



# Federal Government Support for Energy R&D as a Result of the 1970s Oil Crises

# Synthetic Fuels Corporation (SFC)

- Oil prices rose dramatically in the 1970s
- SFC established in 1980; \$19 Billion approp.
- To support development of commercial syn. fuels manufacturing plants
- Structured as quasi-governmental
- Mandated to achieve 0.5 MMB/D by 1987 and 2.0 MMB/D by 1992
- By July 1985, oil prices had fallen to about \$20/BBL
- Terminated 1985, total expend. \$960 MM
- Four projects

# Learnings from SFC Experience

- Govt. support for commercial demonstrations more likely to be successful when private sector partner has substantial investment
- Price supports rather than loan guarantees are more motivational
- Such an agency can not be totally independent of government rules/practice like salaries, response to Congress, etc.

# Was DOE Energy Research Worthwhile?

- Public funding of basic/applied research is appropriate and needed
- DOE/FE R&D 1978-2015: was about \$256/35 Billion (2016 \$)
- NRC study of 1978 to 2008; DOE R&D benefits exceeded costs
- Substantial advances in solar energy, building efficiencies, reduced SOX/NOX emissions, nuclear energy and other areas are result of government R&D
- Total 2009-14 shale oil/gas production value about \$530 Billion (2016 \$)
- Other Benefits from shale oil/gas production are reduction in imports and enhanced security

**YES! DOE ENERGY R&D HAS BEEN WORTHWHILE.**