



GAS RECOVERY/ FLARE MANAGEMENT & CLEAN FUEL

Fuel Quality Roadmap

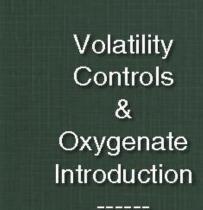


Saudi Aramco Fuel Quality Roadmap

Objective

- Improve the quality of the environment and protect human health
- Ensure fuel compatibility with future automotive engine technology
- Conform to Environmental Master Plan endorsed in 2004

Fuel Quality Program



Cat. Converters

Initial
Benzene
&
Sulfur
Reduction

Olefin & Aromatic Content Limits Sulfur
Elimination
&
Additional
Composition
Controls

CLEAN FUELS



KSA Air Quality Concerns

- 1998 field tests by KFUPM showed the transport sector is a significant contributor to air pollution.
- Strong correlations found between CO and NOx concentrations and traffic density



Systems Approach

Key actions that deliver greatest results to reduce pollution from vehicles

- Ensure vehicles meet effective emission standards when they first enter the market
- Retrofit programs for older vehicles
- Develop clean fuels

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