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2025 IEPR Transportation Energy Demand Forecast Updates

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Acronyms, Initialisms, and Abbreviations

AATE – Additional Achievable Transportation Electrification

ACF – Advanced Clean Fleets Regulations

ACC2 – Advanced Clean Cars II Regulations

CARB – California Air Resources Board

CEC – California Energy Commission

DMV – Department of Motor Vehicles

EIA – U.S. Energy Information Administration

IEPR – Integrated Energy Policy Report

LD – Light-Duty

MDHD – Medium- and Heavy-Duty

NTD – National Transit Database

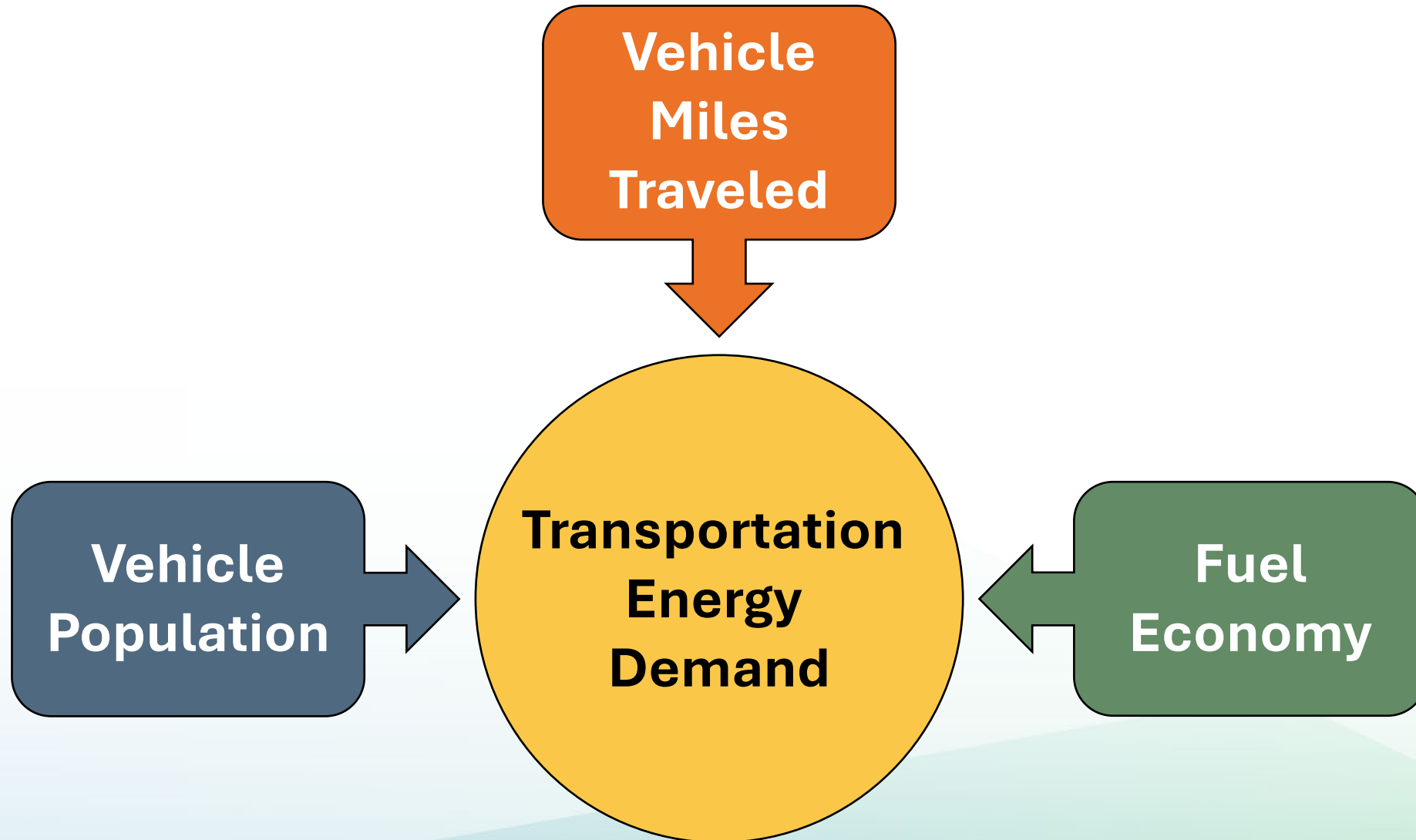
PHEV – Plug-in Hybrid Electric Vehicle

TE – Transportation Electrification

ZEV – Zero-Emission Vehicle

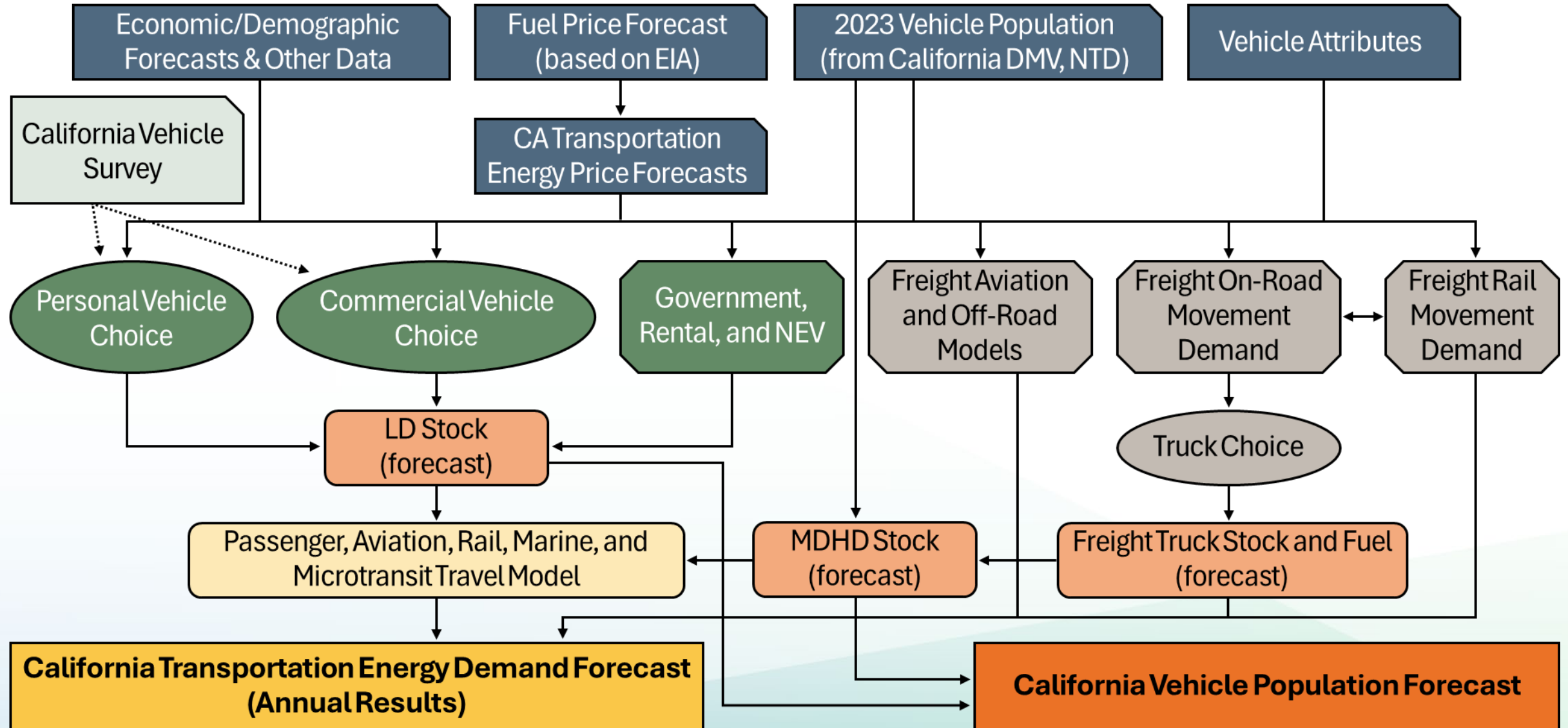


Transportation Energy Demand





Transportation Energy Demand Forecast





Transportation Electrification Scenarios

- **Baseline Forecast** of vehicle and energy demand based on continuing economic and market trends, as well as existing policies
- **Additional Achievable Transportation Electrification (AATE) Scenarios** incorporate some baseline patterns but integrate policies or market transformation that existing demand-side models cannot typically model
- AATE scenarios post-process new sales proportions or population proportions by vehicle fuel type
 - Existing regulations, future regulations, or potential market transformations
 - Within the bounds of “reasonably expected to occur”
 - These are called “managed forecasts”



Additional Achievable Transportation Electrification Scenarios

AATE 2

Accounts for uncertainty in policy/regulatory areas that may lead to increased but moderate growth of ZEV population

AATE 3

Based on recent policies and can be used to guide utility infrastructure investments and resource planning

AATE 4

Incorporates a high-end projection of the number of vehicles that result from recent goals



Executive Order N-27-25

- Reaffirms the state's commitment to ZEV deployment
- Initiates the development of Advanced Clean Cars III regulation
- Updates state purchasing requirements to align with manufacturers that continue complying with clean car regulations
- Prioritizes funding of state incentive programs for clean manufacturers and fleets
- Continues Clean Truck Partnership work
- Directs state agencies to assess additional actions for ZEV adoption and issue recommendations within 60 days, including strategies for consumer protection, infrastructure, voluntary efforts, and local partnerships



2024 IEPR Forecast Transportation Electrification Scenarios

		Major TE Annual Components	
Forecast Case	TE Name	Light-Duty	MDHD
Baseline Forecast	Baseline	Baseline	Baseline
Planning Scenario	AATE 3	ACC2	ACF



Draft 2025 IEPR Forecast Transportation Scenarios

		Major TE Annual Components	
Potential Forecast Case	TE Name	Light-Duty	MDHD
Baseline	Baseline	Baseline	Baseline
TBD	AATE 2	Moderate Growth	Baseline
Planning Scenario	AATE 3	High Growth	Baseline
Local Reliability Scenario	AATE 4	High Growth	High Growth

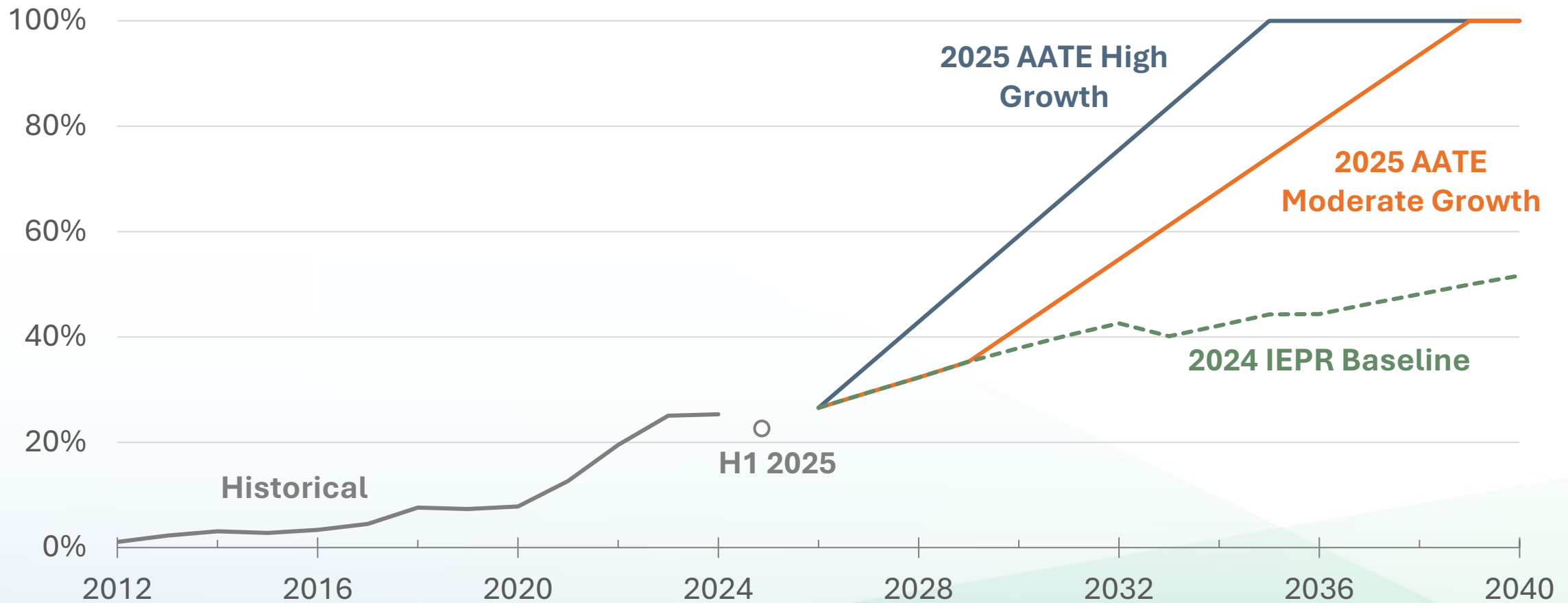
Key Updates

- Additional Scenarios to Reflect Policy Uncertainty
- Economic and Demographic Updates
- Removal of Federal Tax Credits
- Updates to Vehicle Stock and Specific Attributes



Potential 2025 LD AATE Scenarios

LD ZEV Market Share of New Vehicles Sold





Potential 2025 MDHD Freight AATE Scenario

MDHD Freight ZEV Market Share of New Vehicles Sold





Considerations for 2026 and Beyond

- New Policies Resulting from Executive Order N-27-25
- Tariff Impacts and Associated Vehicle Price Data
- Findings from 2024/2025 California Vehicle Survey
- Updated TE Load Shapes
- Improved Forecast Zone Energy Assignments
- Autonomous Vehicle Projections

Thank You!



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