

California's 2030 Climate Commitments

July 8, 2015

Sustainable Freight Leadership
Boosting Supply Chain
EFFICIENCIES



Port of
LONG BEACH
The Green Port

Michael R. Christensen

Senior Executive Lead
Supply Chain Optimization

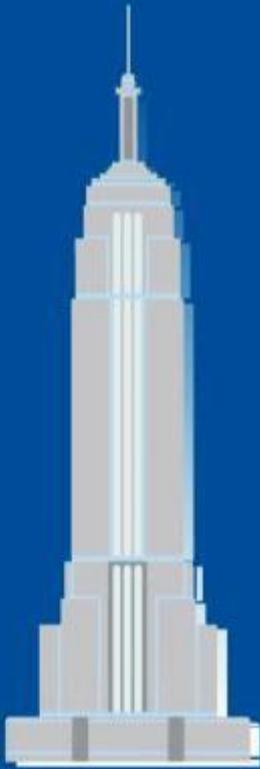


PORT OF **LONG BEACH**

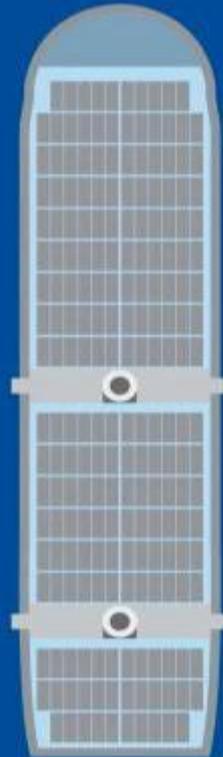
Leader in supply chain innovation and
environmental stewardship

REALLY, REALLY BIG

14,000-TEU ships are as long as a skyscraper is tall, and as wide as a 10-lane freeway.



Empire State Building



14,000 TEU Ship



405 Freeway North and South



SUPPLY CHAIN OPTIMIZATION

Joint Long Beach and L.A. initiatives to improve velocity



MAJOR CHALLENGES

Big ships and alliances spur operational optimization



ALL IN THE POOL

Port's peak fleet and chassis pools easing bottleneck.

BEFORE POOL OF POOLS

Drivers had to match containers and chassis.



Deliver container



Hunt for matching chassis



Get matching container



Deliver matching container

BEFORE POOL OF POOLS

Drivers had to match containers and chassis.



Deliver container



Hunt for matching chassis



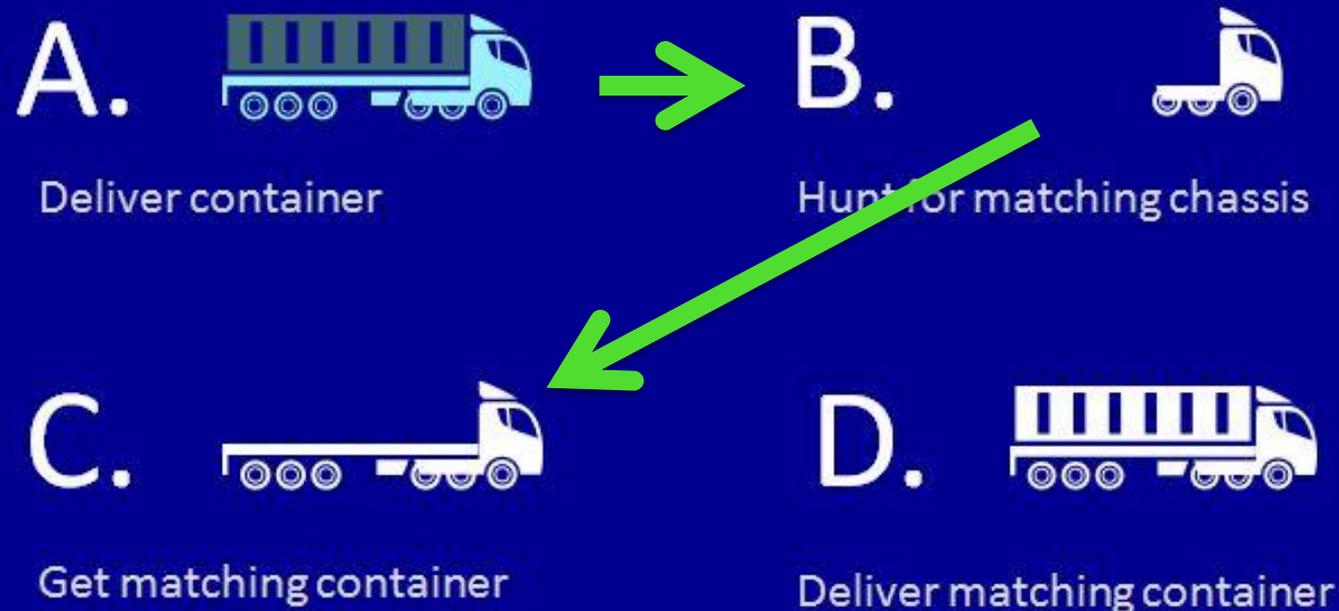
Get matching container



Deliver matching container

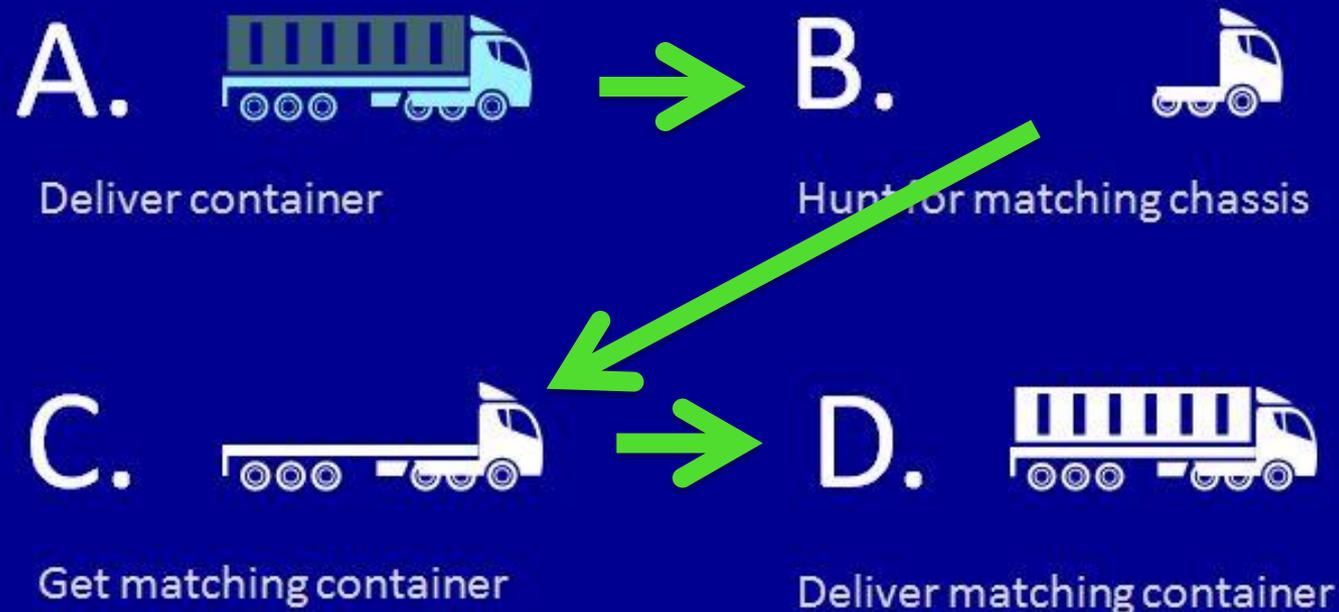
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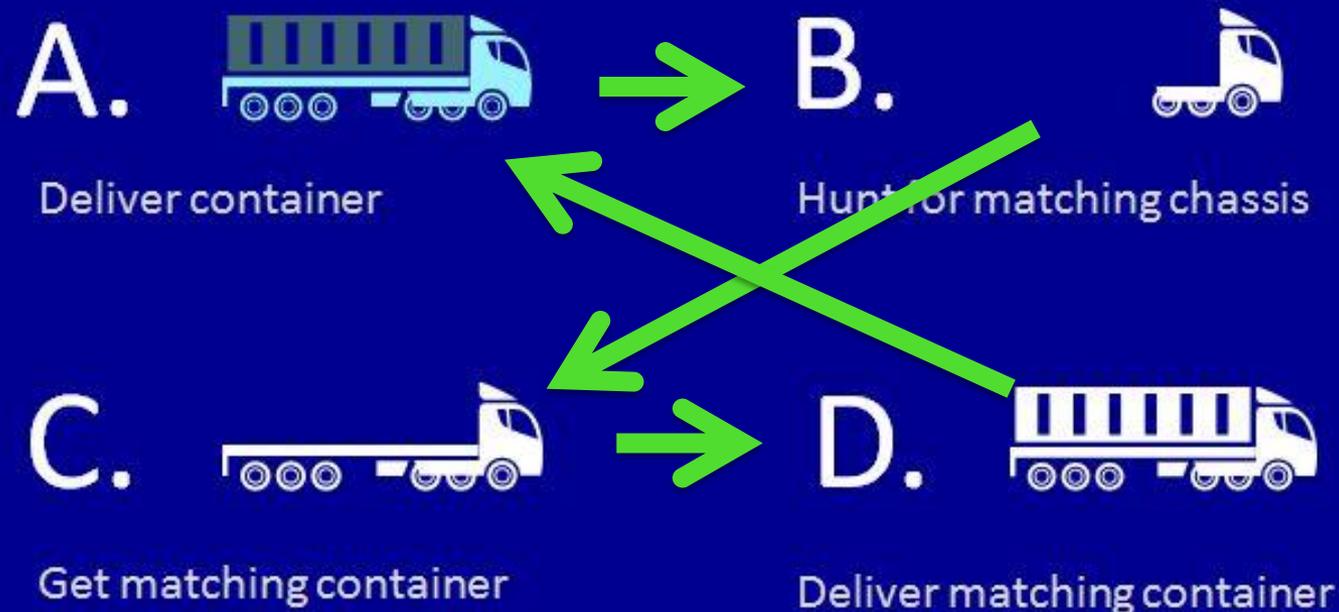
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Drivers had to match containers and chassis.



AFTER POOL OF POOLS

Drivers can use any of the “pool” chassis.



Deliver container



Deliver container

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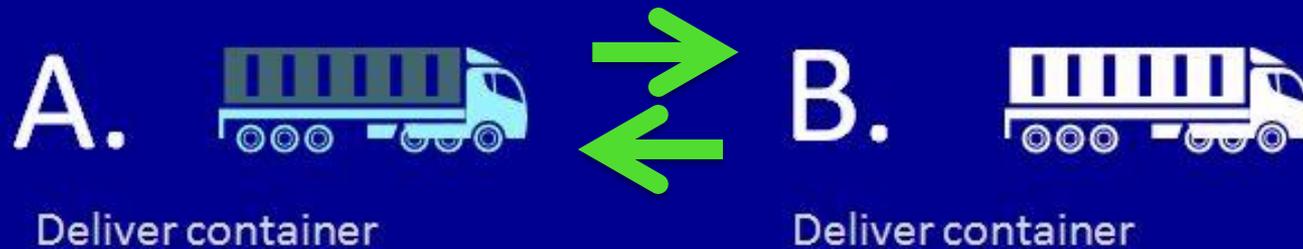
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AFTER POOL OF POOLS

Drivers can use any of the “pool” chassis.



\$4 BILLION INVESTMENT

Decade-long Port capital improvement program





Coming soon: **MIDDLE HARBOR**

Advanced technology, for world's greenest terminal



ZERO EMISSIONS

All-electric, remote-controlled yard tractors

GREEN PORT POLICY

Adopted in 2005, the policy directs the Port to do business in an environmentally friendly way.

10

Years of the Green Port Policy

1

Rank of the Port of Long Beach in the world for environmental leadership in 2014, according to readers of Cargonews Asia



300+ Species of marine animals



60+ Species of fish



100 Species of birds



78

Acres of kelp beds in the Port



99

Percent of cargo ships slowing to 12 knots or less near the Port to reduce emissions



82 ↓

Percent of diesel particulate exhaust eliminated overall from Port sources



500 million

Dollars invested in clean air projects for ships, trucks, trains and cargo-handling equipment



17.4 million

Dollars awarded to schools, health outreach, and renewable energy programs

14,000

Trucks of year 2007 or newer registered in the Clean Trucks Program



Clean Air Action Plan 3.0





ENERGY ISLAND

Advancing green power, clean fuels, energy efficiency,
resiliency



THE FUTURE IS **BRIGHT**

We can capitalize on key opportunities to bring a promising future to the Port of Long Beach.