



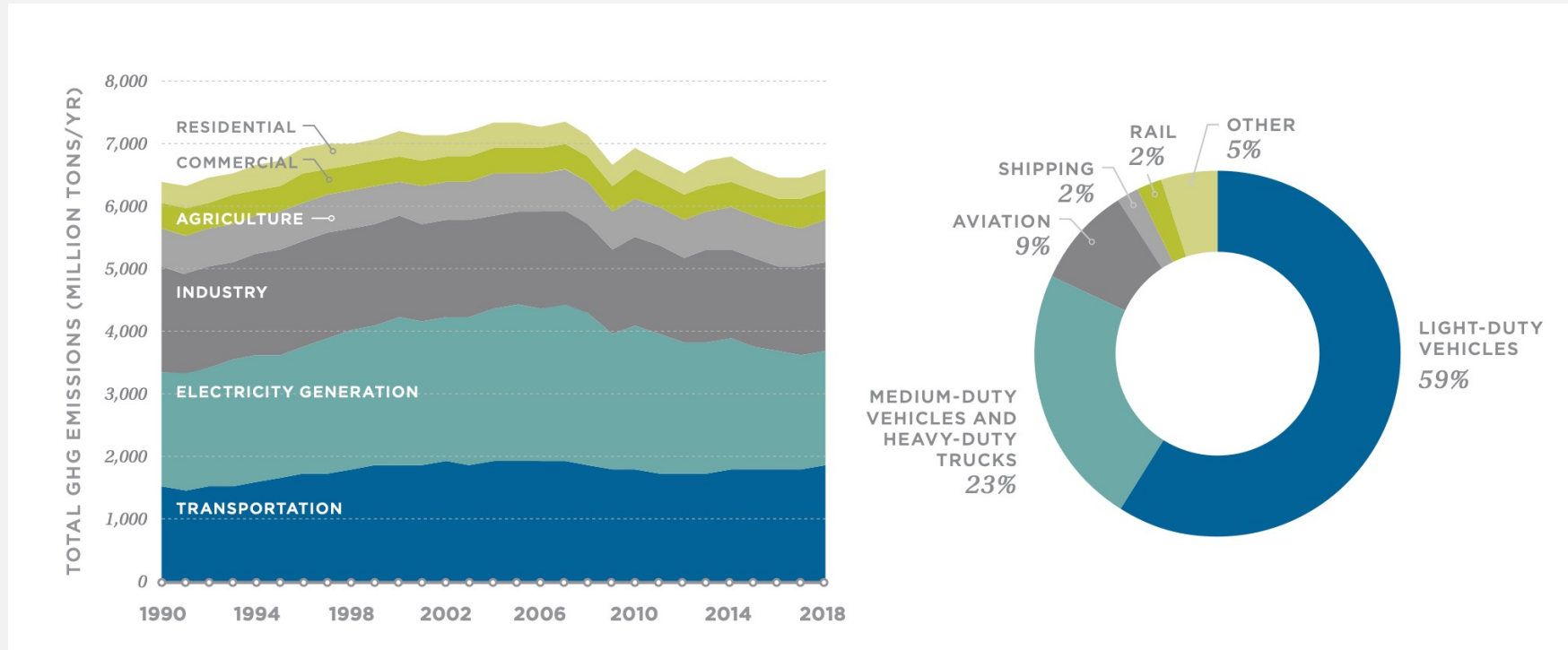
Accelerating Clean, Electrified Transportation in the U.S.

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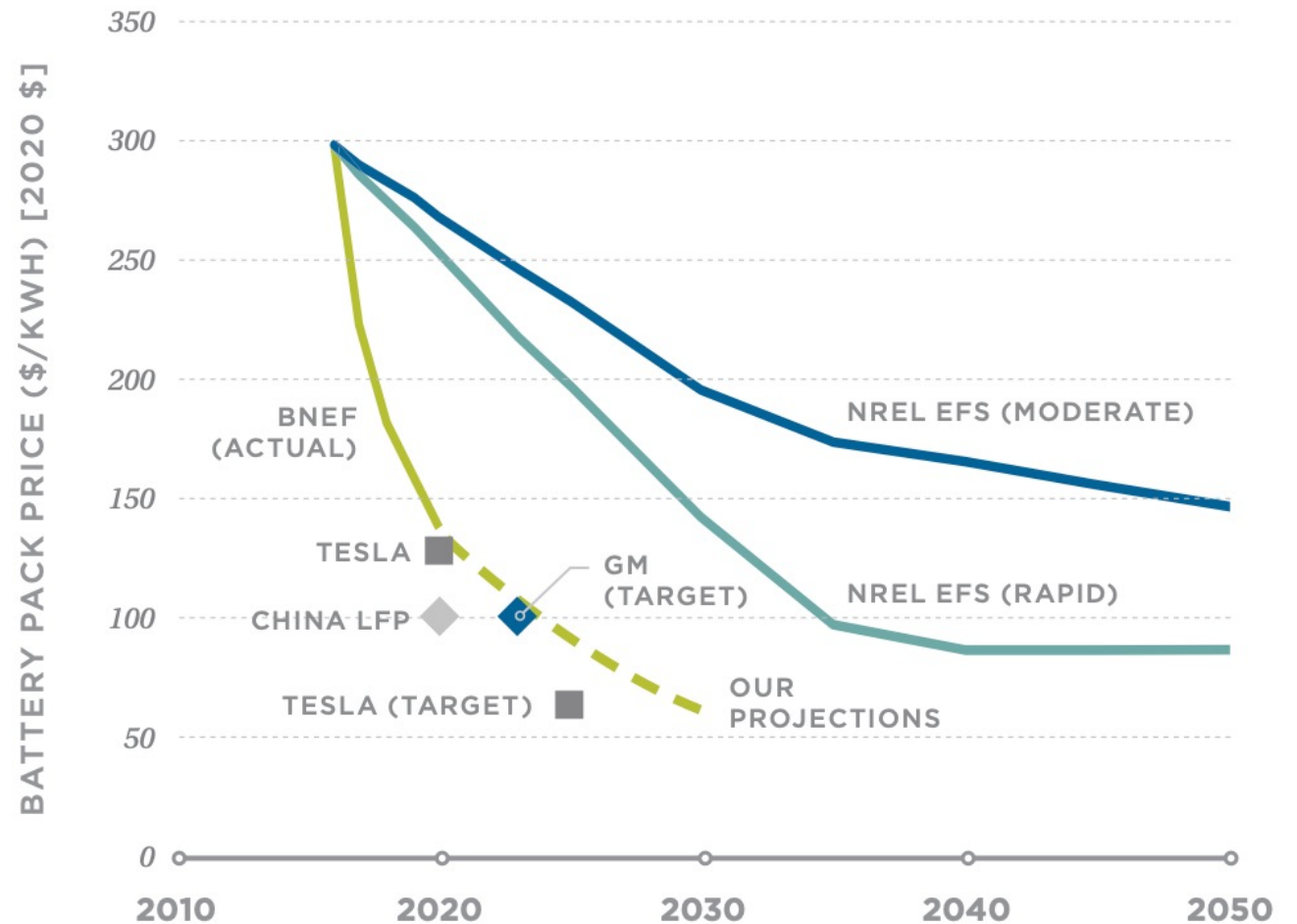


Our Climate has a Transportation Problem



Total U.S. GHG emissions, 1990–2018 (left), and total U.S. transportation GHG emissions, 2018 (right). Image recreated from EPA 2021, Source: 2035 Report 2.0 .

Battery prices are declining FASTER than predicted... year after year.



2035 2.0 Report

Research Question:

Given recent rapid declines in battery costs, what are the impacts of rapid transportation sector electrification on:

- consumers,
- emissions
- public health
- electric power infrastructure, &
- employment?

www.2035report.com/transportation/



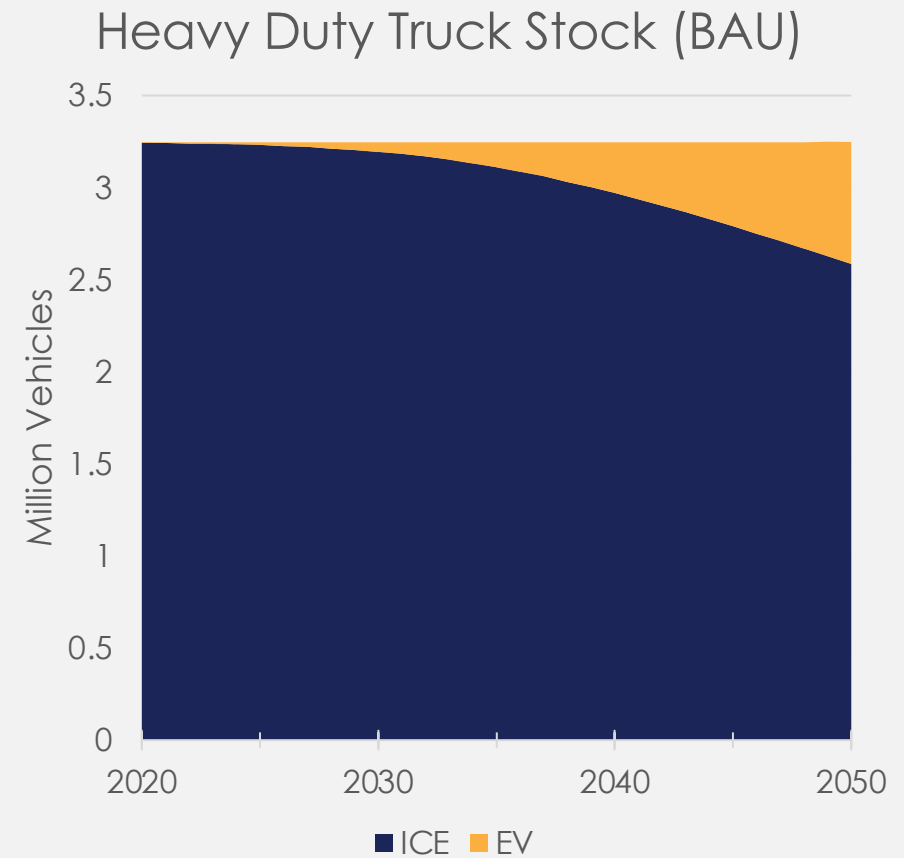
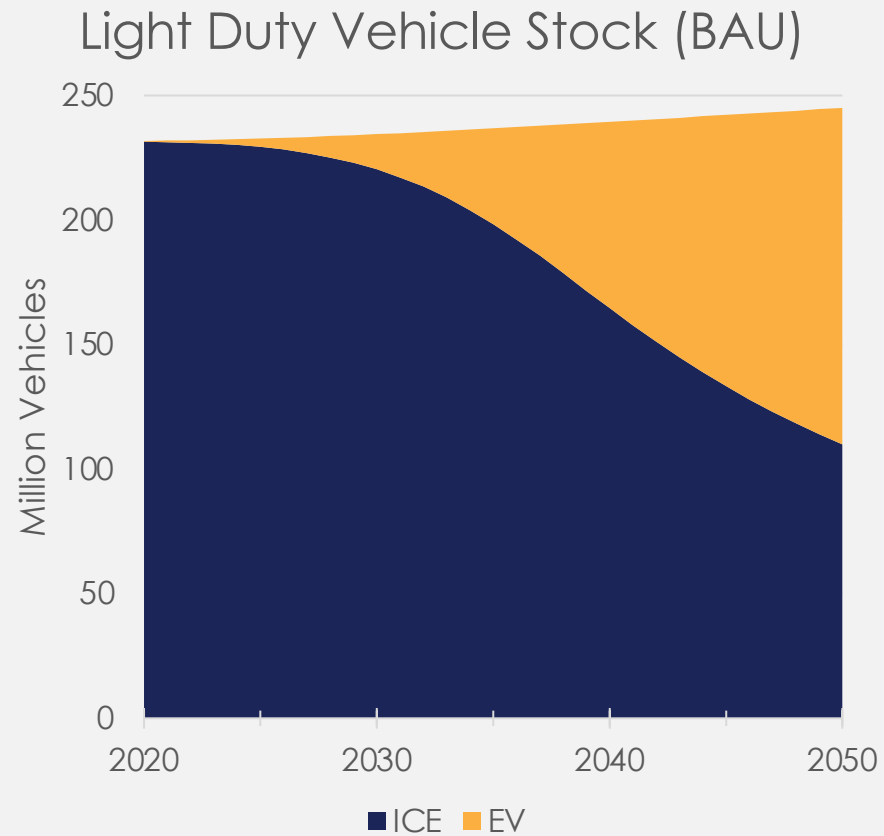
Two Comparative Scenarios

❖ ***DRIVE CLEAN Scenario:***

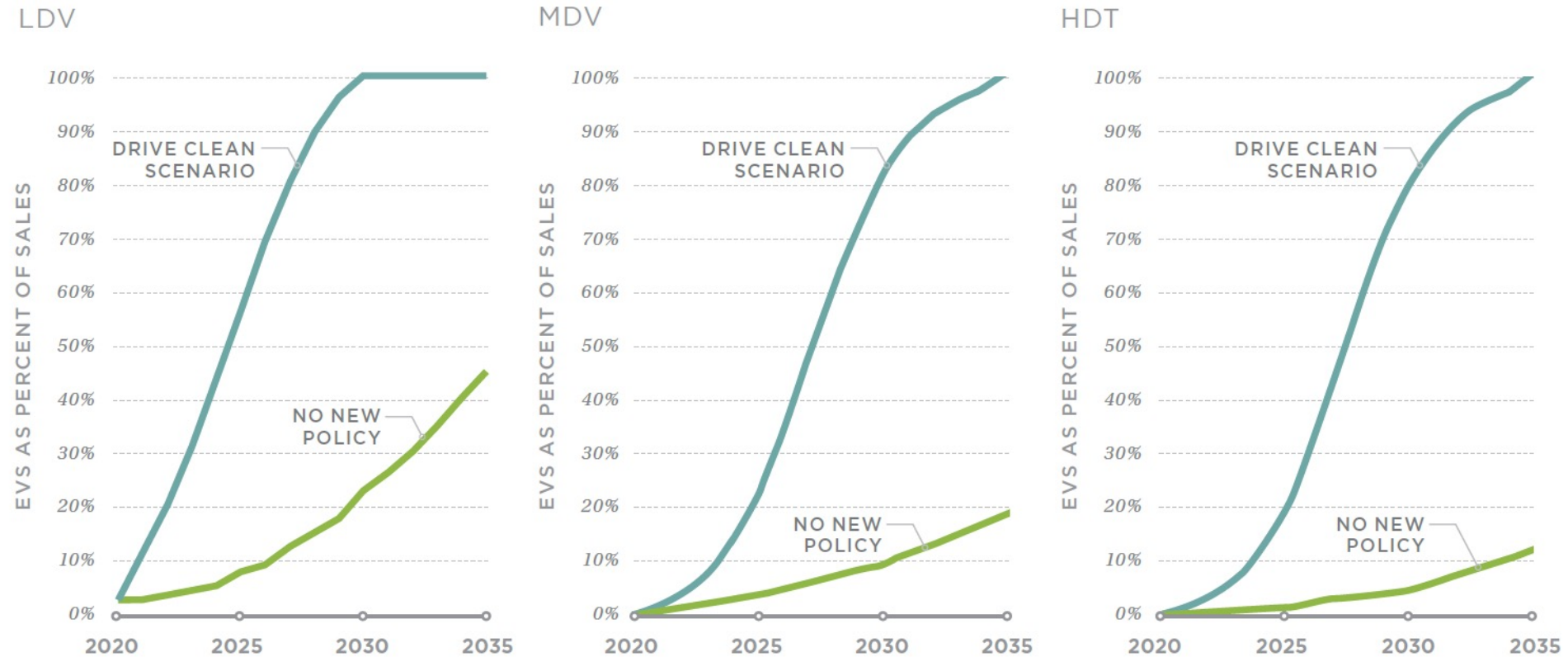
- 100% electric sales of new passenger cars and trucks by 2030
- 100% electric sales of new medium- and heavy-duty vehicles by 2035
- 90% clean electricity grid by 2035

❖ ***NO NEW POLICY Scenario (BAU)***

No New Policy Scenario



EVs as a Percentage of Sales: DRIVE CLEAN vs. No NEW POLICY Scenarios



Consumers Savings & Jobs

- Consumers save ~\$2.7 trillion between 2020 and 2050
 - This translates to average household savings of \$1,000/year for 30 years
- Accelerating EV Sales and grid decarbonization yields 2 Million net jobs in 2035



AUTOS

Ford and SK Innovation to spend \$11 billion, create 11,000 jobs on new U.S. EV and battery plants

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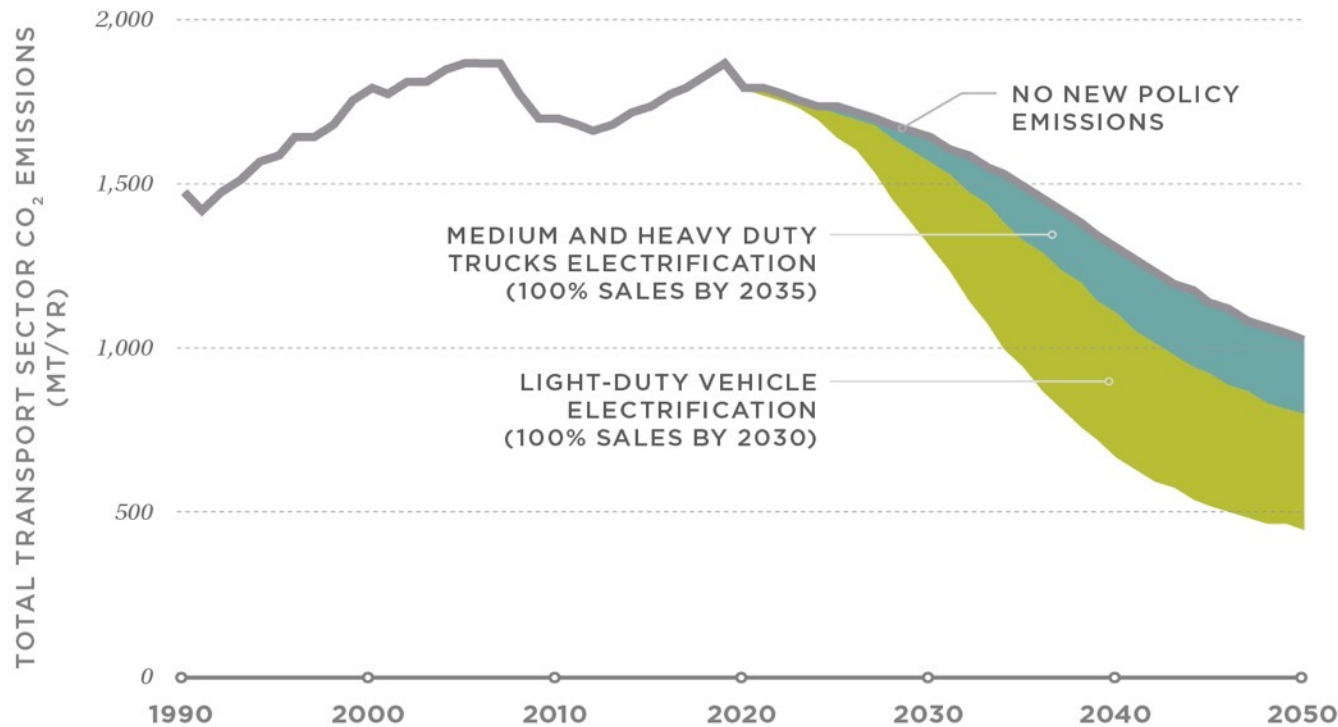
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Transportation Sector GHG Emissions and Pollution-Related Premature Deaths

GHG EMISSIONS IN THE TRANSPORTATION SECTOR



Ground transportation greenhouse gas emissions fall:

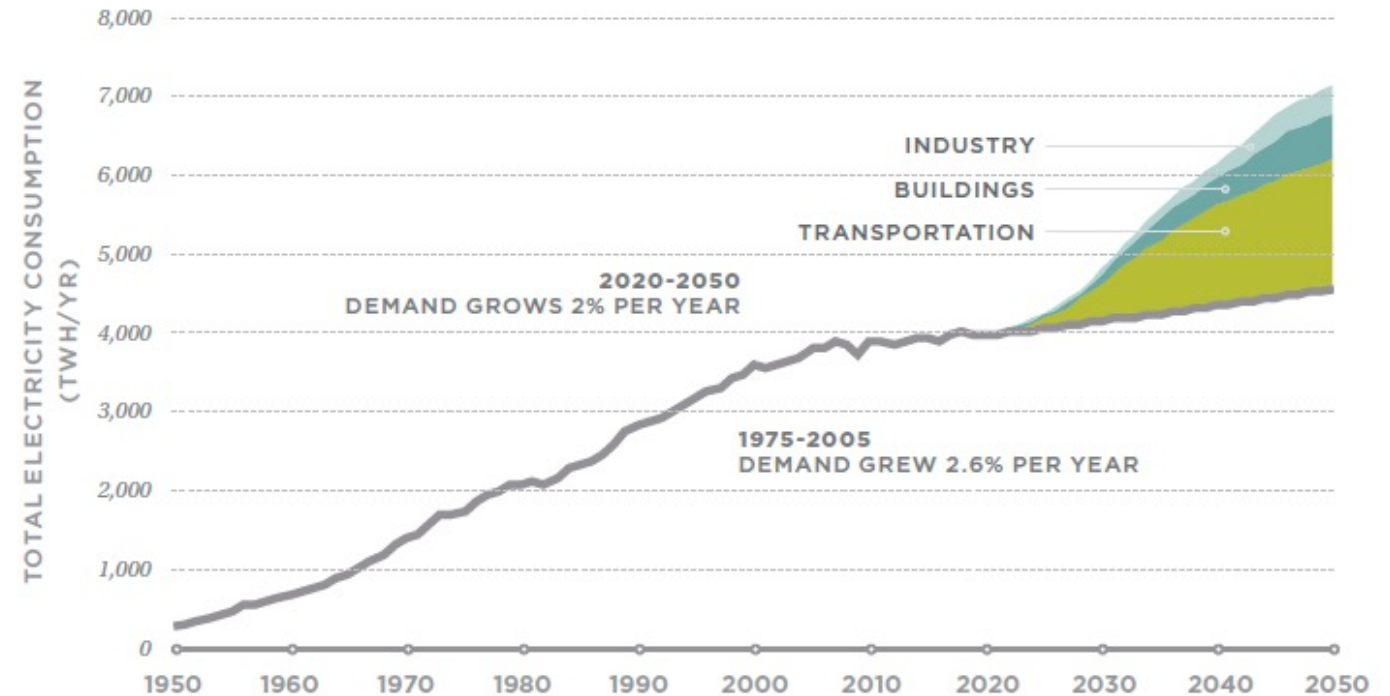
- 60% by 2035
- 93% by 2050

Ground transportation pollution-related premature deaths fall:

- 56% by 2035
- 96% by 2050
- 150,000 total deaths avoided by 2050

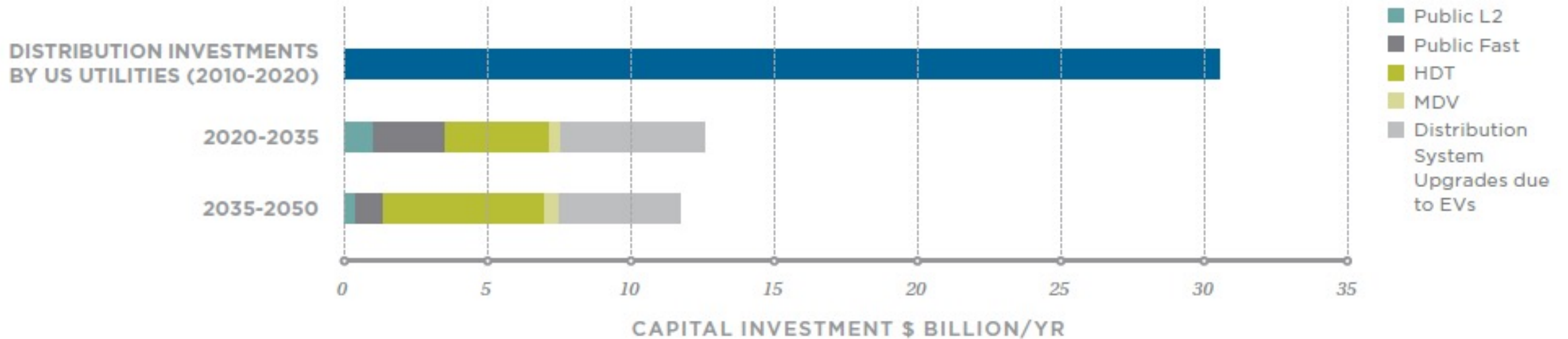
Grid Impacts are Modest

- A 90% clean grid can handle the additional demand due to electrification
- ~120 GW/year of wind, solar, & storage capacity additions are needed
- Wholesale electricity costs and distribution costs on a per kWh basis do not increase from today's levels
- Since total electricity sales increase, average distribution costs do not increase



Charging Infrastructure & Grid Investments

- Rapid investments in public charging infrastructure (+ grid upgrades) are needed
 - ~\$11 billion/year through 2050
- Historical distribution grid investments are ~\$30 billion/year



What Policies Are Needed to Achieve the 2035 2.0 DRIVE CLEAN Scenario?























Companion Policy Report available at:

www.2035report.com/transportation/



50+ Policy Actions, Across 7 Core Categories

- National & State Vehicle Standards
- Targeted Incentives
- Strategic Charging Infrastructure
- Domestic Manufacturing
- Smart Rate Design
- EV-Friendly Codes & Procedures
- Equity & Environmental Justice

POLICY ACTIONS & TIMELINE FOR ENACTMENT			FEDERAL ACTION	STATE ACTION	LOCAL ACTION	UTILITY ACTION
	NEAR-TERM (2021 - 2023)	MID-TERM (2024-2026)	LONG-TERM (2027-2035)			
NATIONAL/STATE 100% EV SALES STANDARD	Adopt federal GHG Emissions Standards reaching 0g/mile by 2030/2035					
	Adopt increasingly rigorous Federal Fuel Economy (CAFE) Standards					
	Adopt state 100% ZEV Sales Standards					
INCENTIVES AND FUNDING TO SUPPORT EV ADOPTION	Reform and expand Federal Plug-In EV Consumer Tax Credit					
	Provide incentives for public and private fleet conversion					
	Provide used EV incentive					
	Offer competitive grants and funding programs for public and non-profit entities					
	Require EV procurement for public fleets, transit, buses					
	Offer federal/state tax exemption or reduction					
	Adopt special lane access for EVs, parking incentives, road toll fee waivers, and licensing incentives					
	Support new financing models and innovative funding programs that significantly expand consumer and business access					
						



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Fixes to the crumbling road system are a major part of legislation currently being haggled over in Congress.



BY SEBASTIAN BLANCO JUN 26, 2021

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RENAULT TRUCKS TO OFFER AN ELECTRIC RANGE FOR EACH MARKET SEGMENT FROM 2023

Thank you!

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