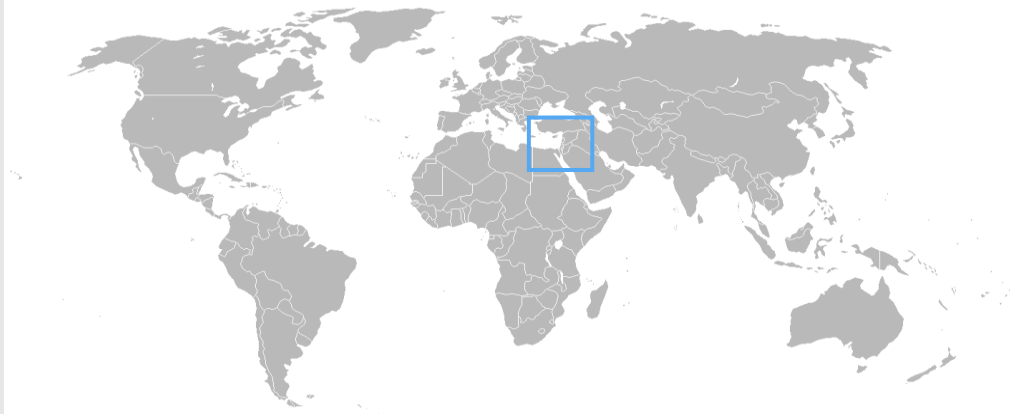


***Israel's
Culture of
Innovation -
Renewable
Energy***



January 2013

Israel - Country ID



Area: 22,000 sqkm
Population: ~ 7.8 millions
GDP: \$245 Billion (2011 est.)
Main Cities: Jerusalem, Tel-Aviv, Haifa,
Be'er Sheva





Netafim - drip (low volume) irrigation



Given Imaging - Ingestible video camera



Intel's Centrino and Pentium 4 microprocessors



M System's Disk on Key and Disk on Chip flash memory



GE Healthcare's portable cardiac ultrasound system



The Phillips Brilliance CT Scanner



IP Telephony invented by founders of Vocal Tec



AOL Instant Messenger ICQ

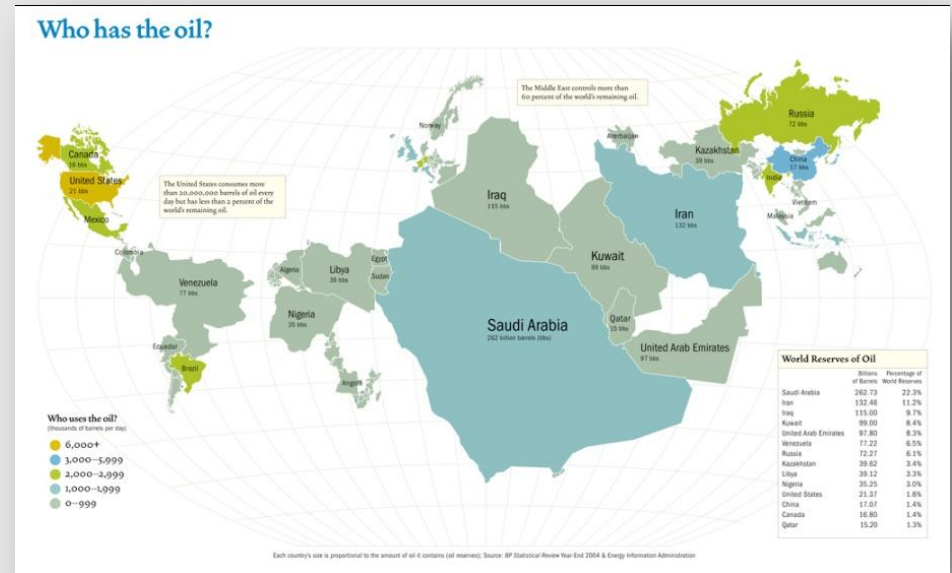


Zip compression technology

World Growing Demand

Energy Independence

Preservation of the Environment



Israel's Renewable Energy Overview





Harry Tabor (left) demonstrates his selective-black collector to Israeli Prime Minister David Ben-Gurion prior to its shipment to the first solar congress in Arizona in 1955. Ben-Gurion actively encouraged solar R&D in Israel.

“Solar energy is the largest and most impressive source of energy in our world”

David Ben Gurion 1955



Established in 2006, the program aims at promoting Israel's Water and Renewable Energy Sector

- Strengthening human capital
- Promoting research and development
- Supporting local implementations
- Increasing exports and investments



Research with a vision





Country	Companies in 2010
USA	55
United Kingdom	11
Germany	7
Israel	5
India	3
Denmark	3
China	3
Sweden	2
France	2
Norway	2
Canada	2
Switzerland	2
Netherlands	2
New Zealand	1
Italy	0
Luxembourg	0

Source: Cleantech Group 100 Publication, Oct. 2010



imagination at work
ecomagination™

Two of the five winners of the **GE Ecomagination Challenge 2010** for powering the grid are companies from Israel—**GridON** and **WinFlex**.



WinFlex

Source: GE Ecomagination Challenge for powering the grid

Solar Energy:

- Thermal energy production
- Heat-powered air conditioning
- Water heaters
- Photovoltaic
- BIPV



Wind:

- Variable wind
- Elastic
- Compound materials
- Light weight
- Retrofit



Energy Efficiency:

- Green building materials
- Monitoring devices
- Power-efficient lighting
- Smart grid
- Smart heating



Vintec Knowledge Ltd.
Light Energy Saving



Bio-fuels & Energy From Waste:

A combination of many fields are used in order to improve commercial crops that can serve as resources for the mass production of bio-fuels.

- Agricultural and animal waste
- Domestic waste
- Jathropha and Castorbean
- Algae



ARROWECOLOGY
THE WAY TO ZERO WASTE

Seambiotic

Agricultural Research Organization (ARO)
Volcani Center

**TRANS
BioDiesel Ltd.**



The Israel New Energy Initiative

***Reducing World
Dependence on
Oil in Transportation***



Why must we move away from oil ?

Oil Has a Transportation Monopoly



Oil Reserves Peaking



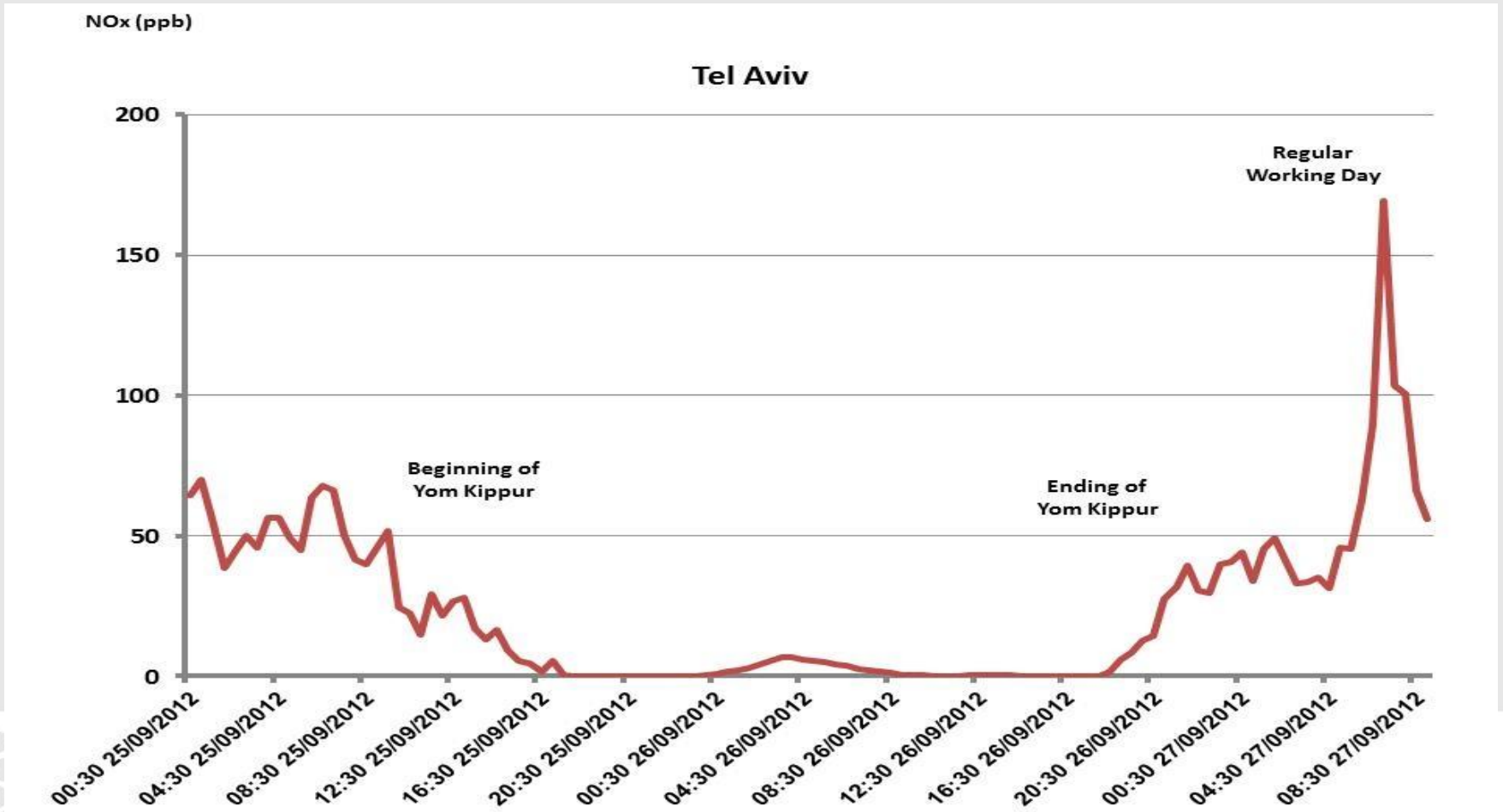
Economic Effects



Environmental Problems



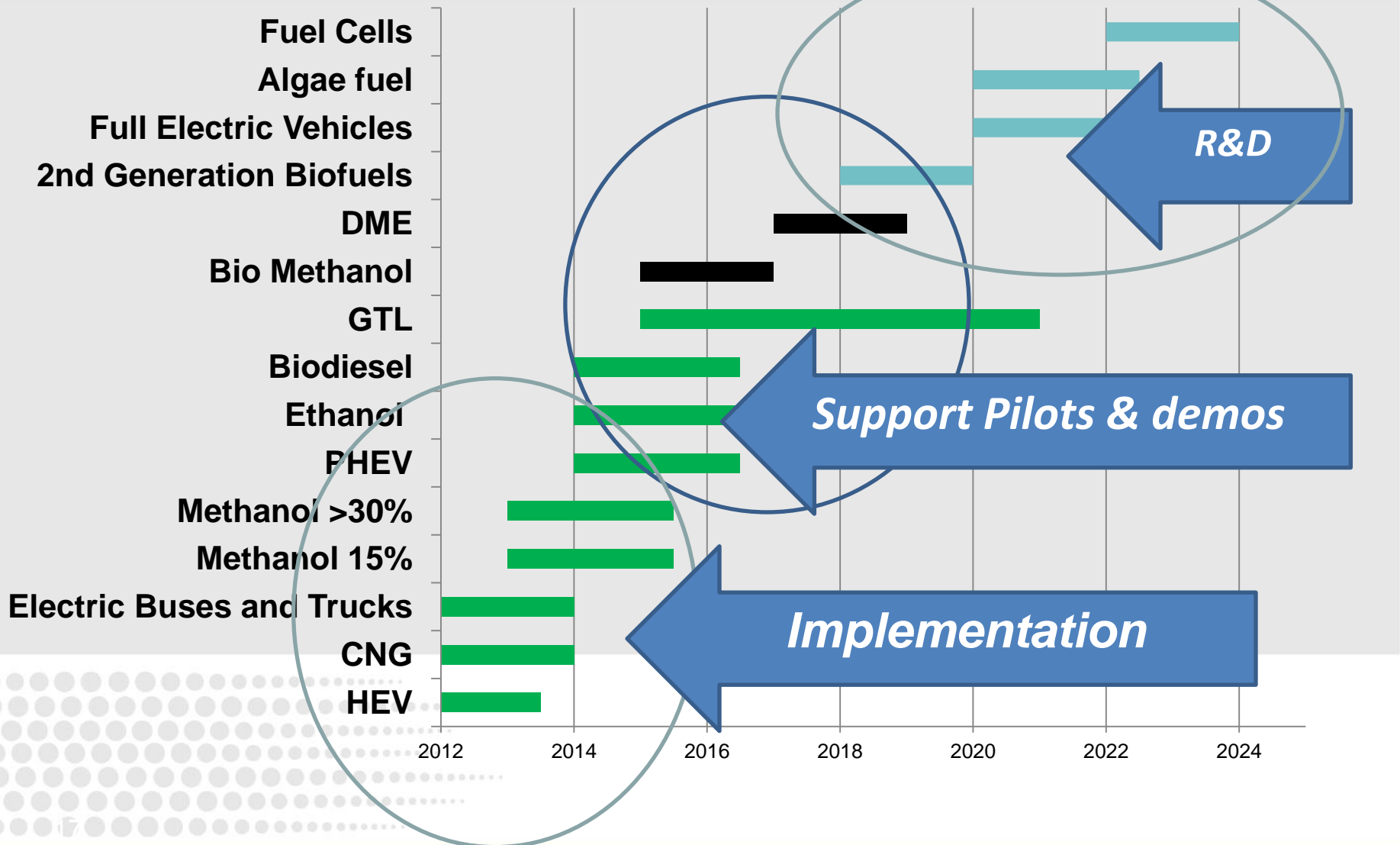
Carbon Emissions – Tel Aviv, Yom Kippur September 2012



Our Mission:

- To serve as a catalyst for the reduction of global dependence on crude oil by establishing Israel as a center of knowledge and industry in the field of fuel alternatives*

Forecast of Economic Viability of technologies

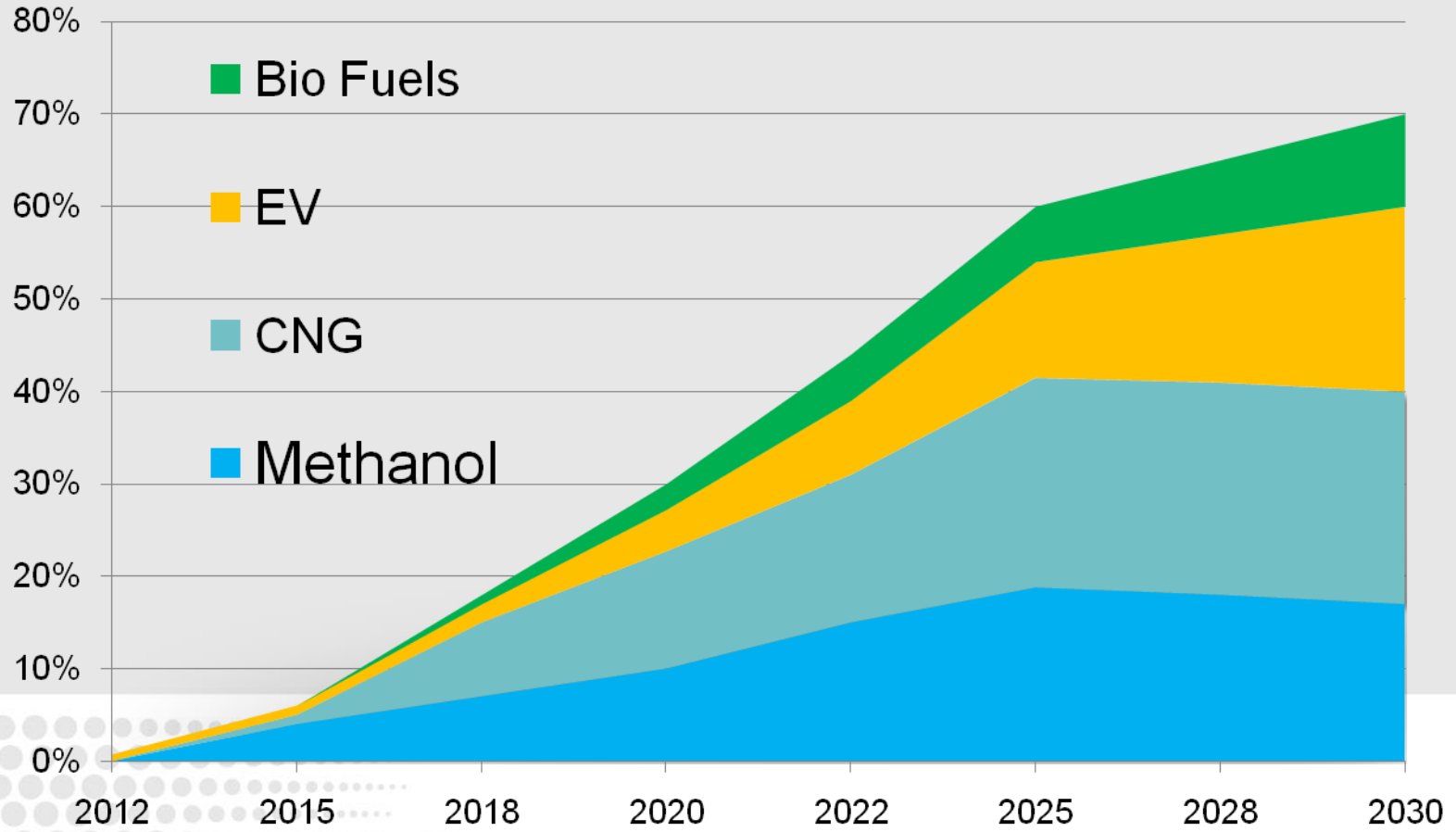


- *There are many solutions*
- *No gold standard*
- *Some solutions are already economically viable*
- *Solutions are locally based*
- *Implementation can start now!*

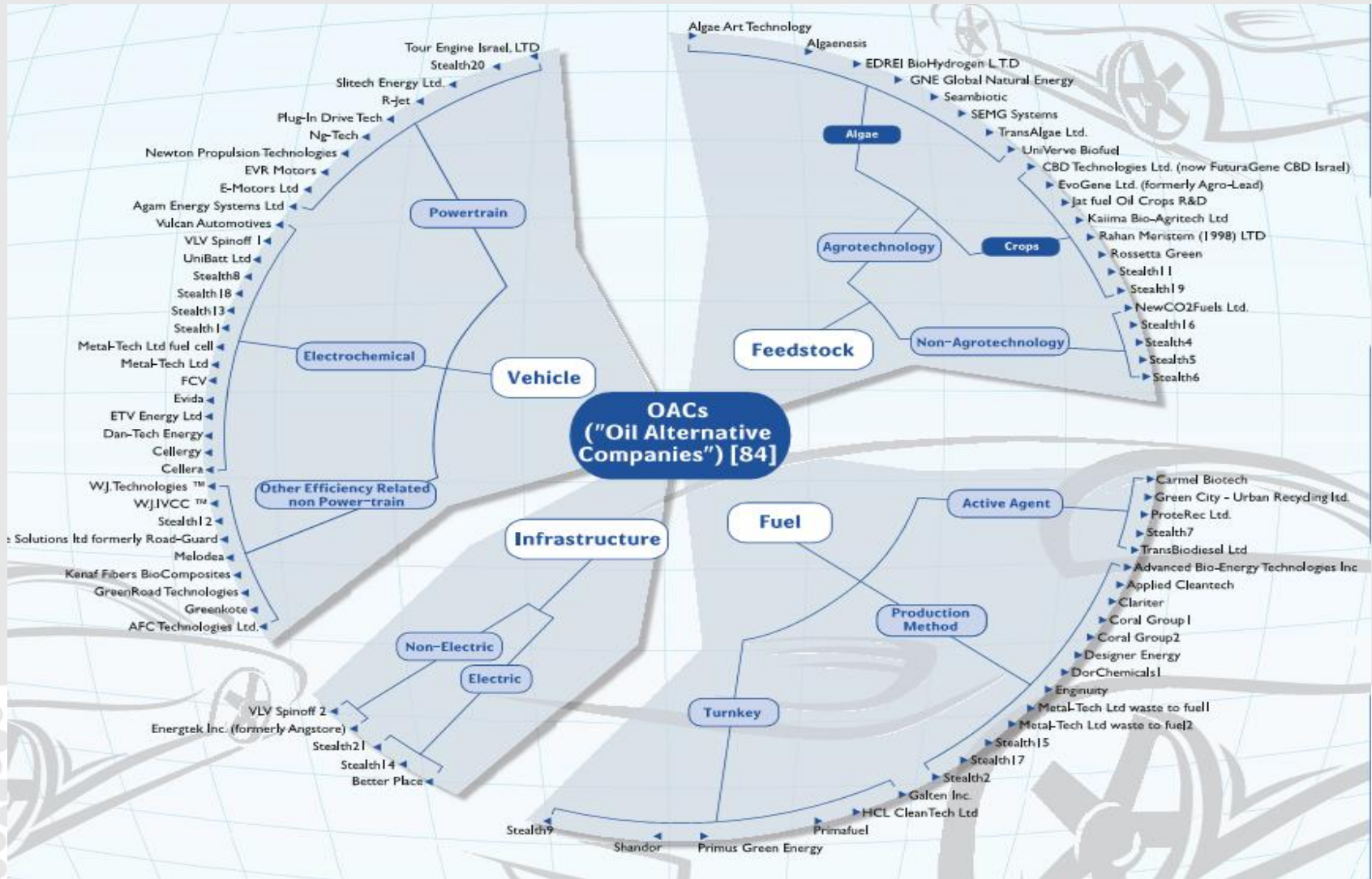
1. *Reducing the share of crude oil in Israel's transportation sector by **30% by 2020** and by **60% by 2025**, while supporting green growth*
2. *Turning Israel into a center of knowledge and industrial best practices in the field of fuel alternatives.*
3. *Raising the world's awareness of alternative fuels, and of activity in the field in Israel. Building global coalition of partners to the idea of innovation in transportation*

Reducing the Share of Oil in the Israeli Transportation Sector

Expected Penetration Rate for Alternative Fuels



Israeli Companies active in the field



Thank you

