

An aerial photograph of a large port facility, likely the Port of Long Beach, is shown with a semi-transparent blue overlay. The port features numerous shipping docks, large gantry cranes, and several cargo ships. In the background, a dense urban area is visible. The title 'HYDROGEN NEEDS FOR PORTS' is centered in large, bold, white capital letters, with a thin yellow horizontal line underneath it.

# HYDROGEN NEEDS FOR PORTS

*Heather Tomley, Managing Director of Planning and Environmental Affairs Port  
of Long Beach*

Select Committee on Building a Zero-Carbon Hydrogen Economy

August 6, 2024



# WHY HYDROGEN AT SEAPORTS?

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Meets zero  
emission goals

Flexibility

Operationally  
similar to existing  
operations

Less cost and  
disruption to  
install needed  
infrastructure

Can work for  
hard-to-  
decarbonize  
equipment

Suitable for a  
wide range of  
applications



# HYDROGEN APPLICATIONS AT SEAPORTS

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**Terminal  
Equipment**



**On-Road  
Trucks**



# POTENTIAL FUTURE HYDROGEN APPLICATIONS AT SEAPORTS

Locomotives

Vessels

Power systems resilience and grid support

Shore-side and dredging power





# CHALLENGES WITH THE TRANSITION

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High Capital  
Costs

Permitting and  
Approvals

Early  
Accessibility of  
Clean Renewable  
Fuel

Grant Funding  
Restrictions

High Operational  
Costs

Building  
Hydrogen  
Experience and  
Expertise



# THANK YOU

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Port of  
**LONG BEACH**  
THE GREEN PORT