

NEWS RELEASE

The Institute for Transportation Decarbonization Launches with Goal to Meet Net-Zero Emissions in the Sector

WASHINGTON (January 10, 2023)—Today, a new research-focused non-profit, the Institute for Transportation Decarbonization (ITD) launched with a report outlining technology and policy gaps to cut harmful U.S. transportation emissions. The launch coincides with the annual Transportation Research Board (TRB) meeting. The group’s goal is to identify a framework of viable pathways for light-, medium-, and heavy-duty vehicles, as well as hard-to-decarbonize sectors including freight, aviation, and maritime, to help the U.S. meet net-zero climate goals by 2050 and decarbonize the transportation sector.

“There is no single remedy for cleaning up the way we move people and goods—numerous technologies and policies will need to be advanced, starting now, to fully decarbonize U.S. transportation by 2050,” said ITD Senior Fellow and report author Kelly Fleming.

“Transportation is complex, and we must move to cleaner technologies immediately to avoid the worst impacts of climate change. We need to consider the best opportunities across the board to produce clean fuels, innovate vehicle technologies, and implement robust policies to close the gap.”

The ITD report, titled *Pathway to Net-Zero Transportation in the United States: An Exploration of Technologies and Policies*, outlines the available low-carbon transportation technologies and identifies gaps in national policy and research support for technologies that promote a deep reduction in fossil fuel usage in the transportation sector, a key contributor to air pollution and climate change.

Building on a 2021 [study by](#) Rhodium Group, the ITD report zeroed in on existing and emerging clean transportation technologies and sustainable solutions for the way we move people and goods. The report outlines five distinct transportation sub-sectors (light-duty vehicles, medium- and heavy-duty vehicles, aviation, marine transportation, and fuels) to map the status of promising technologies, and the needed actions to deploy those technologies, in order to achieve the 2050 goal of a carbon-free transportation sector.

The report outlines these key findings:

- Electric vehicles (EVs) appear likely to be the primary tool for reducing GHGs from on-road transportation, but some modes like aviation, marine and rail may require energy-dense, easily transportable liquid fuels for the foreseeable future. Here, low-carbon fuel

technologies can—and must, going forward—play a useful role in emissions savings, depending on their feedstock, processing practices, and ultimate end-use;

- The transition of the existing vehicle fleet to electric vehicles will take several decades. Many low-carbon fuels can be used with existing engine technologies, which will help lower emissions from the vehicles that are currently on the road;
- As freight shipment continues to grow, low-carbon liquid fuels are emerging as a necessary tool to cut transportation emissions in the marine and aviation sectors, and to immediately reduce emissions from the existing vehicle fleet;
- The scale-up of production of sustainable aviation fuels, or SAF, will be crucial to cutting emissions from aviation, an effort that requires international cooperation;
- To achieve net-zero emissions by 2050, policymakers must act with urgency to incentivize the adoption of low-carbon alternatives as viable technology solutions to cut carbon out of hard-to-electrify subsectors, specifically long-haul trucking, aviation, and marine transportation. Simultaneously, the U.S. should conduct a national assessment on how all parts of the economy can be a part of decarbonizing the transportation sector and better align the nation's abundance of resources with solutions.

“To decarbonize the transportation sector with the urgency that is needed, the United States must pursue all available options to immediately reduce emissions including expand electrification, improve efficiency, and transition to cleaner fuels to cut the use of gasoline and fossil fuels—especially in sectors like marine and aviation that are hard to electrify— across the economy,” **said Fleming**. “We must take the lessons learned in the power sector to the transportation sector: Technology development and policies must work together with a focus on the quickly transforming on-road sector along with harder-to-decarbonize sectors like aviation and marine to help reach net-zero by 2050.”

Founded in 2022, the Institute for Transportation Decarbonization (ITD) is a non-partisan nonprofit organization 501(c)(3) supported by [Community Initiatives](#) working to accelerate a 100% greenhouse gas emissions reduction in the United States transportation sector by 2050. ITD focuses on research and analysis of viable decarbonization pathways for light-, medium-, and heavy-duty vehicles, as well as the freight, aviation, and maritime networks, to prioritize reducing pollution and carbon emissions reductions through the acceleration of clean energy technologies and policies.

Contact:

Institute for Transportation Decarbonization

press@decarbonizetransporation.org