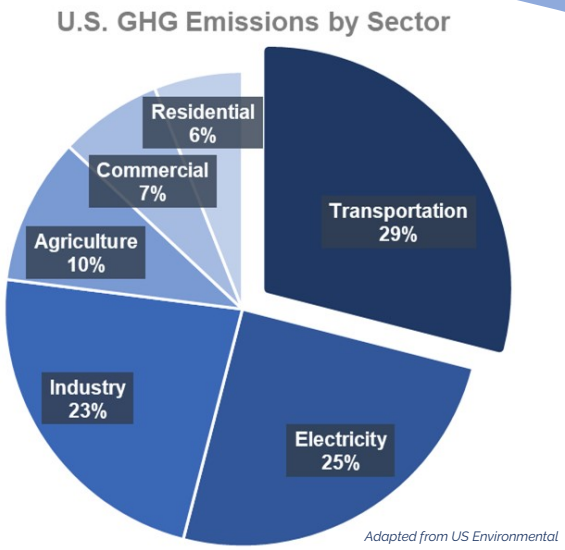
Greenhouse Gases and the Transportation Sector

As greenhouse gas (GHG) emissions continue to rise, organizations across all industries are feeling the pressure to curb emissions to slow climate change. As of 2019, the transportation sector - including road, rail, air, and marine transportation - accounted for 29 percent of all global emissions, establishing it as the largest single sector emissions source above industrial and electricity-associated emissions.

Over the past 10 years, transportation emissions have outpaced the growth of other sectors, and the demand for transportation is expected to grow over the coming decades to meet the demands of a growing population. With solutions ranging from sector-wide electrification to fuel efficiency improvements, there are significant opportunities to achieve reductions in transportation greenhouse gas emissions.

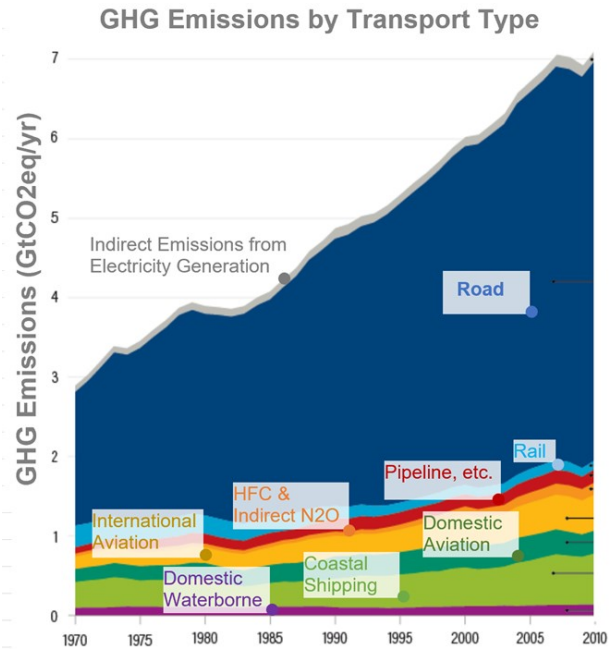


Adapted from US Environmental Protection Agency, 2019

The Derive VQ Platform is proven to reduce fuel use by an average of 8.3% during driving, and up to 20% during idling.

Fleets and Climate Action

Within the transportation sector, road vehicles account for 83 percent of all emissions, a number that has risen at a faster rate than other transportation types. Corporate fleets play a large role in this growth, and forward–thinking organizations are targeting fleets as a way to reduce their fuel usage and costs, and achieve their sustainability targets. While electrification is often seen as the end-goal for fleet decarbonization, there are many factors, including standard fleet turnover rates and the limited availability of EVs, that prevent electrification from being a practical, near-term solution. However, other cutting-edge solutions are available today that provide immediate and meaningful progress towards climate goals.



Adapted from World Resources Institute, 2019

The Derive VQ Platform: A High Tech, Low Carbon Solution

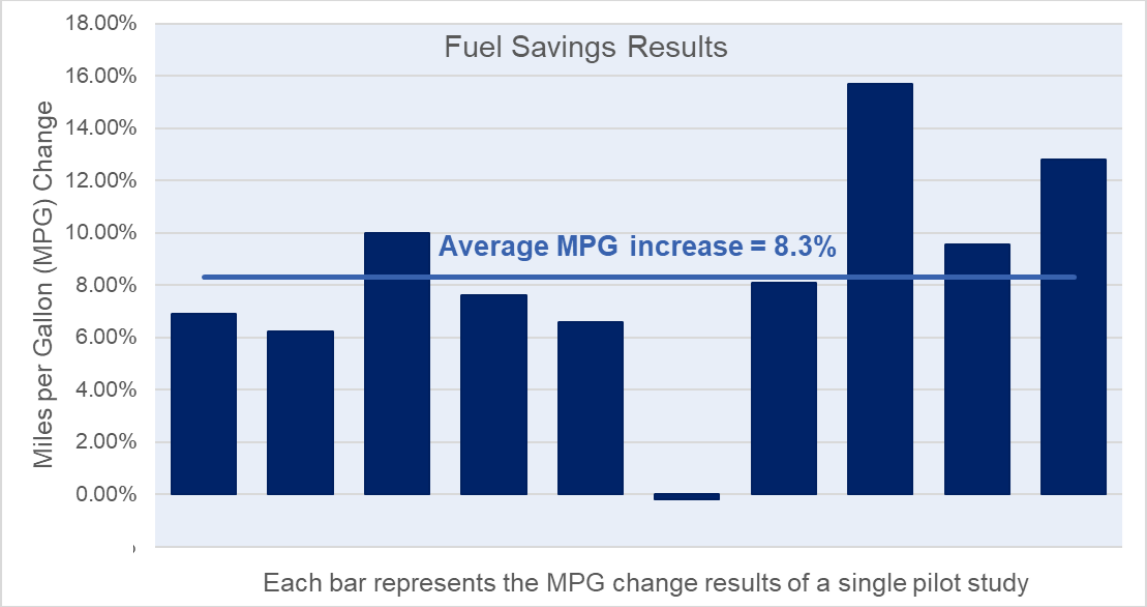
The Derive VQ Platform offers an innovative new fleet management solution to decarbonize the transportation sector. By adjusting automatic transmission parameters, Derive VQ minimizes fuel usage, thereby providing tangible fuel savings while also reducing carbon emissions.

Providing detailed fleet performance data on a macro level as well as on an individual vehicle-basis, Derive offers fleet owners the ability to understand how to efficiently integrate EVs into their fleets to optimize for fuel usage and carbon emissions reductions.

Fleets can continue to grow while decoupling from GHG emissions. Derive's automotive optimization technology empowers fleet managers to take charge of their greenhouse gas emissions with a simple installation - and save money in the process.

Fuel Savings Case Study

ClimeCo worked with Derive to test its claims of fuel savings following the implementation of the Derive VQ Platform. To accurately represent Derive's customer base, ClimeCo requested sets of data from across nine distinct industries with different transportation characteristics, ranging from construction and utility services, to oil and gas and manufacturing. Ten pilot studies, looking at vehicle statistics over a baseline and trial period for multiple vehicle classes, were used to characterize the Derive VQ Platform fuel savings achieved during both driving and idling.



Fuel savings during driving were calculated based on driving distances and fuel fill-ups to get a percent MPG change. In the pilots examined, vehicle MPG increased by up to 15.7%, with an average of a 8.3% MPG increase. Where data was available for idling, fuel savings were calculated based on the fuel use over the idling time period. In these cases, the Derive VQ Platform was shown to reduce idling fuel usage by up to 20%. These fuel savings correlate to a direct reduction in greenhouse gas emissions.

Derive-ClimeCo Relationship

ClimeCo first partnered with Derive in 2021 to work on the development of carbon offsets through the fuel use savings and associated emission reductions provided by the Derive VQ Platform.

To further strengthen Derive's sustainability offerings, ClimeCo worked to review the fuel savings claims being made by Derive, and solidify the relationship between fuel savings and carbon reductions. To learn more, please visit DeriveVQ.com

About ClimeCo

ClimeCo is a global leader in the management and development of environmental commodities, combining unrivalled commodity market expertise with engineering and ESG advisory services to offer vertically integrated solutions to maximize sustainability impacts.

The Sustainability, Policy, & Advisory team is a leading transformation partner to global companies, investors, and governments pursuing a low-carbon and just economy, with expertise across each stage of a sustainability transformation from strategy development, risk management, and impact assessment to voluntary disclosure and regulatory optimization.

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