

Reducing World Dependence on Oil in Transportation

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Consequences of oil dependence



Strategic

7 of 9 biggest oil exporters have a non democratic regime



Economic

Oil price increase hurts global growth



Enviromental

The source of 40% of GHG emissions is oil



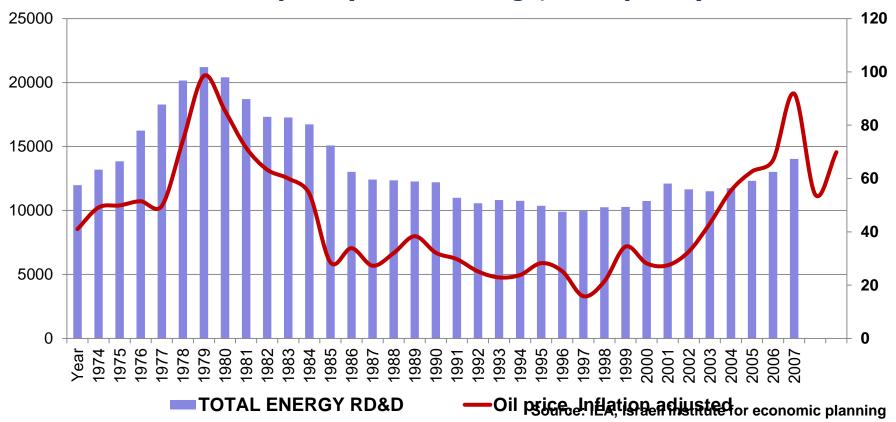
- Most global oil dependence is due to transportation
- □ 600 million new cars will be sold by 2020.

Lack of long term vision



☐ Investment in oil alternatives depends on oil price

World Energy RD&D (million US\$, 2008 prices) and oil price (annual average, 2008 prices)



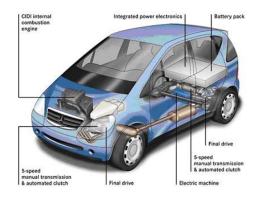
Oil Substitutes for Transportation

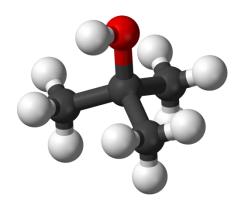




Bio Fuels

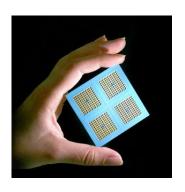
Engine Technologies





Synthetic Fuels

Electric Cars and Fuel Cells



Israel has significant capabilities



- **□** Advanced research in relevant scientific fields
 - Over 50 serious research groups
- Business activity and investments in the field
 - 200 M\$ already invested in 60 companies and start-ups
- □ Existing Industrial clusters enable establishment of the field
 - Agriculture and BioTechnolgy
 - Chemistry and Chemical Engineering.
 - Software and Electronics
 - Defence industry



The National program



Goal:

Israel as a center of industry and research, a leader in development of technologies that reduce world dependence on oil for transportation, and their worldwide implementation

Main principles:

- Certainty: assuring continuity and stability of support for 10 years.
- Cooperation: on the international, business and academic levels for maximum leverage of government resources and for the focus of worldwide attention
- Allow private initiative to choose technological path

The National program



Partners:

Ministries of Industry and Commerce, Treasury, National Infrastructure, Transport, Environment, Interior, Vatat and ISF.

5 year Mission:

- ☐ To double the number of Israeli companies from 50 to 100, 20 of them with significant global sales
- □ To double the number of researchers In Israel
- World class "Excellence centers"
- ☐ Breakthrough pilots and beta-sites
- Full Scale solutions

The National program



Designated Program Manager, International Cooperation

Beta Site Project Funding

One Stop Shop for Companies

Venture Capital Co-Investment and incentives

Excellence Centers, Grants, Certainty

Basic Research

Industrial R&D

Pilot

Scale Up

Thank you