

Co-Optimization of Fuels and Vehicles

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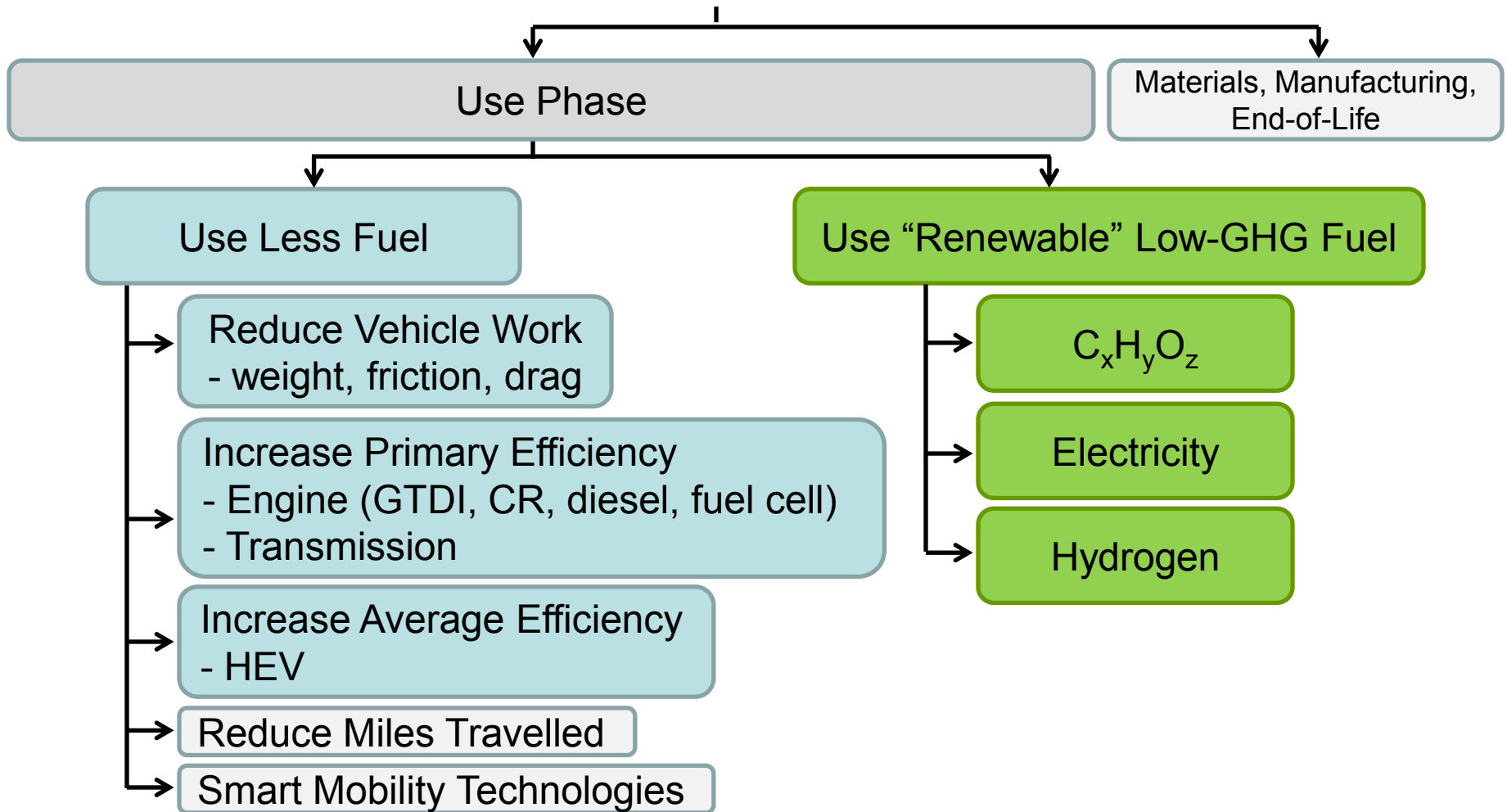


Research and
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Bioenergy 2015

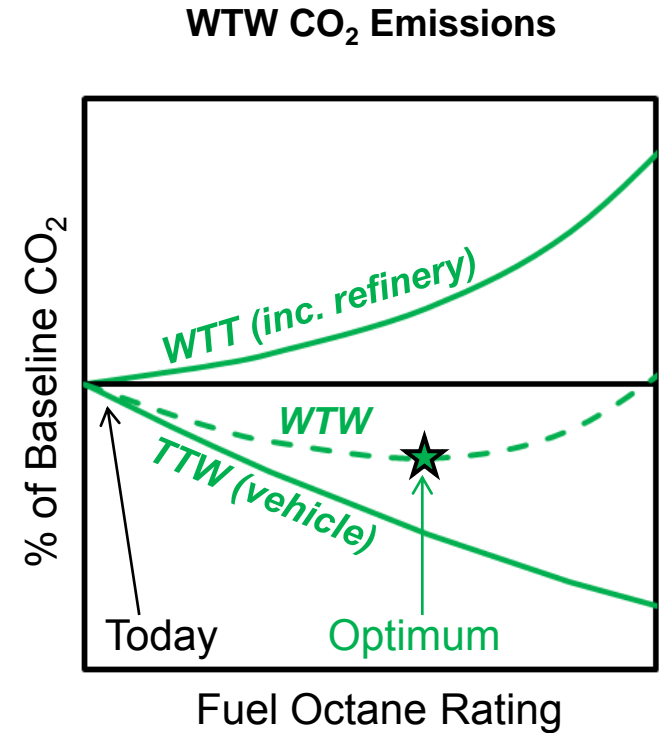
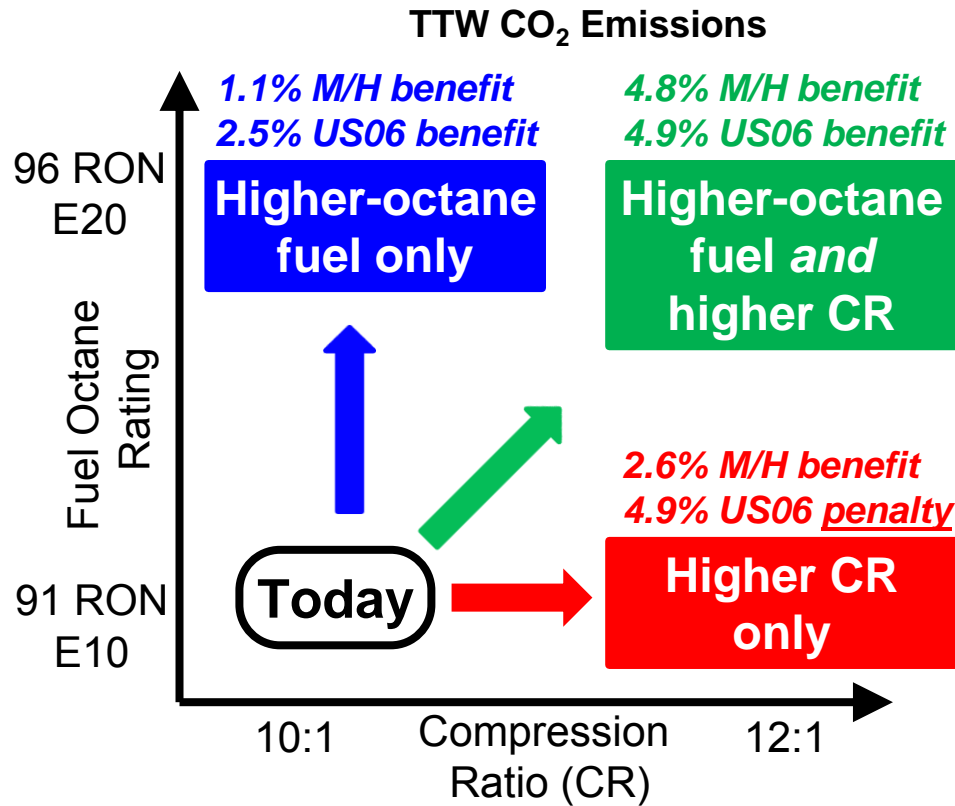
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Sustainable Personal Transportation



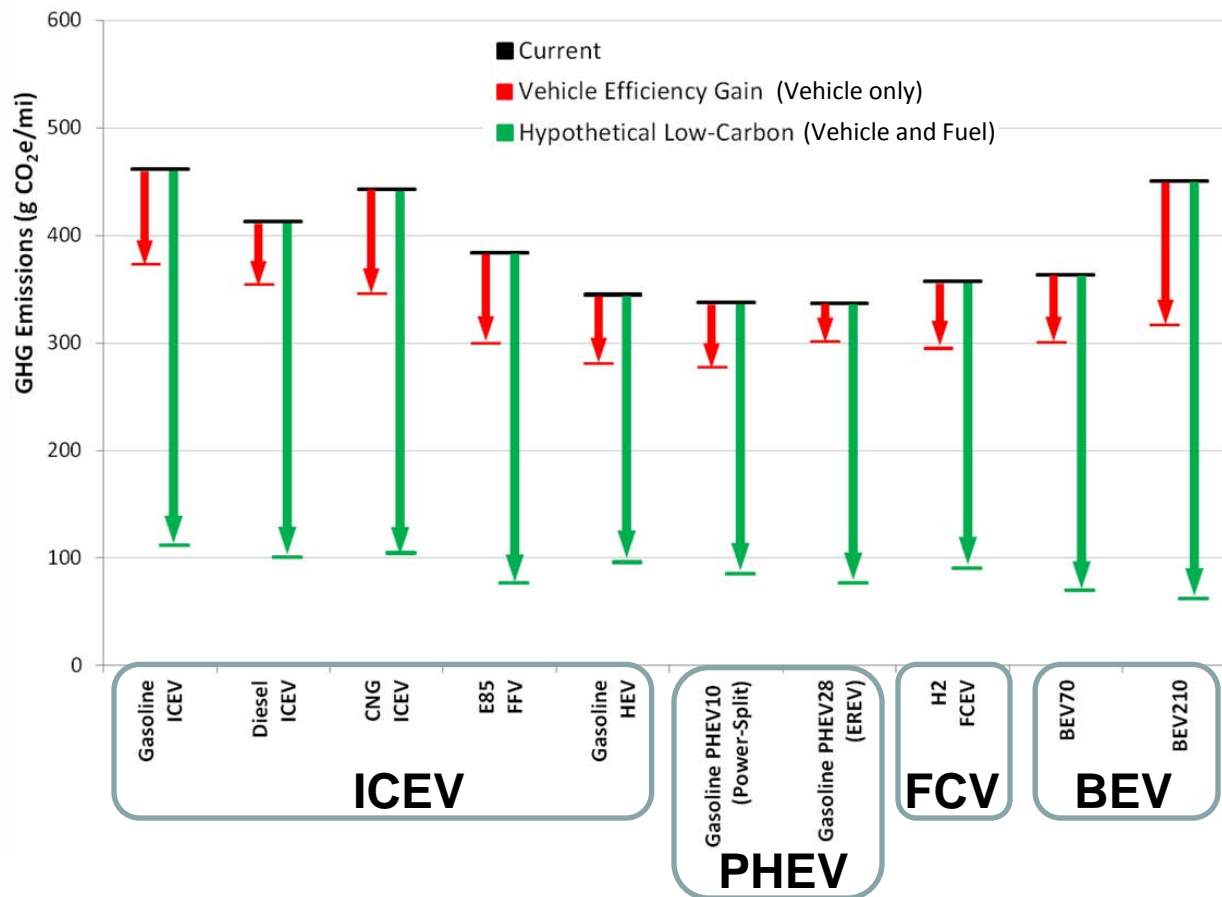
Sustainable LDV transportation requires actions on multiple fronts: vehicle, fuel, and user.

Efficiency Changes with Fuel Octane Rating and Engine Compression Ratio



Best TTW and WTW results are achieved by the *combination* of higher-octane fuel and an engine optimized for that fuel.

GHG Emissions from LDV Pathways



Large GHG reductions for LDVs are challenging and require low-carbon fuels. Vehicle efficiency improvements will also play an important role.