

# Fleet Sustainability

November 2020



**PEPSICO**

# About PepsiCo

PepsiCo products are enjoyed by consumers more than one billion times a day in more than 200 countries and territories around the world. PepsiCo's product portfolio includes a wide range of enjoyable foods and beverages, including 22 brands that each generates \$1 billion or more in estimated annual retail sales.

## GLOBAL BEVERAGES



## GLOBAL FOODS



### FLEET ENGINEERING & SUSTAINABILITY



## PERFORMANCE



More than **\$67 billion** net revenue in 2019

## BRANDS



22 billion-dollar brands\*

## SCALE



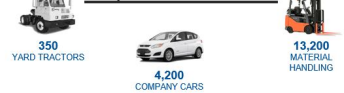
More than **200** countries & territories

## PEOPLE



More than **260,000** employees

## 70,000+ Assets



One of North America's Largest Private Fleets

\*Based on 2019 estimated annual retail sales



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# Regulatory Drivers Toward Zero Emission Vehicles (ZEV)

## CALIFORNIA

California Advanced Clean Truck proposed rulemaking will require ZEV medium- and heavy-duty trucks in 2 regulated groups

### MANUFACTURERS\*

Model Year	Class 2b-3*	Class 4-8 Vocational°	Class 7-8 Tractors
2024	5%	9%	5%
2035	55%	75%	40%

### FLEETS

Fleet reporting and ZEV rule in development

## MULTI-STATE

15 states and the District of Columbia issued joint MoU committing to advance electric medium- and heavy-duty vehicles, including California, Connecticut, Colorado, D.C., Hawaii, Maine, Maryland, Massachusetts, New Jersey, New York, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont and Washington.

## GLOBAL

Cities across the world are implementing city-wide diesel bans, including:

- Paris
- Mexico City
- Hamburg
- Madrid
- Athens

Global policies are influencing federal, state, and local policy development

\*with interim goals between 2024 and 2030

# 1.5°C – A World Of Difference



The recent report by the Intergovernmental Panel on Climate Change (IPCC) laid out a stark choice: we can either make the "[rapid, far-reaching and unprecedented changes in all aspects of society](#)" to hold temperature rise to 1.5°C above pre-industrial levels and hold off some of the worst climate impacts, or face irreversible damage to our societies, economies and the natural world.

## Corporate action towards 1.5°C

While companies will be asked, at a minimum, to set targets that are compatible with the goal of keeping global warming well-below 2°C — as outlined by the Paris Agreement — acknowledging the risks involved in exceeding 1.5°C of warming, we are now urging companies to aim for targets that align with keeping warming below 1.5°C.



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2016  
2°C Goal

REDUCE ABSOLUTE  
GREEN HOUSE GAS  
EMISSIONS ACROSS  
OUR VALUE CHAIN BY

20%



GHG REDUCTION  
GOAL  
>>> 20%

In early 2020, we signed the UN's

**Business Ambition for  
1.5°C pledge**

joining other leading companies in committing to set science-based emissions-reduction targets.

More aggressive Climate Goals on the horizon



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# Transition to Electric

- Business as usual diesel costs are volatile but well understood
- Transition to electric requires new considerations

Considerations when switching to electric are dynamic:

Time of Use Rates

Demand Charges

Seasonal Rates

Charge Management

Resilience

Partnerships

The solution to the complexity of electricity rates & resilience is:

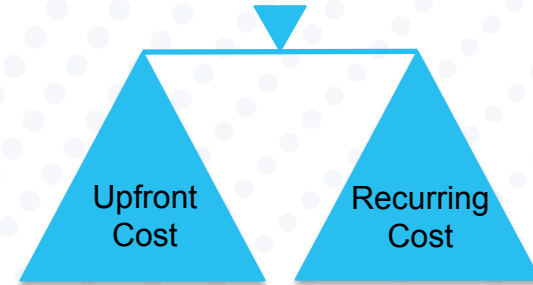
Distributed Generation



Energy Storage



The aim is to balance:



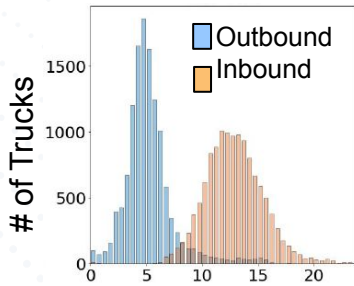
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# Need to Solve

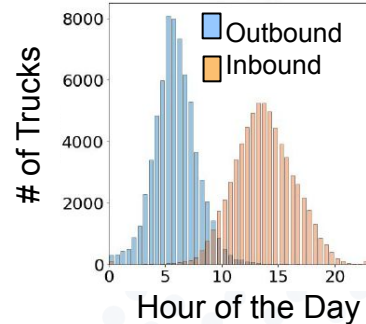
Owned Fleet		Contracted Transport
Equipment:	Charging:	
Availability Class 2b-8 Pricing/TCO Service Network Reliability Scalable Solutions	Utility Readiness Cost – Infrastructure, Energy, Demand Rate Plans Resilience Charge Management	Bidders Equipment Infrastructure



# Example - Delivery Trucks @ a site



**14 STRAIGHT TRUCKS**  
90% Operate < 50 miles/Day  
Daily Dwell: 16 Hours  
kWh/Mi: 1.2  
Charger Size: 20 kW



**71 ROUTE TRUCKS**  
90% Operate < 30 miles/Day  
Daily Dwell: 15 Hours  
kWh/Mi: 0.7  
Charger Size: 7 kW

**Regarding Mobility and Transportation, to achieve Carbon goals, a critical obstacle to overcome is – lack of effective solutions in a capital constrained environment.**