

# PORT OF BELLINGHAM

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**Developing a Thermal Energy Network**

# 2025 PORT COMMISSION



**Bobby  
Briscoe**



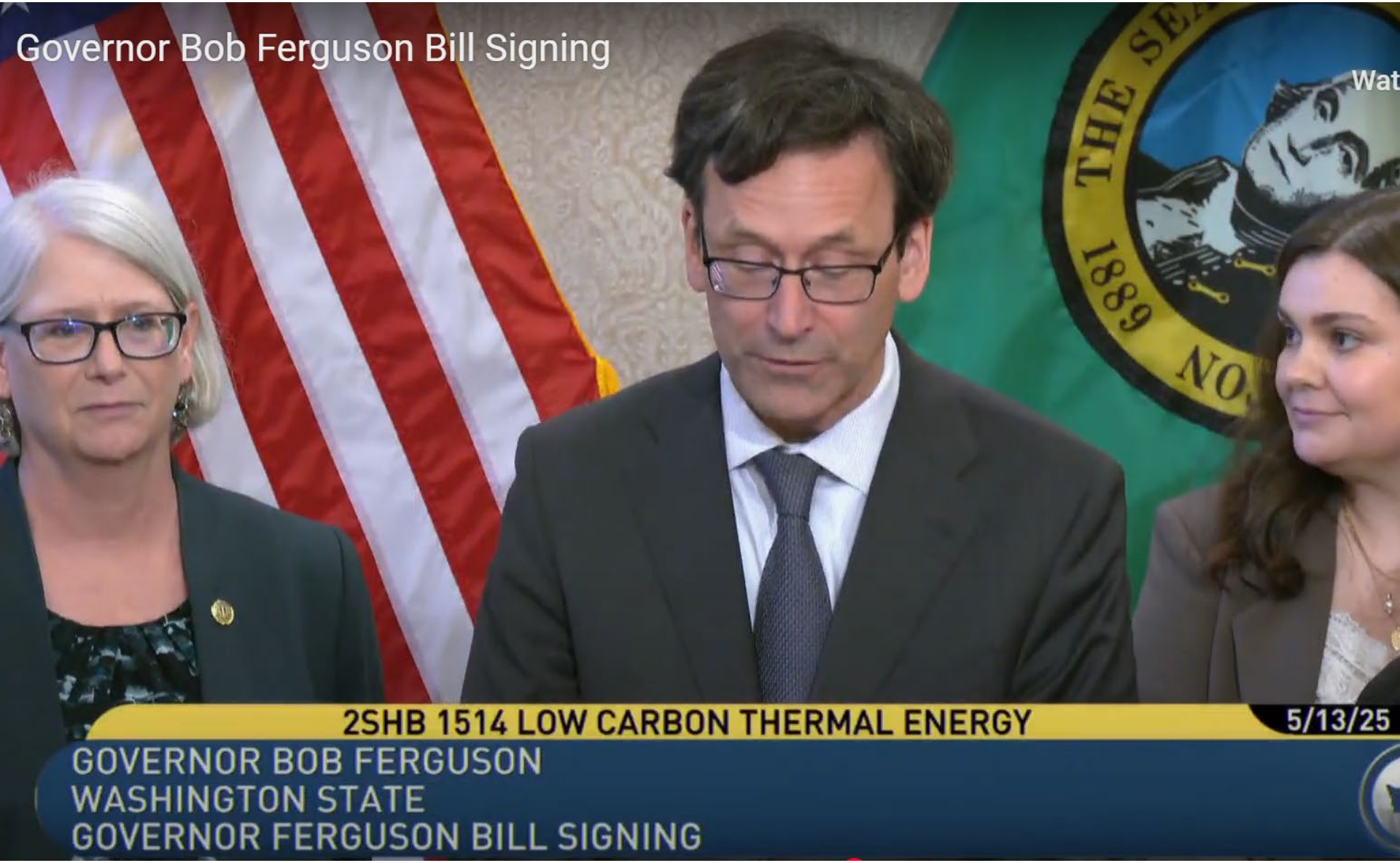
**Ken  
Bell**



**Michael  
Shepard**

***Promote sustainable economic development, optimize transportation gateways, and manage publicly owned land and facilities to the benefit of Whatcom County***

# Gov. Ferguson Signs HB1514 to Law (5/13/2025)



Governor Bob Ferguson Bill Signing

2SHB 1514 LOW CARBON THERMAL ENERGY

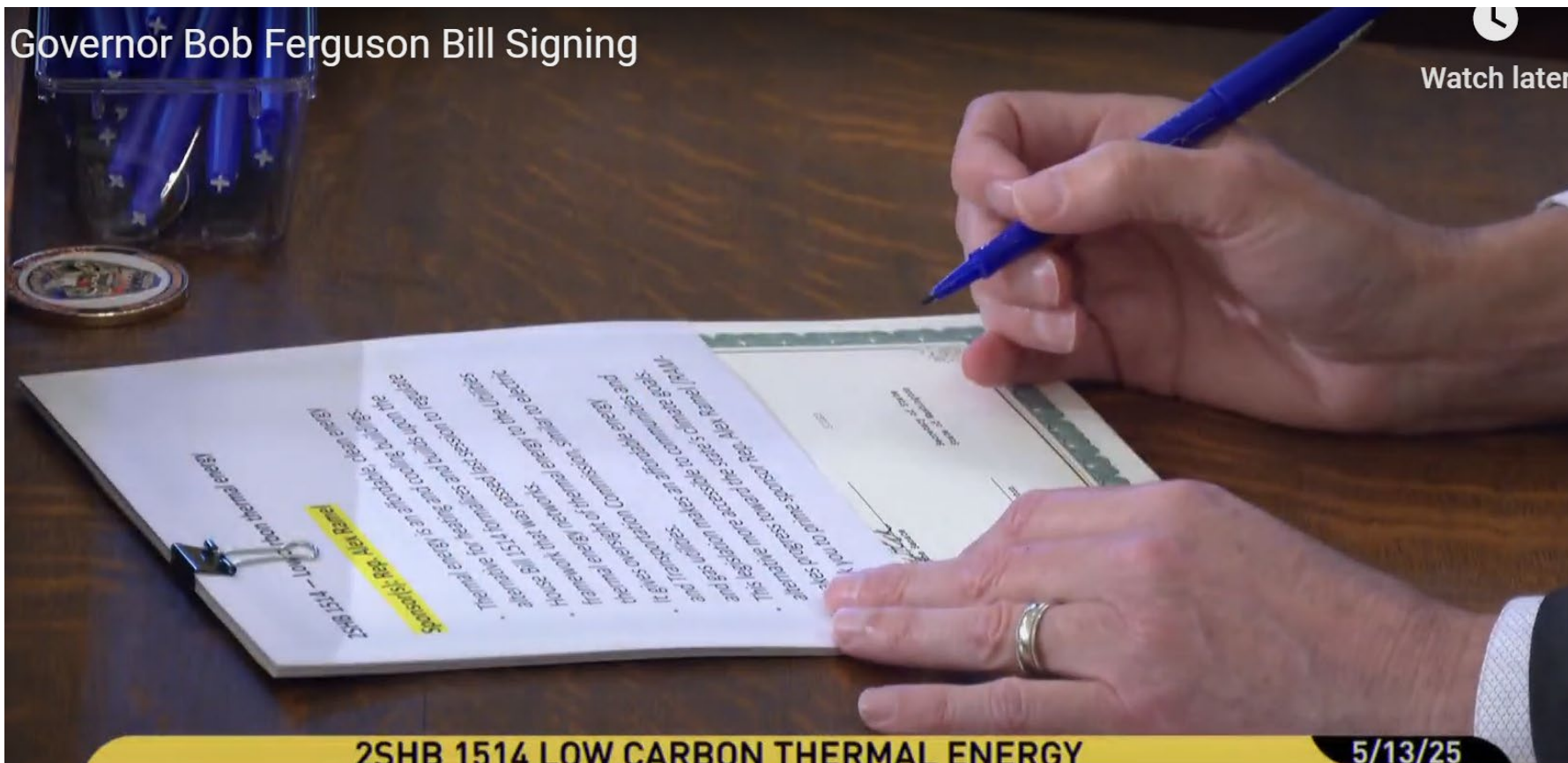
5/13/25

GOVERNOR BOB FERGUSON  
WASHINGTON STATE  
GOVERNOR FERGUSON BILL SIGNING



## Governor Bob Ferguson Bill Signing

Watch later



**2SHB 1514 LOW CARBON THERMAL ENERGY**

**5/13/25**

GOVERNOR'S CONFERENCE ROOM, CAPITOL CAMPUS, OLYMPIA  
FOR MORE INFORMATION VISIT [GOVERNOR.WA.GOV](http://GOVERNOR.WA.GOV)  
GOVERNOR FERGUSON BILL SIGNING



# WHAT IS A THERMAL ENERGY NETWORK?



***THE PROLOGUE***

# WHAT IS A THERMAL ENERGY NETWORK?

## Low Carbon Heating Sources



Industrial Waste Heat



Building Waste Heat



GeoExchange



Sewer Heat Recovery



Biomass



Biogas

Current

THERMAL ENERGY  
RECYCLING CENTER



Future

Institutional  
Campuses

Residential &  
Commercial

Business  
Districts

Energy Transfer  
Stations

THERMAL HEAT

THERMAL COOLING

Underground Insulated Pipe Network

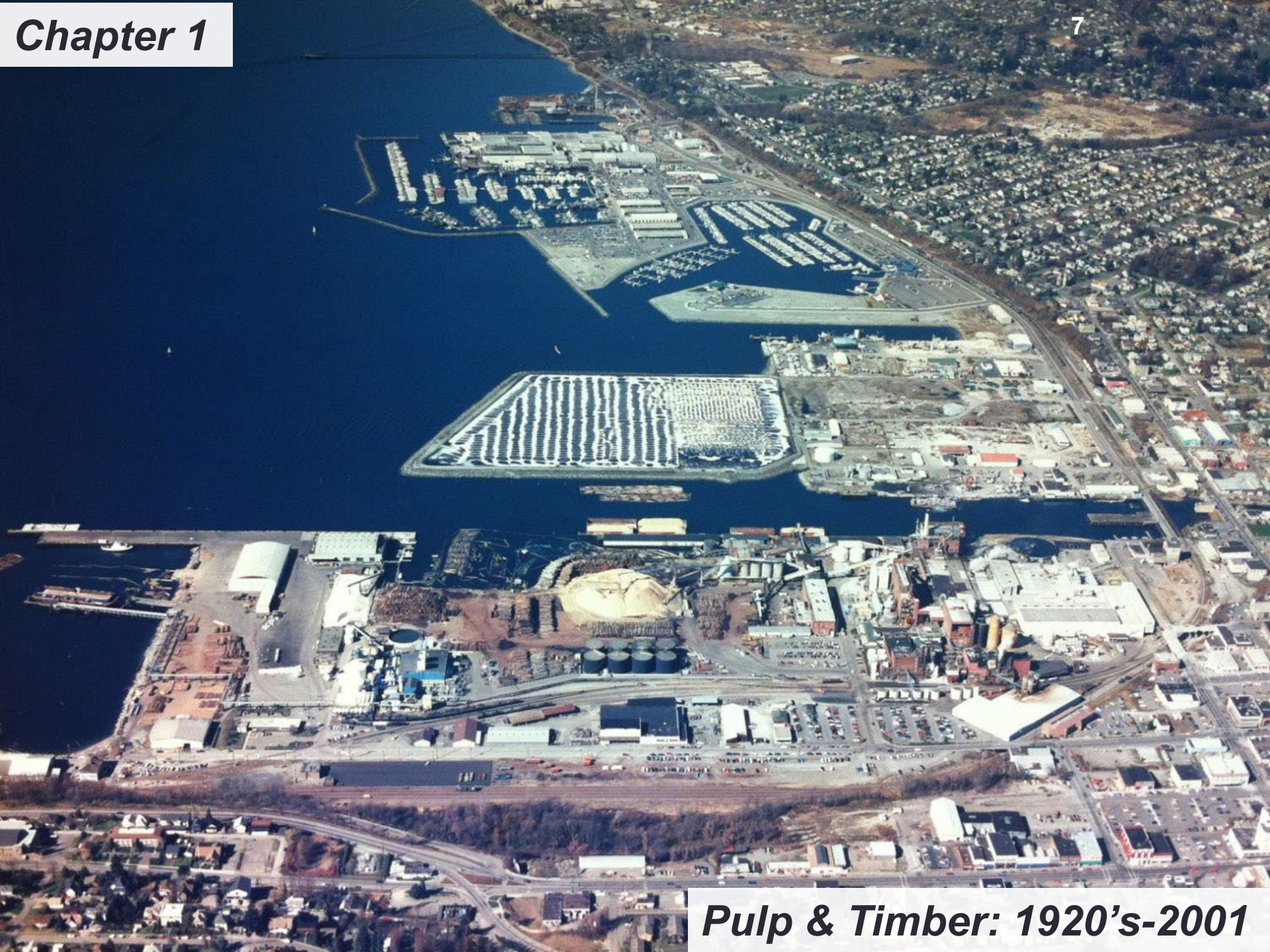
RETURN

RETURN

RETURN

- **MASSIVE SCALE HEAT RECYCLING**
- **ABLE TO CHANGE HEAT SOURCE**







1993



- 165 MW Co-Generation Electricity Plant
- Burns Natural Gas, Sells Steam & Hot Water to GP for Pulp Mill
- Sells Surplus Electricity



WEDNESDAY, SEPTEMBER 24, 2003

THE BELLINGHAM HERALD

www.bellinghamherald.com

## LOCAL &amp; STATE

HOMETOWN  
Inside

# G-P Closes Pulp Mill

March 30, 2001

Georgia-Pacific Corp. today announced it will permanently close its already-idled pulp mill and associated chemical plant at Bellingham, Wash., following a review of their long-term viability. Those operations have been temporarily closed since December due to high electric power costs.

The adjoining tissue paper and converting facilities at Bellingham will continue operating with temporary electric generators while Georgia-Pacific searches for other sources



**Georgia-Pacific is set to permanently close its Bellingham pulp mill**

of affordable electric power. The tissue operations will be included in the continuing integration

analysis of Georgia-Pacific and former Fort James operations as the company seeks to maximize

synergies across its consumer products manufacturing system. The tissue paper and

converting operations have been powered by temporary generators since January.

# Waterfront Futures Group (2002-2004)

- Rebuild the Waterfront Economy
- Restore the Health of Land and Water
- Improve Public Access to Water
- Vibrant, Mixed-Use Waterfront



***Private Sector Redevelopment Unfeasible***



# Port Acquires 137-Acre GP Property (2005)<sup>11</sup>



- Assets and Liabilities





- *Enough Waste Heat to Supply the Entire City of Bellingham*
- *Reduce, Reuse, Recycle*





## Waterfront Master Planning

# District Energy Feasibility

- Will Puget Sound Energy allow us to use the waste heat?
- How much to install the infrastructure?
- How much will waste heat cost residents?
- Do private developers want this?
- Where else has it been done?
- Who will be the utility provider?
- What if the PSE closes its Encogen Plant?
- Is District Energy a market differentiator?
- Economic Development opportunities?

*Developers hate uncertainty! Do good staff work, form partnerships, keep your Commission informed and keep the dream alive!!*



# Hedging Our Bets (2013)

THE waterfront DISTRICT  
BELLINGHAM © WASHINGTON



*A D2 Group, L.L.C. Architectural Illustration*

**Sub-Area Plan**

## *Development Regulations*

*“If District Energy is available,  
you shall connect”*



**2017: Fish or Cut Bait?**



- **Port invests in 4 pipe system**
- **Long-term Return on Investment**





**2020: Infrastructure Agreement with Corix Utilities**



# Oh No!

- **City Permitting**
- **TEN's Not Regulated, Independent Ratepayer Panel**
- **Clean Energy Transformation Act (CETA) WA**
  - All Public Utilities Carbon Neutral by 2030, 100% renewable by 2045
    - Long-term viability of waste heat from PSE Encogen Plant
- **2021 Washington State Energy Code – Bans fossil fuels and electric resistance heating in new commercial/residential buildings**
  - Effectively **prohibits** new construction from connecting to primarily fossil fuel powered District Energy systems.
  - Provides **new** definition for “**Low Carbon District Energy Systems**” and clear pathway for buildings to achieve energy code compliance with district energy.

# Thermal Energy Networks, A Sequel?

- First **Low Carbon District Energy System** in WA
- HB 1514
- Ribbon Cutting Next Week
- Port Infrastructure Opportunities
- Optimization and Expansion: Thermal Energy Networks Strike Back

