

# Expanding Cruise Ship Shore Power to Port of Seattle Pier 66

Sustainability, City Light, Arts & Culture Committee

Friday, June 7, 2024



City of Seattle

# Agenda

1. Shore Power Overview
2. Pier 66 Project Goals & Overview
3. MOA with Port of Seattle & City Light
4. Purpose of Ordinance



# What is Shore Power?

- A shore power connection allows cruise ships to plug into cleaner, electrical power on land and turn off diesel powered engines.
- Each ship that plugs in can reduce diesel emissions by 80% and CO2 emissions at berth by 66% on average.
- 25% of cruise ships total emissions in Puget Sound can be avoided by plugging into shore power at berth.
- Currently shore power available at Pier 91 for two cruise ships (installed in 2009).
- Shore power under construction at Terminal 5 (cargo).
- Planning for Terminals 48 & 18 (cargo).



# Project Goals

**1. Reduce Carbon Emissions.** Shore power enables cruise ships to turn off auxiliary diesel engines while at berth, resulting in overall reduction of annual emissions.

**2. Promote Environmental Justice.** Active reduction of emissions minimizes impacts to socially disadvantaged communities historically affected by poor environmental conditions.



1. Sep 26, 2023: Ductbank alignment, looking south on Terminal 46

2. Sep 13, 2023: Ductbank alignment looking west on Terminal 46

Photos courtesy of Mark Longridge, Port of Seattle

References: [PortofSeattle\\_Pier66-ShorePower\\_2021\\_UpdatedMar2023.pdf](#) ([portseattle.org](#))



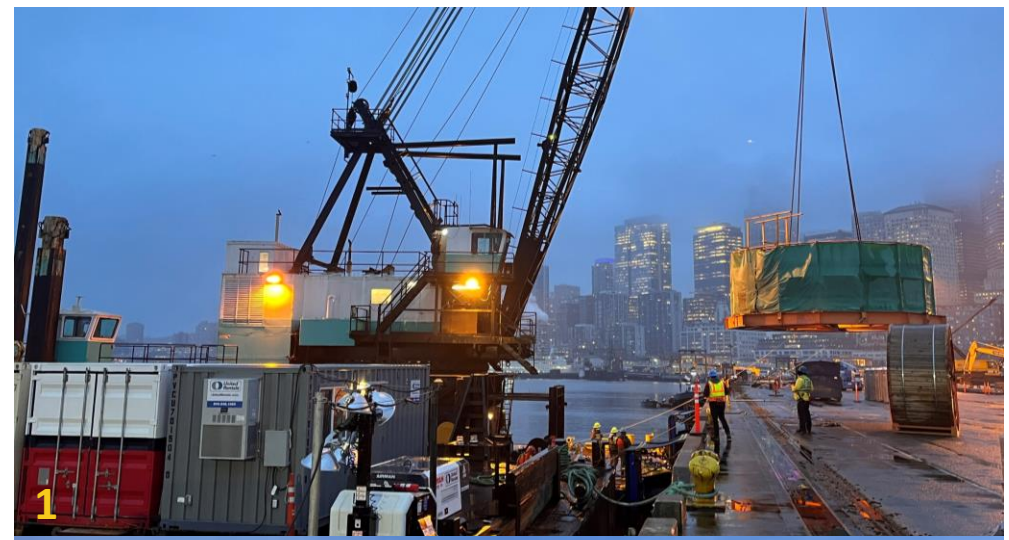
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# Project Goals

## 3. Implement City Light's **Clean Energy Future Strategic Priority**

- Transportation Electrification Strategic Investment Plan

## 4. Support the **Seattle Waterfront Clean Energy Strategy (SWCES)**, a partnership between City Light, the Port of Seattle, and Northwest Seaport Alliance (NWSA).



1. Jan 8, 2024: Submarine Cable Reel load onto barge at Terminal 46.

2. Jan 15, 2024: Submarine Cable pull on Pier 66.

Photos courtesy of Mark Longridge, Port of Seattle

References: [PortofSeattle\\_Pier66-ShorePower\\_2021\\_UpdatedMar2023.pdf](#) ([portseattle.org](#))



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# Pier 66 Shore Power Project Overview

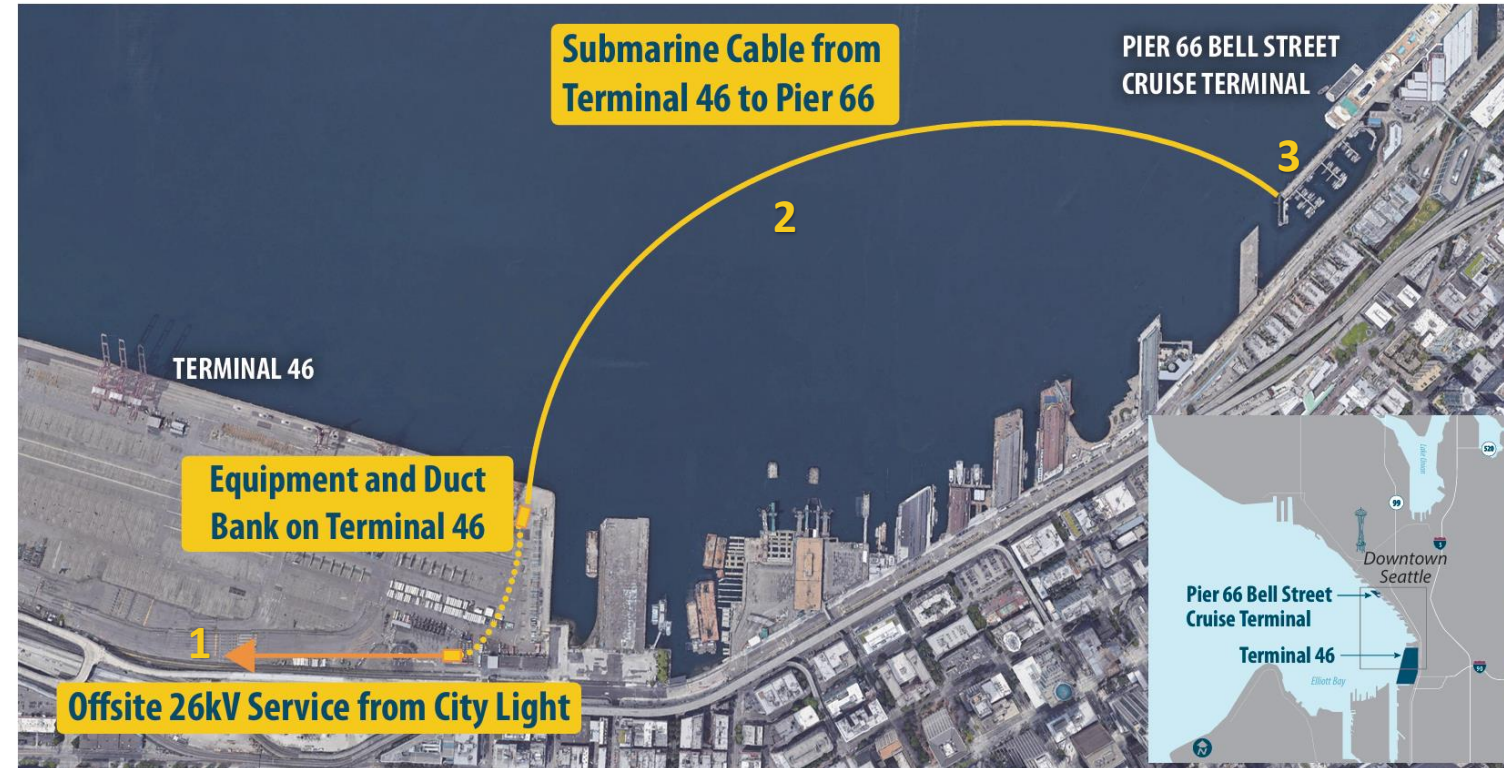
Part of City Light's Maritime Transportation Electrification Program (MARTEP)

## Segments:

1. Underground Ductbank on Terminal 46 for Service and System Extension
2. Submersible Cable from Terminal 46 to Pier 66
3. Pier 66 Shore Power Infrastructure

Design: 2019 – 2023

Construction: Aug 2023 to Q3 2024



From: [PortofSeattle\\_Pier66-ShorePower\\_2021\\_UpdatedMar2023.pdf](#) ([portseattle.org](#))

# Memorandum of Agreement (MOA)

Total Port Budget is \$44M,

City Light's Cost Share is \$3.6M,  
including:

- Over 2,600 linear feet of ductbank for system expansion
- Funded by City Light Maritime Transportation Electrification Program (MARTEP)
- Ductbank capacity for future MARTEP services for Washington State Ferries, King County Marine Division, Kitsap Transit, and the Port of Seattle

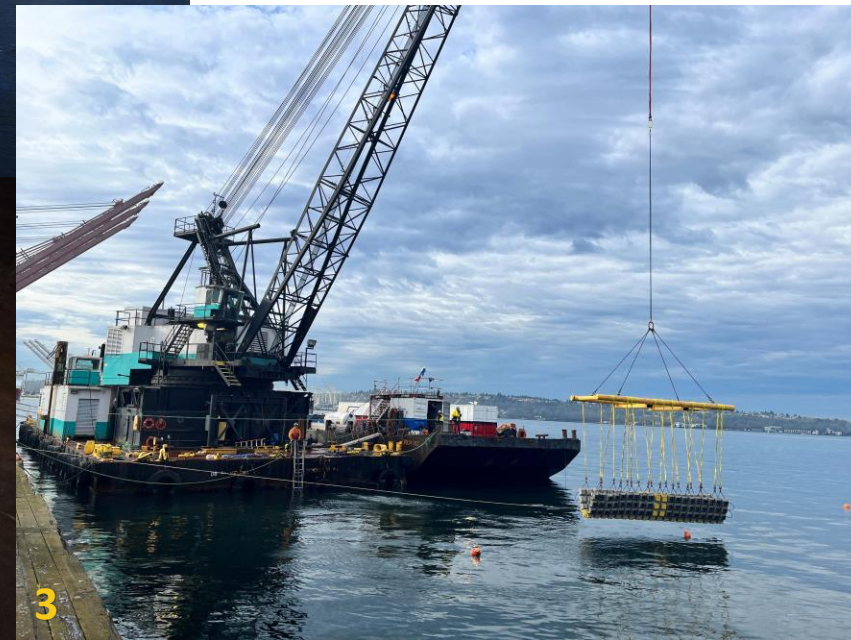


1. Jan 15, 2024: Submarine Cable lay

2. Nov 30, 2023: Vault Set on Terminal 46

3. Jan 28, 2024: Articulated Concrete Mat placement near Terminal 46

Photos courtesy of Mark Longridge, Port of Seattle



# Ordinance Authorizes City Light to:

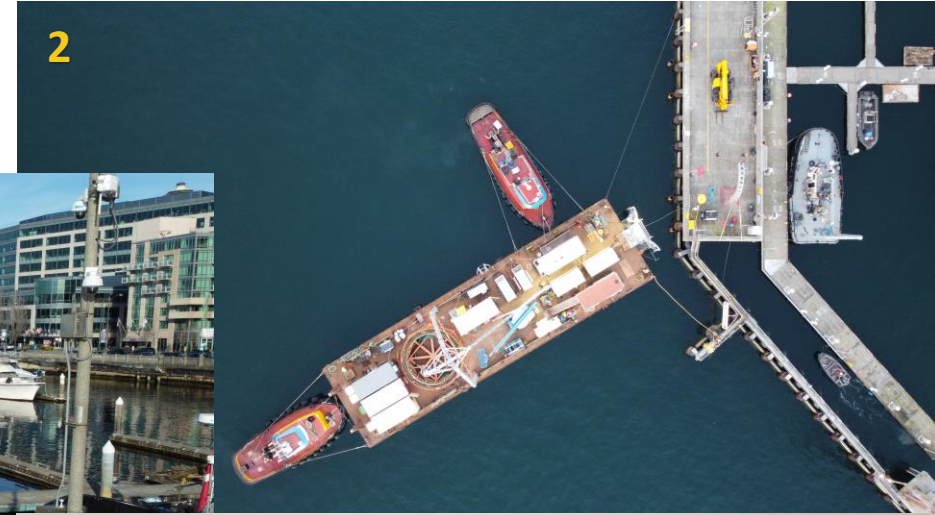
- Execute and deliver two (2) year MOA with the Port of Seattle
- Execute a thirty (30) year Operations Agreement between City Light and the Port of Seattle (forthcoming)



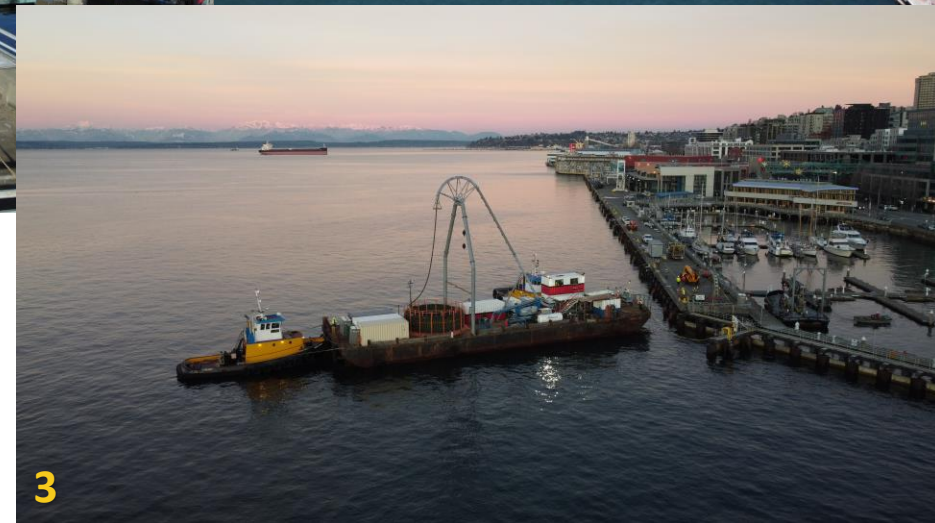
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1. Jan 15, 2024: Submarine Cable pulling rig on Pier 66  
2 and 3. Jan 15, 2024: Submarine Cable lay at Pier 66

Photos courtesy of Mark Longridge, Port of Seattle



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