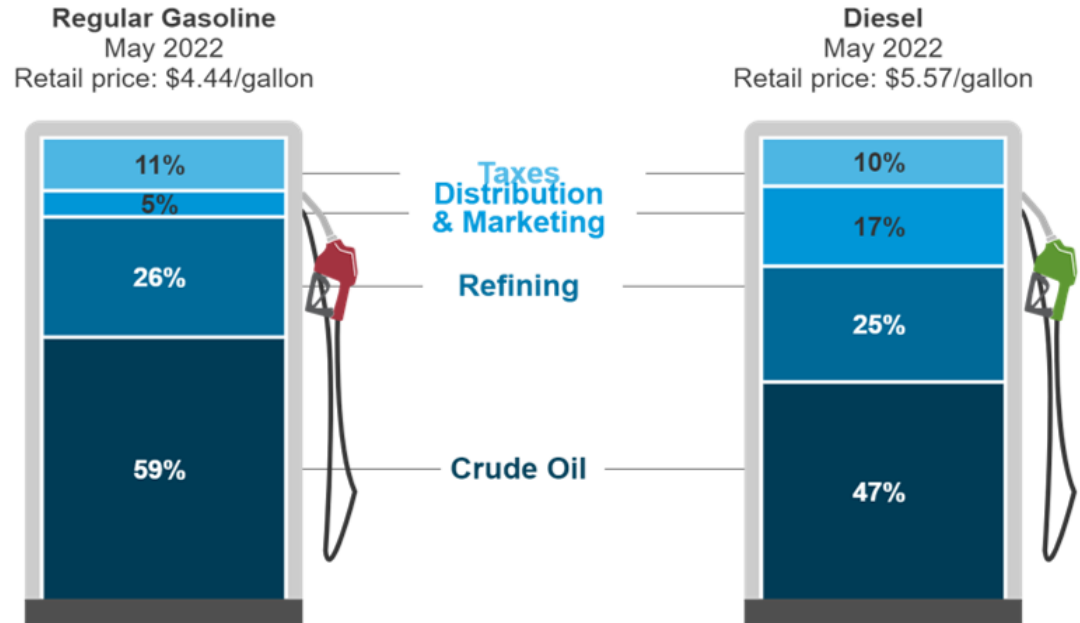




# Prices

## What Makes Up Fuel Cost?

- Average May 2022 U.S. Costs
- Crude oil is the primary cost
- Taxes are collected at the local and Federal level
  - Washington's gas taxes are approximately 140% the U.S. average (4<sup>th</sup> highest)

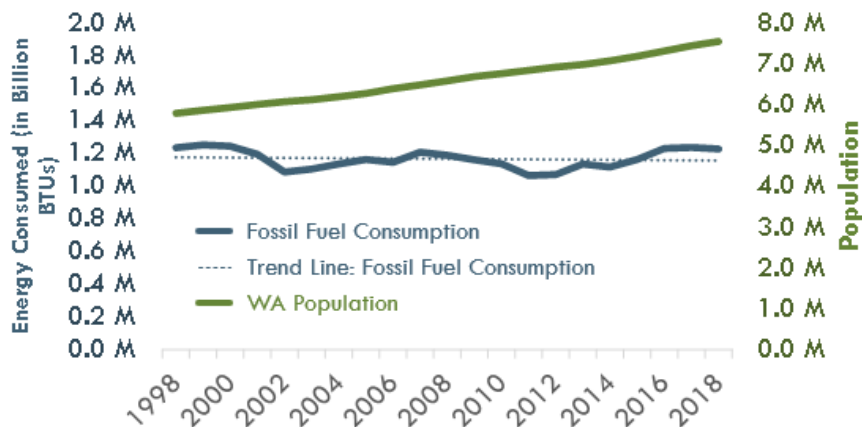


Source: U.S. Energy Information Administration (EIA), "[Gasoline and Diesel Fuel Update](#)," May 2022.

# Statewide Context

## Energy Use and Population Growth

- The Federal EIA projects a 6% increase in U.S. petroleum consumption from 2019-2050
- Washington State population is projected to grow by 30% over the same period
- On going per capita use decreasing over time



# Expected Cost Effects of Code

- Supply could only be directly affected by additional refineries
  - Additional refineries are not expected because of overall expectations around petroleum consumption despite current high costs
- Restricting storage capacity could increase consumer fuel costs from additional transportation
- Any effects are expected to be relatively minor compared to global and national trends

# Proposed Fossil Fuel Code Changes (VMC Title 20)

## High Level Summary:

- New bulk fossil fuel storage and handling facilities, including oil, gas or coal storage or transshipment, would be prohibited
- Existing bulk facilities could be maintained and upgraded
- Existing facilities could be expanded slightly if converted to cleaner fuel and brought up to seismic standards, by conditional use permit
- 'Cleaner fuels' would be specifically defined
- Small fossil fuel storage and handling, intended for local markets, would be allowed by conditional use subject to new standards
- Coal and other solid fuel storage yards, and coal-fired electricity generating facilities would be prohibited

# Proposed Fossil Fuel Code Changes (VMC Title 20)

Create three new land use categories:

1. “Bulk Fossil Fuel Storage and Handling Facilities” to include a range of liquid and solid petroleum products including coal, natural gases (e.g., methane, propane, and butane); would not include certain products derived from fossil fuels (e.g., plastics, fertilizer, asphalt, etc.)
2. “Cleaner Fuel Storage and Handling Facilities”: conversion of bulk fuel facility to liquid or gaseous fuels that have low or no emissions
3. “Small Fossil Fuel Storage and Distribution Facilities” include fuel storage tanks with cumulative storage of 60,000 gallons or less, for either local distribution to customers or accessory to support an onsite commercial, industrial, etc. use

# Proposed Fossil Fuel Code Changes (VMC Title 20)

## Bulk Fossil Fuel Storage and Handling

- Prohibit any *new* bulk fossil fuel storage and handling facility in all zoning districts, regardless of size
- Allow for maintenance and upgrades to existing facilities
- Allow for conversion of bulk facilities to cleaner fuels and possible minor expansion of capacity as “Cleaner Fuel Storage and Handling Use”

# Proposed Fossil Fuel Code Changes (VMC Title 20)

## Cleaner Fuels

Define as liquid or gaseous fuels produced from renewable sources that are low or no emissions, including:

- Carbon-free fuels that generate no carbon emissions including green hydrogen
- Any credit-generating fuel under WA State Low Carbon Fuel Standard
- Any biomass renewable fuels approved by federal Environmental Protection Agency
- Alcohol fuels meeting the requirements of RCW 19.112.010(1)
- Biodiesel fuels meeting the requirements of RCW 19.112.010(1)
- E85 (high-level ethanol) motor fuel meeting the requirements of RCW 19.112.010(1)
- Alternative fuels exclusively for propulsion of motor vehicles meeting RCW 19.112.010(1)



# Proposed Fossil Fuel Code Changes (VMC Title 20)

## Cleaner Fuels Storage and Handling Uses

- Prohibit construction of *new* facilities in all districts
- Allow conversion only of existing bulk fossil fuel facilities to cleaner fuels in the IH Heavy Industrial District as a limited use, subject to:
  1. Documenting conversion (type of fuel, date converted)
  2. Placing requirement that converted facility may not return to bulk fossil fuel storage and handling
  3. Approval of comprehensive spill prevention and fire response plans
- Allow such converted facilities to expand by up to 15%, subject to CUP and new development standards including seismic upgrades, spill and fire plans

# Proposed Fossil Fuel Code Changes (VMC Title 20)

## Small Fossil Fuel Storage and Distribution Facilities

- Allow in the IH Heavy Industrial District subject to:
  - Conditional use permit
  - Compliance with building standards related to seismic stability
  - Documentation of proposed fuels
  - Comprehensive spill containment and fire response plans
- Prohibit small fossil fuel storage and distribution in all other zoning districts

# Proposed Fossil Fuel Code Changes (VMC Title 20)

## Add new Special Use Standards at VMC 20.895.110

- Purpose: environmental protection; minimize impacts from fire or explosion; support transition to cleaner, renewable fuels
- Apply to all three new fuel-related use classifications
- Non-capacity improvements (maintenance, structural upgrades, etc.) to existing facilities must document baseline capacity
- Small Fossil Fuel or Cleaner Fuel Storage and Distribution Facilities must document baseline capacity, comply with seismic upgrades, and obtain approval of spill prevention and fire response plans

# Proposed Fossil Fuel Code Changes (VMC Title 20)

## Special Use Standards at VMC 20.895.110 (Continued)

- Conversion of existing Bulk Fossil Fuel Storage and Handling Facilities to Cleaner Fuels Storage and Handling Facilities must have an approved spill prevention and fire response plan, and once converted, may not later be used to store or transship petroleum-based fossil fuels
- Expansion of such converted facilities is allowed by up to 15%, subject to the above restrictions, plus seismic upgrades to existing facilities, a greenhouse gas assessment, proof of financial assurance in case of accidents, and an annual reporting requirement

# Proposed Fossil Fuel Code Changes (VMC Title 20)

## Other Code “Clean-up” Amendments

- Delete solid fuel (e.g., coal) storage yards from Industrial Services land use description
- Delete reference to coal-fired electricity generation facility as an example of major utility facilities
- Delete use category “bulk crude storage” to be replaced by bulk fossil fuel storage and handling facilities

# Stakeholder Outreach To-Date

- Port of Vancouver and NuStar (tenant)
- Western States Petroleum Association (WSPA)
- Tidewater
- SW Washington Beyond Fossil Fuel Task Force
- Columbia Riverkeeper
- Washington Environmental Council
- Friends of the Gorge
- Physicians for Social Responsibility
- NW Natural

# Proposed Next Steps

- July 13-31: Additional Stakeholder Outreach and SEPA Determination Issuance
- August 1: City Council Workshop (scheduled)
- September 13: Planning Commission Hearing (tentative)
- October 4: City Council Public Hearing (tentative)
- November 5: Ordinance takes Effect
- November 8: Moratorium Expires



# Questions and Discussion

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Fossil Fuel Facility Code Changes - 23

Slides Held in Reserve

# Fossil Fuel Code Changes– Impacted Facilities

- 6 existing facilities identified, on lands with moderate to high liquefaction susceptibility in the event of an earthquake
- The facilities generally process, store, or transport propane, natural gas, and petroleum products



# Fossil Fuel Code Changes– Impacted Facilities

## Tidewater Barge Lines (Class 1)

- 1.3 M gallons tanks storing diesel fuel
- Miscellaneous fueling stations and tanks with lube oil, gasoline, diesel, and used oil totaling less than 20K gal





# Fossil Fuel Code Changes– Impacted Facilities



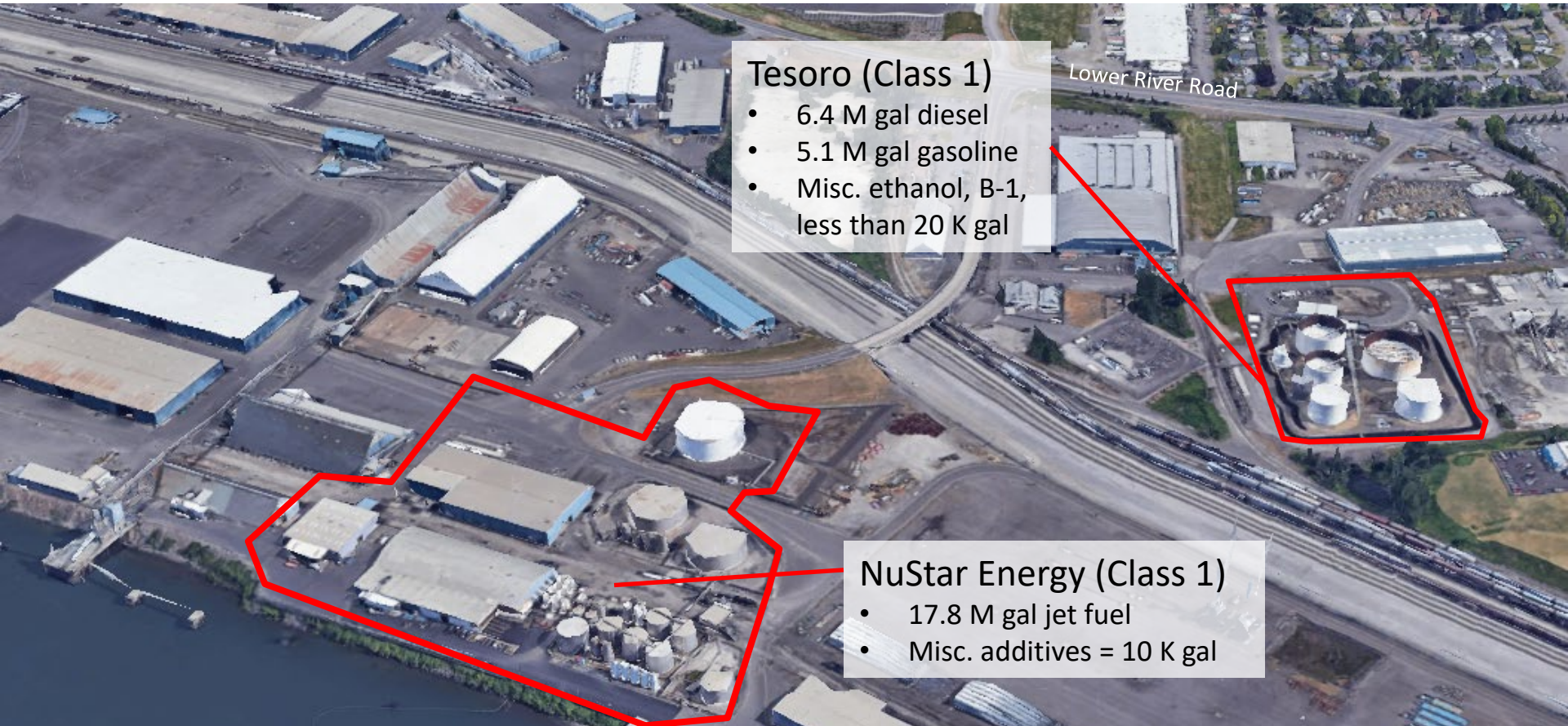
CPU River Road  
Generation Plant

Tristar Fuel  
Transfer Facility

NGL Energy  
Partners



# Fossil Fuel Code Changes– Impacted Facilities



## Tesoro (Class 1)

- 6.4 M gal diesel
- 5.1 M gal gasoline
- Misc. ethanol, B-1, less than 20 K gal

## NuStar Energy (Class 1)

- 17.8 M gal jet fuel
- Misc. additives = 10 K gal

# Fossil Fuel Code Changes– Impacted Facilities

Trillium CNG (also referred to as NuStar Annex)  
Fruit Valley Rd.  
Compressed Natural Gas Facility

