

Resolving Challenge Areas: Moving Forward

EV Rates

- EV Rates Primer complete: Introduction to Process of Designing EV Retail Rates posted on EVGrid Assist www.energy.gov/EVGridAssist
- Secondary research underway to synthesize recent experience

Treatment of Energy Storage

- Completed initial investigation to identify specific challenges
- Developed proposed solutions

Interconnection

- EV working group in i2X initiative
- Technical assistance applications close on 3/22
- Sign up to participate: <https://www.energy.gov/eere/i2x/i2x-registration>

Load Forecasting

- Looking to vet assumptions and results with broad set of stakeholders
- Working with labs to identify priority questions, map existing tools, identify tool/analysis gaps

Interoperability

- RFI on No-Charge Events comments closed 11/18
- Establishing new consortium to address charging reliability and interoperability

DOE Awards \$7.4 Million for 7 Commercial ZEV Corridor Planning Grants

Seven Awarded Project Partnerships

1. CALSTART East Coast Commercial ZEV Corridor (I-95 GA to NJ)
2. Cummins I-80 Midwest Corridor (IN, IL, and OH)
3. GTI I-10 H2 Corridor (Houston to LA)
4. LACI 'First to Last Mile' I-710 Corridor
5. National Grid Northeast Electric Highway (I-95 and other connecting corridors ME - PA)
6. RMI San Francisco and Bay Area Regional MHD Electrification Roadmap
7. UT State University Wasatch Front Multi-Modal Electrification Plan GSL Area

Planning Priorities

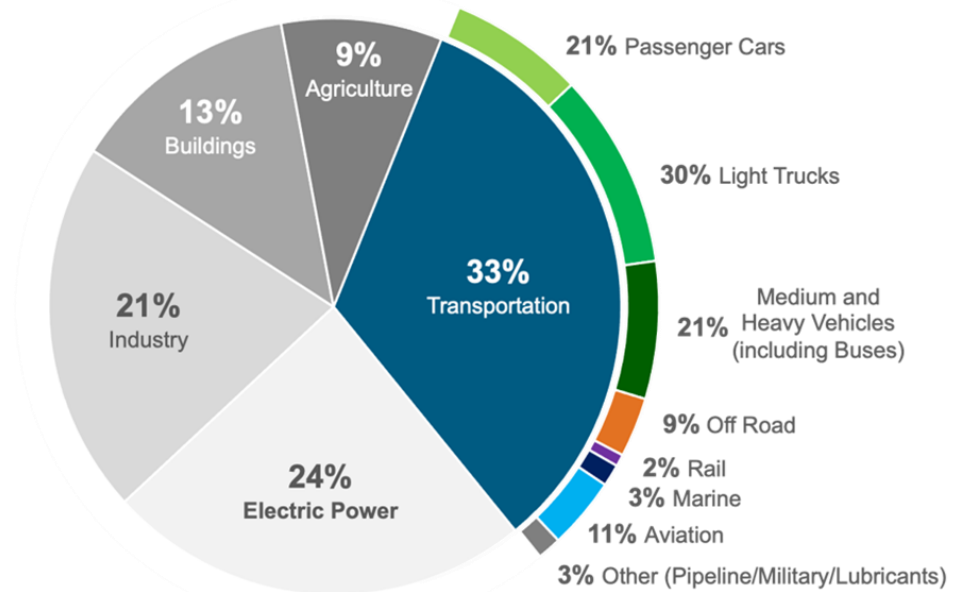
- 23 States
- Multi-Stakeholder Partnerships
- Justice40 & Community Impacts
- Freight Hubs and Ports
- Charging and H2 Refueling
- Grid Capacity and Future Needs
- Fleet Needs Assessment
- Infrastructure Costs
- Innovative Technologies

The U.S. National Blueprint for Transportation Decarbonization

- A joint strategy to transform transportation and eliminate emissions by 2050.
- Inclusive of all modes with realistic and achievable pathways.
- Seeks to provide clear signals to industry on strategy and timeline.
- Strategies to decarbonize include pathways for *convenient*, *efficient* and *clean* transportation.



2019 U.S. GHG Emissions



Aviation and marine include emissions from international aviation and maritime transport. Fractions may not add up to 100% due to rounding.



SUMMARY OF EMISSIONS REDUCTION GOALS

Transportation Mode	Federal GHG Emissions Reduction Goals
Light-Duty Vehicles ~49% of emissions	<ul style="list-style-type: none"> • 50% new vehicle sales be zero-emission by 2030 supporting a pathway for full adoption • Deploy 500,000 EV chargers by 2030 • 100% federal fleet procurement be zero-emission by 2027
Medium and Heavy-Duty Trucks and Buses ~21% of emissions	<ul style="list-style-type: none"> • Support achieving cost-effective ZEV medium duty/short haul trucks by 2030 and long-haul trucks by 2035 • 100% federal fleet procurement be zero-emission by 2035
Off-road ~10% of emissions	<ul style="list-style-type: none"> • Work to establish specific targets. Focus resources to develop technology pathways and set efficiency and zero emissions vehicle and equipment targets
Rail ~2% of emissions	<ul style="list-style-type: none"> • Work to establish specific targets. Focus resources to develop technology pathways and set efficiency and zero emissions vehicle and electrified rail targets
Maritime ~3% of emissions	<ul style="list-style-type: none"> • 5% of the global deep-sea fleet capable of using zero-emission fuels and 10 large trade ports covering at least three continents supply zero emission fuels by 2030 • Net-zero emissions by 2050 via a combination of vehicle design and clean fuels
Aviation ~11% of emissions	<ul style="list-style-type: none"> • Reduce aviation emissions by 20% by 2030 compared to a business-as-usual scenario • Catalyze the production of at least three billion gallons of Sustainable Aviation Fuel (SAF) per year by 2030 and ~35 billion gallons by 2050, enough to supply the entire sector
Pipelines ~4% of emissions	<ul style="list-style-type: none"> • Work to establish specific targets. Eliminate leakages and enable use of pipelines for clean sustainable fuels
Total Sector	80-100% Emissions Reductions by 2050 (in line with the US Long Term Strategy)



Strategies to Accelerate Clean Energy in Tribal Communities



Cross-disciplinary - inter-agency collaboration on advancing clean energy solutions for Tribal communities.

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