



Global Commercial Vehicle Drive to Zero Program

www.globaldrive2zero.org

The [Global Commercial Vehicle Drive to Zero Program \(Drive to Zero\)](#) is a targeted, international initiative designed to enable and accelerate the growth of the global zero-emission and near-zero emission medium- and heavy-duty vehicle (MHDV) sector. Its goals are to bring together key regions of change

REGIONS WITH POTENTIAL FOR CONCURRENT BEACHHEAD LAUNCHES

DRIVING GLOBAL VOLUMES FOR COMMON SUPPLY CHAIN PRODUCTS



worldwide, along with leading manufacturers and fleet users, to work collaboratively to speed this change by setting in place requirements, policies, incentives, investments and infrastructure that can support key early market success.

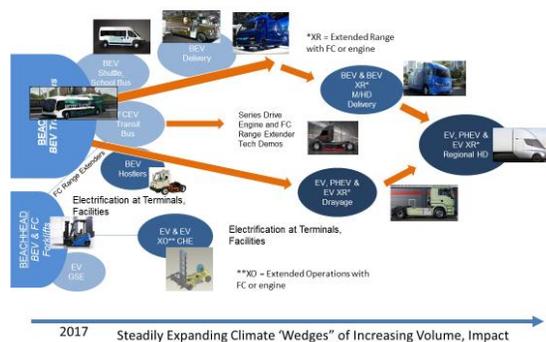
Outcomes. By focusing its efforts on a critical, but complex, vehicle space – heavy-duty goods movement, people movement and equipment – Drive to Zero will be a key tool helping global nations achieve the greenhouse gas emissions targets established under the Paris Accord. As importantly, Drive to Zero launches its efforts in those applications most impacting urban air quality, providing the dual benefit of a strategy to cut climate change emissions and greatly reduce harmful emissions causing poor air quality.

Strategy. In collaboration with the California Air Resources Board (CARB), CALSTART – a clean transportation technologies consortia of more than 200 members – developed a “beachhead” or first success

Drive to Zero Mission & Goals

- Coordinate activities and accelerate growth of beachhead markets in key regions around the world
- Share lessons so countries, provinces, and cities can learn from and be inspired by each other, so that:
- By 2025 – Near- and Zero-Emission MHDV beachhead applications are commercially viable in target global markets
- By 2040 – Zero Emission MHDVs dominate in their segments

M-HDV Zero Emission Beachhead, Pathways



analysis, identifying the segments of the commercial vehicle market where zero-emission and near-zero technology is most likely to succeed in the near term. The following factors were key determiners of these first markets: technology readiness, duty cycle and use, industrial activity and capacity, and user economics. The beachhead strategy has been incorporated into CARB’s three-year investment plan strategy and approved by its Board. For zero-emissions, the early beachhead markets are: transit buses, shuttle vans, package and delivery vans and trucks, terminal tractors, port equipment, and regional distribution (freight) trucks.

Impacts. This powerful strategy closely matches vehicle makers’ timelines and capacity to produce. By coordinating deployments of similar vehicle applications in multiple markets at once, common component volumes increase and reduce cost, speeding investments. By coordinating via Drive to Zero, successful collaboration can result in the beachhead markets being commercially viable by 2025 in leading cities/regions of China, India, Mexico, Canada, the European Union and the United States. The size of these beachheads can create a sustainable ecosystem enabling fully zero emission technology to expand to other commercial vehicle segments in the 2025-2035 timeframe.

On-Going Work. Drive to Zero works to support and coordinate partner action. It is now expanding its partner base, developing vehicle availability data and assembling a menu of implementation tools that partners can select from to enact to drive market success. Tools include purchase incentives, utility regulatory policy to support infrastructure, investing in next generation technology, and enacting supportive policies and regulations.



Pledge Partners. To date, more than 30 vehicle manufacturers, elected officials, and city and government agencies have signed the Drive to Zero pledge and are working on a variety of strategies to advance the beachhead markets. Partners get access to global information sharing and tools. Pledge framework:

- Committed stakeholders sign “pledge” to take part in program (no cost commitment)
- Agree to work together, take actions in their region to support growth of zero emission commercial vehicle markets
- Able to take part in information sharing among peer regions
- Learn best tools, research; Access to assistance, data to support their work

Drive to Zero Partners (as of February 2019)

Government

- California Air Resources Board
- South Coast Air Quality Management District
- Bay Area Air Quality Management District
- Los Angeles Department of Transportation
- Foothill Transit

Cities

- Los Angeles - Mayor Eric Garcetti.
- New York – GCAS
- Oslo - Governing Mayor Raymond Johansen
- Sacramento - Mayor Darrell Steinberg
- Stockton - Mayor Michael D. Tubbs

Industry (Manufacturers, Fleets, Organizations)

- Auto Research Institute
- AxleTech
- Ballard Power Systems
- BYD
- Chanje Energy
- Effenco
- Lightning Systems
- Mayor USA
- Mitsubishi Fuso Truck
- Motiv Power Systems
- New Flyer Industries
- Orange EV
- Prospect Silicon Valley
- Proterra
- Ryder
- Siemens
- The Lion Electric Co.
- Southern California Edison
- TransPower
- Unique Electrical Solutions LLC
- US Hybrid
- Viatic
- West Valley Construction Company
- Workhorse
- XL
- Coast to Coast Smart e-Mobility
- Zenith Motors



Initial Drive to Zero Pledge signing ceremony: Global Climate Action Summit Workshop, Sept. 11, 2018

There is no cost to take part in the Drive to Zero program, just your commitment!
 Visit www.globaldrive2zero.org or contact Bill Van Amburg at CALSTART: bvanamburg@calstart.org