***Inside Cummins: Last Quarter's Progress***

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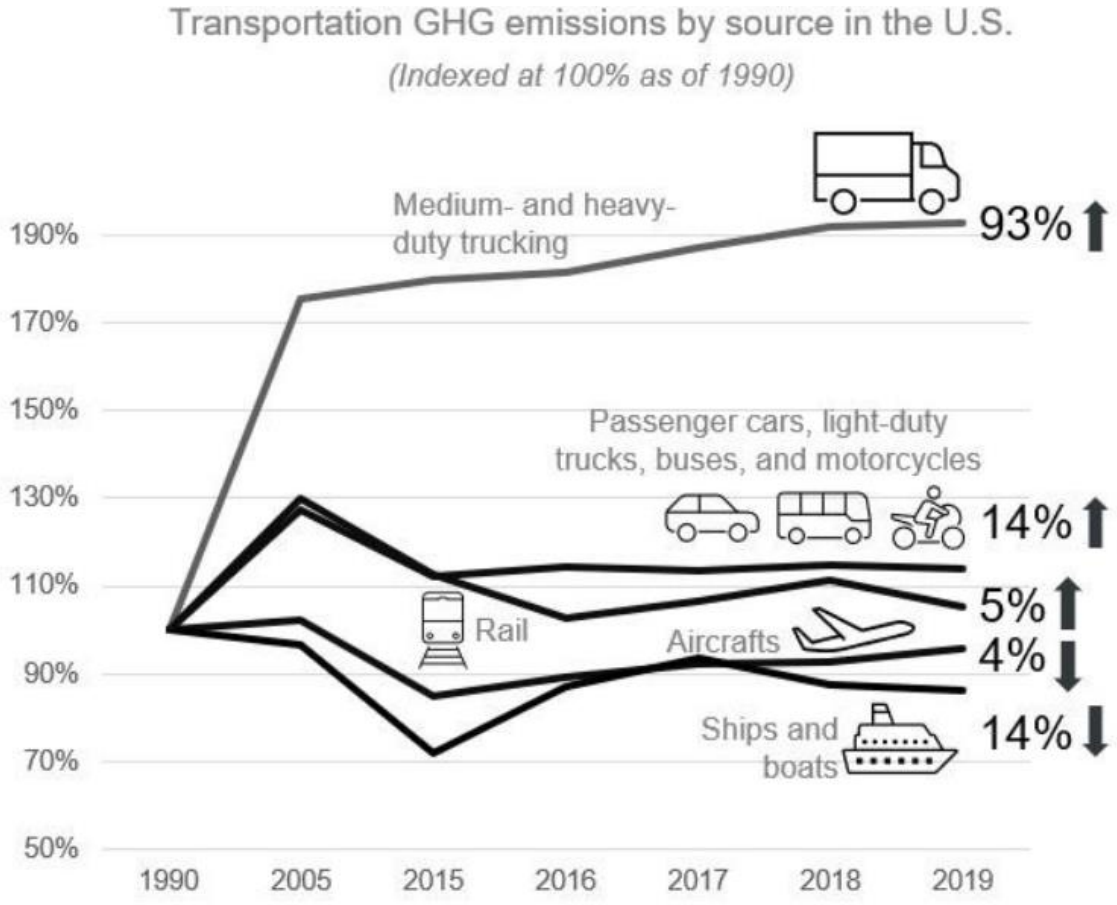
Cummins has a similar "big picture" story to Caterpillar, where demand is plentiful everywhere except for China but the company can't quite keep up with that demand due to ongoing supply chain issues. Cummins' revenue growth of 5% was led by North American strength in both highway truck markets and off road construction markets, as non-residential construction picked up. Inflationary manufacturing and freight costs held down Cummins' bottom line some, but it improved its profitability from a tough quarter three months ago. Cummins expects profitability to increase as the year progresses and more pricing increases offset higher supply costs. It has raised its full year expected revenue growth as a result of strong market conditions even in a tough operating climate.

Known as the "diesel king" for the past couple decades, Cummins has always been a leader in providing the best diesel powertrains to customers to help them meet stricter and stricter emissions standards. As "strict emissions standards" soon will become "zero-emissions standards" Cummins strategy has been to become a leader in the transition to zero-emission trucking. This past quarter it unveiled its "fuel agnostic engine platform". These are a new design of engine where the base of the engine is the same and the head of the engine, above a certain gasket, varies depending on the type of fuel the customer wants to use. These fuels can be diesel, natural gas, hydrogen or propane. This kind of engine helps reduce carbon emissions by enabling trucks to use low or no-carbon fuel <u>with</u> the familiar internal combustion engine.

Cummins sees hydrogen ICE vehicles as the primary technology used during the transition to all electric hydrogen fuel cell vehicles in the next 15 years or so. By creating a fuel agnostic engine, Cummins makes it easier for its customers to integrate lower carbon fuels into existing vehicles serviced by technicians familiar with ICE engines.

The following chart shows greenhouse gas emissions over the last 30 years for various transportation sectors. Even though airplanes, boats and ships have reduced emissions, and some individual cars and trucks have lowered emissions, the trucking industry as a whole has increased greenhouse gas emissions by 93% in the past 30 years because of the sheer volume of trucks on the road. Cummins' new fuel agnostic engine design attacks this issue head on and is a way of altering the trend now as opposed to 15 years from now when the economics of electric vehicles might finally make sense. While it is impossible to predict just how long the transition to zero-emission trucking will take, it's becoming more clear with every quarter that Cummins is in it to win it.




Source: United States Environmental Protection Agency. (December 2021). U.S. Transportation Sector Greenhouse Gas Emissions.[PDF file]. Retrieved from https://www.epa.gov/