



Co-Optimization of Fuels and Engines (Co-Optima)
National Lab Project Overview

Market Transformation Team

Identify and Mitigate Barriers to New Fuel Deployment for Thrust I and Thrust II

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Market Transformation Current Research

Communicate the Co-Optima program with all market sector stakeholders

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- Stakeholder Engagement achieved through monthly conference calls, one-on-one visits, and Listening Day events

Stakeholders engaged



New Fuel & Vehicle Introduction

Lessons Learned Report



Fuel & Vehicle Introduction



Fuel & Vehicle Distribution



Laws & Incentives



Feedstock Supply



Mitigate unintended consequences

- Mitigate market acceptance barriers through SAE with initial focus on prevention of misfueling





Develop MT evaluation metrics

Inputs to the Co-Optimizer Algorithm

Infrastructure Compatibility	Rail, pipeline, terminal, truck, Retail tanks/dispensers, Potential for leaks/emissions, Safety concerns?
Vehicle Compatibility	Materials, refueling/misfueling, performance (startability/driveability), Emissions, Safety
Regulatory Requirements	Fuel registration, ASTM cert, UL equipment cert, use for CAFÉ' tests
Geographic Factors	Regional deployment, feedstock volume, buyer demographic, climate-related performance, non-attainment areas, State laws/incentives
Political Factors	Champion industries, Key constituencies
Uncertainty	Oil prices, Deployment/adoption of CAVs

- Working with the ASSERT Team, analyze potential market introduction scenarios of new fuels and vehicles for Thrusts I & II

Thank you!



Questions?