



A
PROGRAM
OF CALSTART

Accelerating the transition towards zero-emission urban freight vehicles

Urban Freight Forum
3 March 2020



CALSTART is a consortium of over 220 members to advance and accelerate clean transportation solutions

STRATEGIC PILLARS



CONNECT. We help our industry members connect with each other and our government and NGO partners, and actively form partnerships that advance the industry.



INFORM. We share information with policymakers and stakeholders to help them understand how new laws and regulations can help grow the industry. We inform our industry members of new trends and opportunities.



INFLUENCE. We work with our partners to become leading global examples that create more competition and encourage others to do better and move faster.

GOALS

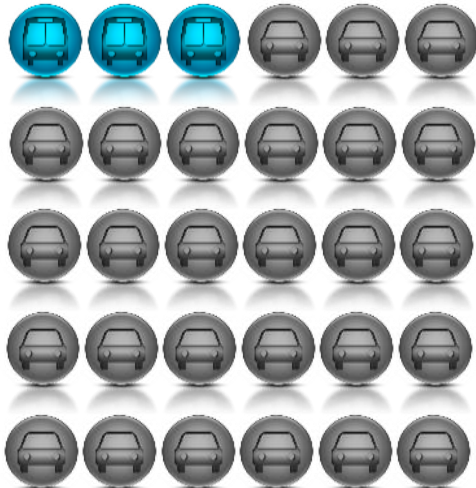
- Mitigate climate change
- Reduce oil dependence
- Reduce air pollution
- Create high-quality jobs



Commercial vehicles represent a relatively small share of the global on-road fleet but contribute to a disproportionate share of on-road fuel consumption and emissions

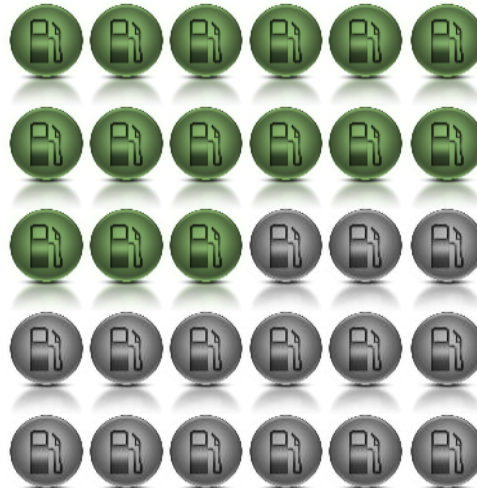
11%

of global on-road fleet are HDVs



46%

of on-road fuel consumption by HDVs



71%

of on-road particulates by HDVs



Drive to Zero is an international multi-stakeholder initiative to accelerate the growth of zero-emission commercial vehicles

2025

Near- and zero-emission MHDVs are commercially viable and cost-competitive in beachhead applications and first-mover regions by 2025.

2040

Zero-emission MHDVs achieve 80% of new vehicle sales in first-mover regions by 2040.

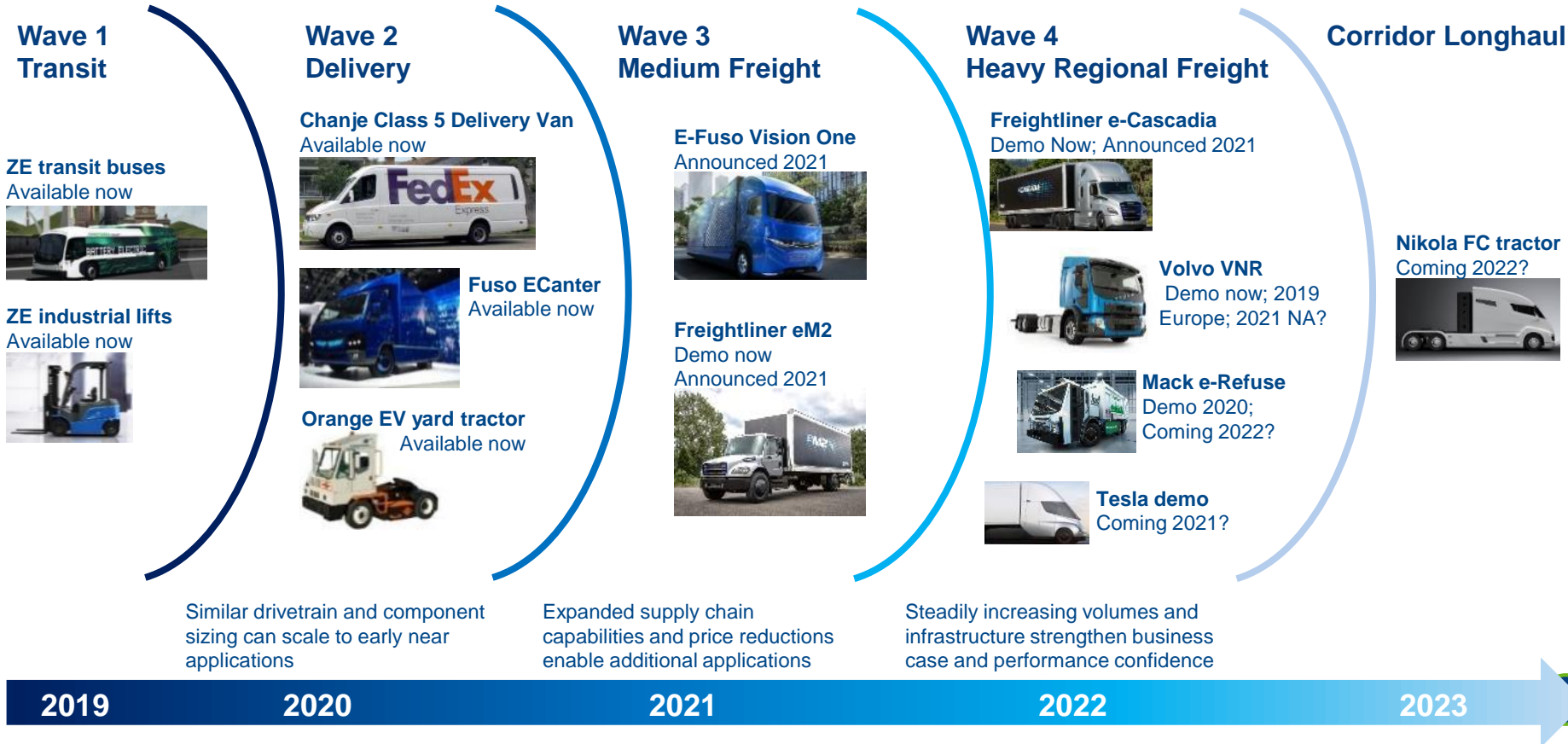


1

TARGET ACTION

Target first-success beachhead markets where electrification works now, typically urban applications where vehicles travel along known routes and return to base for charging.

Zero-emission vehicles will come in waves, and our “beachhead” strategy targets applications where zero-emission technology is likely to succeed first





2

BUILD ECOSYSTEMS

Build supporting “ecosystems” of success in key first-mover regions made up of aligned policies, incentives, infrastructure, and pilot projects.

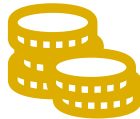
Policy and Action Toolkit

Ecosystems of change can enable and accelerate the transition towards zero-emission commercial vehicles



POLICIES

- Exclusion zones
- Access restrictions
- Procurement requirements
- Sales requirements
- Fuel efficiency/GHG regulations
- Low-carbon fuel standards



FINANCIAL INCENTIVES

- Voucher purchase incentives
- Tax purchase incentives
- Congestion pricing
- Favorable electricity rates
- Battery production/purchase

INFRASTRUCTURE INVESTMENTS

- Depot charging
- Public infrastructure
- Corridor charging



PILOT PROJECTS

- Vehicle
- Infrastructure
- Business models





3

COLLABORATE

Work concurrently and collaboratively between regions and industry worldwide to encourage global supply chain of critical components and manufacturers.

70+ organizations worldwide have signed the Pledge

Catherine McKenna, Minister of Environment and Climate Change Canada, announces endorsement at Drive to Zero Vancouver Workshop



The Pledge

Cities, governments, manufacturers, fleets and fuel suppliers agree to:

- Work together to accelerate early markets for zero- and near-zero emission trucks, buses and equipment.
- Share information with peer regions.
- Access best tools, research, assistance, data.



4

EXPAND

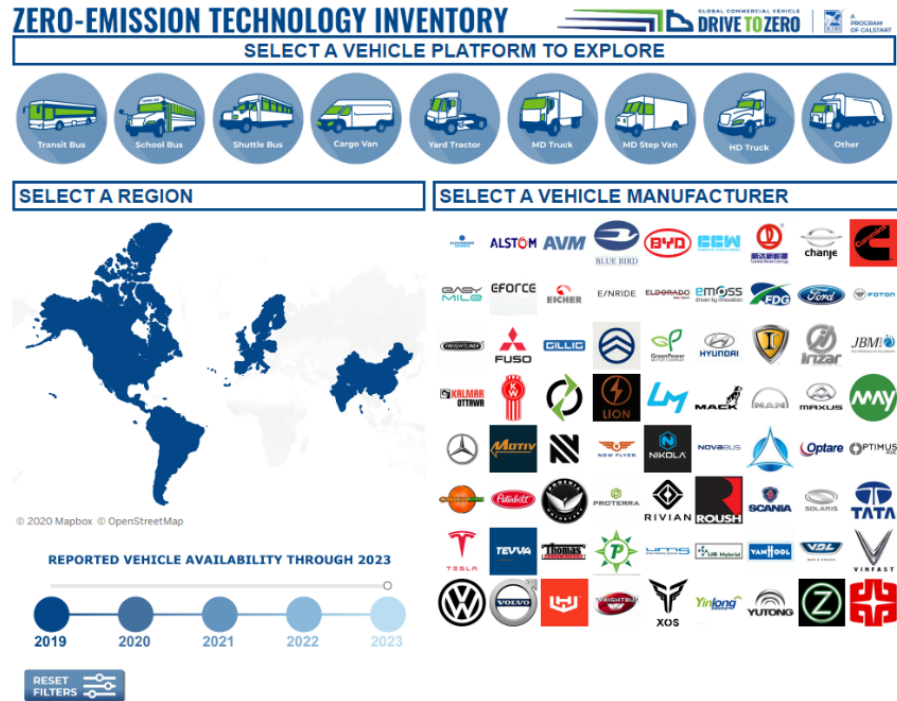
Expand to succeeding success markets as supply chain grows, costs decrease, and business case expands.



ZETI

Zero-Emission Technology Inventory

There are already 300+ existing and announced zero-emission commercial vehicle models



Join our team and sign the Pledge!

REGIONAL AND NATIONAL GOVERNMENTAL AGENCIES

Bay Area Air Quality Management District (BAAQMD)

British Columbia Province, Canada

California Air Resources Board (CARB)

California Energy Commission (CEC)

Canada

Chile Sustainable Energy Agency

Foothill Transit

K'uL Group, Canada

Los Angeles Department of Transportation (LADOT)

New York State Energy Research & Development Authority

Quebec Province, Canada

South Coast Air Quality Management District (SCAQMD)

Västra Götaland Region, Sweden

CITIES

City of Helmond, Netherlands

City of Madison, WI, USA

City of Vancouver, Canada

New York City, NY, USA

Raymond Johansen, Mayor of Oslo

The Honorable Darrell Steinberg, Mayor of Sacramento

The Honorable Eric Garcetti, Mayor of Los Angeles

The Honorable Michael D. Tubbs, Mayor of Stockton

MANUFACTURERS

AxleTech

BAE Systems

Ballard Power Systems

BYD

BYD Canada

Canadian Electric Vehicles

Chanje Energy

Coaster Cycles

Effenco

Lightning Systems

Mitsubishi Fuso Truck

Motiv Power Systems

New Flyer Industries

Nikola Corporation

Nuvera Fuel Cells

Orange EV

Prestolite eDrive Systems

Proterra

Roush CleanTech

Siemens

StrapWing

Tevra

The Lion Electric Co.

TransPower

Unique Electric Solutions LLC

US Hybrid

West Valley Construction Company

Workhorse

XOS

Zenith Motors

FLEETS AND USERS

Blue Mountain Resorts

Ingka Group (IKEA)

Mayor USA

Ryder

XL

UTILITIES AND INFRASTRUCTURE PROVIDERS

Black & Veatch

East Bay Community Energy

Southern California Edison

USGRDCO

KNOWLEDGE AND SERVICE ORGANIZATIONS

Auto Research Institute

Charge across town

Clean Energy Canada

Coast to Coast Smart e-Mobility

Dunksy Energy Consulting

East Bay Clean Cities Coalition

Electric Vehicle Association of Atlantic Canada

Empire Clean Cities

Geotab

Greener by Design, LLC

International Commuter Challenge

Prospect Silicon Valley

Sim

Viatic

Windfall Ecology Centre



A
PROGRAM
OF CALSTART

Thank you! Merci!

Cristiano Façanha
Global Director

cfacanha@calstart.org

For more information:

www.globaldrivetozero.org