GASEOUS MOTOR FUELS. AN ASSESSMENT OF THE CURRENT AND FUTURE STATUS.
S. S. Sorem, Shell Oil Co., San Francisco, Calif., et al.

The Engine Fuels Subcommittee of the API Committee of Environmental Affairs undertook an assessment of published information on the potential impact of adoption of gaseous fuels to reduce automotive emissions from existing and future motor vehicles as a means of achieving improved air quality in the 1975-80 period. The major considerations of vehicle emissions, fuel and equipment costs and availability, and overall impact on emissions from all sources provided the basis for the report. This study found that with favorable costs for the gaseous fuels and favorable fuel tax consideration coupled with fuel availability, and inherently lower maintenance, converted fleets can show an economic advantage. Conversion of older models to gaseous fuels can result in reduced emissions for those vehicles, but will not realize significant benefit for the current (1973) model vehicles, nor those anticipated to meet the 1975-76 Federal standards. Therefore, the impact of such conversion on air quality is expected to have marginal impact in the 1975-80 period. If the gasoline engine can meet or even approach the 1975-76 emissions limits, conversion of earlier models to gaseous fuels will not provide improved air quality during the next decade except under very special environmental and economic conditions.