



Fueling Innovation

Israel's Fuel Choices Initiative

Eyal Rosner Chairman and Director of Administration Prime Minister's Office Israel





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 for transportation.



Our Goals

- <u>Replace</u> the share of oil in Israel's transportation sector by 60% by 2025, while supporting <u>green growth</u>.
- 2. Turn 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.

Building global partnerships to speed up innovation.



The Way to change



Linear approach

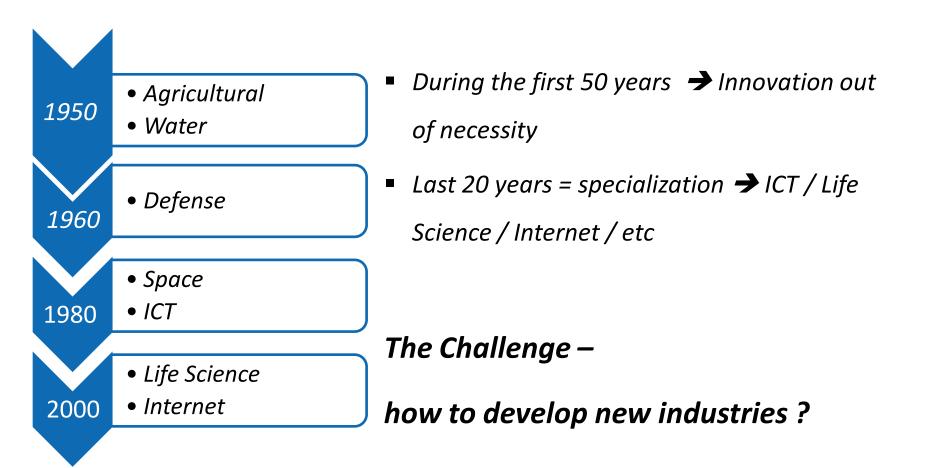


Non-Linear approach

We cannot solve our problems with the same thinking we used when we created them. (Albert Einstein)



Start-up Nation: History of innovation





Principals for non linear Innovation

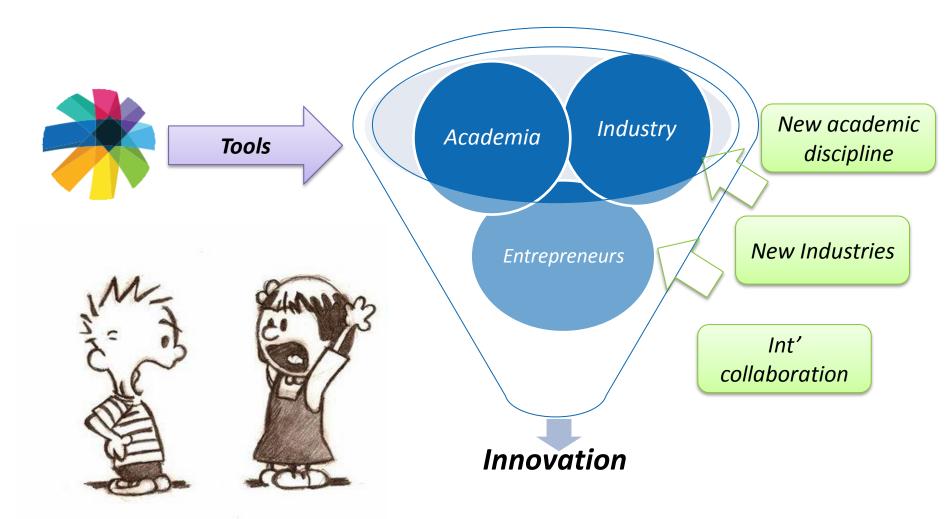
- Focus:
 - Define the needs and create a challenge
 - Tools to support along the value chain
- Leverage
 - Use Israel's small degree of separation
 - Bring people and know-how from other fields
- Fresh thinking
 - Create tool for interdisciplinary
 - Joint projects

"The best way to predict the future is to create it," (Abraham Lincoln)



Innovation Process

Sake and Stir





Smart Transportation Institute

- National center together with Tel Aviv University.
- Multi disciplinary.
- Research agreements with international institutes.
- Partnership with Industry.
- Accelerator for pre seed ideas.





Local Entrepreneurship





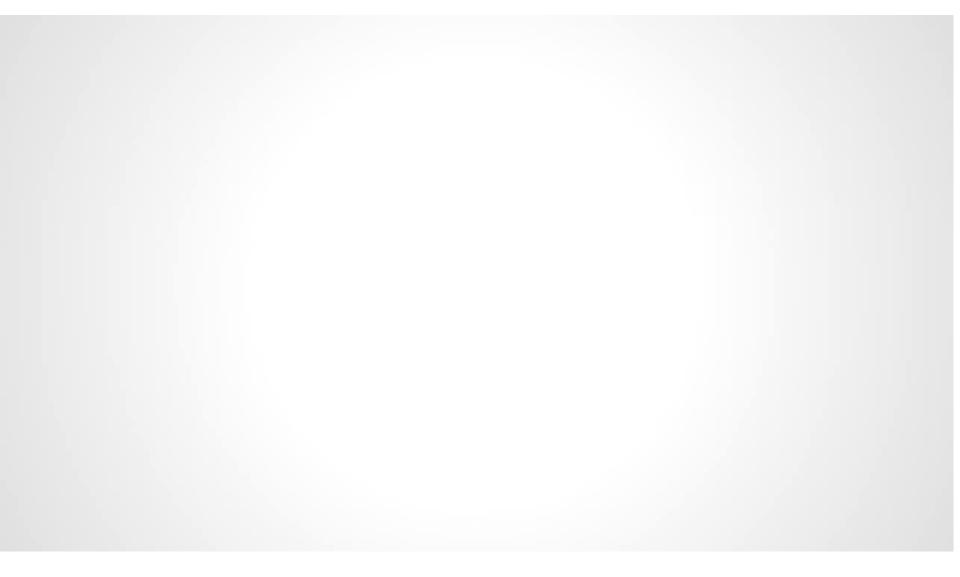
Putting the entrepreneurs in the center

✓ Build supportive ecosystem✓ Community

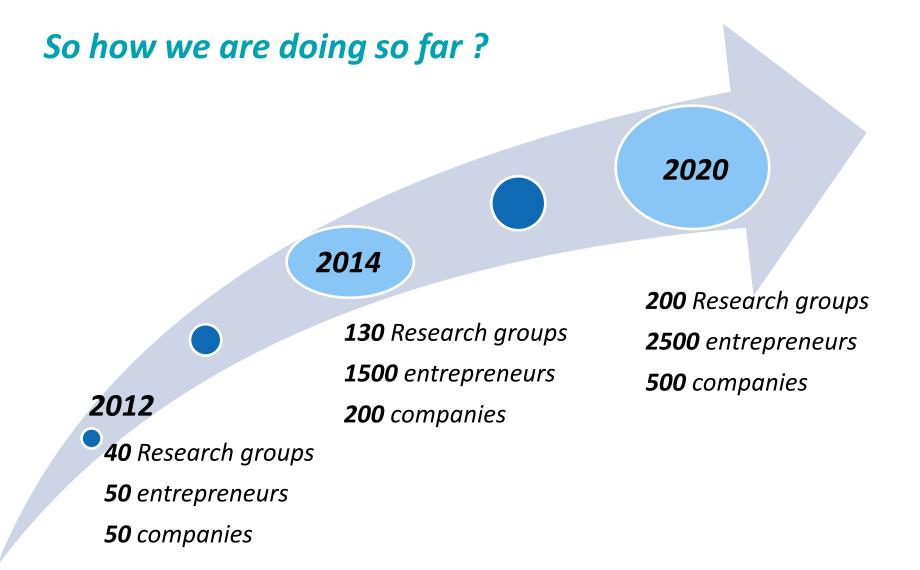
















www.fuelChoicesInitiative.com





Reality of Fuels Alternatives

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





Basic assumptions

- Solutions must have economic viability
- We will not pick a winner
- We will provide equal opportunity for everyone
- Infrastructure will need government support





How to replace Fuel ? - Barriers for change

- Total Cost of ownership (Cost of the Vehicles + maintenance + fuel)
- Vehicles Availability
- Infrastructure Cost
- Standards and Regulation
- Market Acceptance (Fear factor/Safety / Environment / Chic / Trends)

Acceptability Index: How easy is the change

(T.O.C + Infrastructure cost + regulation, market acceptance / how fast can it happened)



Market acceptance matrix

	Light	Private	taxi	Light Duty trucks	Heavy Duty trucks	Buses	Jets
CNG	low	medium	high		Very high		
Methanol		High		Unknown			
EV	high	low	medium	Very	low	high	
Bio		high					



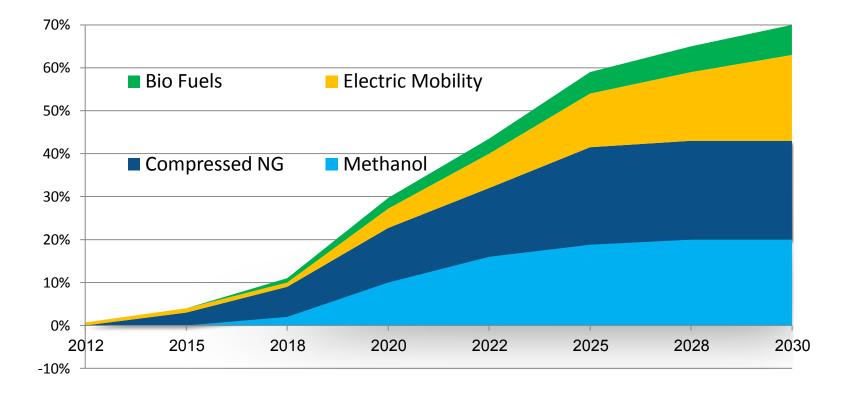
Israel market analysis

	Gasoline		Jet Fuel				
	Mainly Private Vehicles	Light Duty Trucks	Medium & Heavy Duty Trucks	Buses	Private Vehicles & Taxis	Train	Jet Planes
# of Vehicles	2200K	217K	75K	16K	100K		
Current Usage (fuel)	43%	14.5%	18%	5.5%	5.5%	0.5%	100%
2025 Objectives (fuel) <mark>40%</mark>		4.5%	5.5%	1.5%	1.5%	0.1%	
	17%			13%			10%



<u>**Reduce</u>** the usage of oil by 60% by 2025</u>

Expected Penetration Rate for Alternative Fuels in Israel





The Green growth effect – contribution to the GDP

