

Reinventing the Energy Supply with Autonomous, Green Power Generation

Executive Summary

Grafenika, established in 2020, is a pioneering deep tech venture poised to transform the clean energy landscape.

While the world thinks existing polluting power stations and grid - are a must, **Grafenika delivers next-generation on-campus energy supply**. Our solution is clean, efficient, cheaper and avoids the need for Grid.

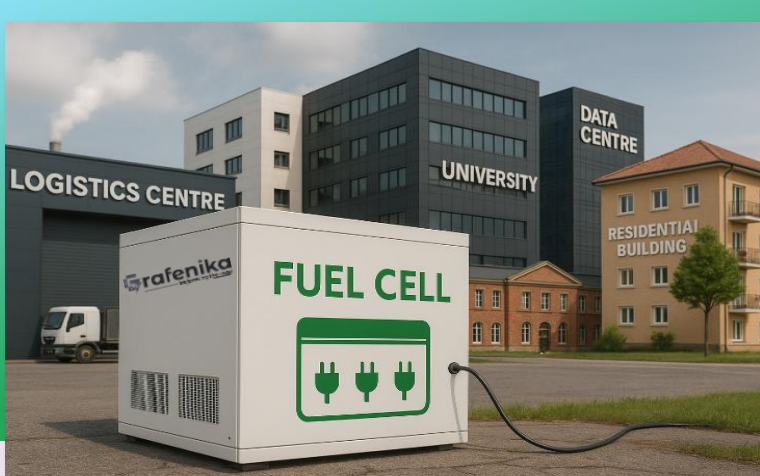
We have successfully developed a proprietary "**pre-graphene**" material using nanotechnology. Based on this breakthrough material, we've created technology that enables a fundamental redesign of fuel cell architecture, promising 100+% efficiency gains and 70% cost reduction compared to current solutions.

Our disruptive fuel cell: is the basis for future energy sources.

Technical Superiority

X2	-70%	-15%
Energy Density	Unit Cost (/kW)	Operation Cost (/kWh)
Cell-by-Cell Control	Higher Endurance	Net Zero
BMS Capability	Autonomous Energy Source	ERP (*): 0.5-ton CO2 / 1.0 GWh

* ERP = Emissions Reduction Potential



Market Analysis by 2034



TAM - Total Addressable Fuel Cell Market:	\$34.5B
SAM - Serviceable Available Stack Market:	\$11.4B
SOM - Serviceable Obtained Stationary Market:	\$4.8B

The Customers

- B2B** - Energy Suppliers: stacks and fuel cell manufacturers, system integrators
- B2C** - Energy consumers: data and logistics centers, industrial zones, residential buildings, hospitals, colleges & universities, and defense applications

Traction and Progress

- x3 Awards by the Israeli Innovation Authority (IIA)
- Collaborates with x3 universities
- Bilateral fuel cell project with UJV, EU
- LOI: EN Power, NY - energy pilot in a building
- LOI: TOPiVision, IL - UAV energy pilot
- Invitation: Gov., Kenya - campus energy pilot

Investment Opportunity

Grafenika offers an attractive investment opportunity in the booming Energy market.

With a \$1M investment, we will finalize our MVP with strategic partners and secure IP protection. It will position Grafenika to capture a significant share of the energy market.

The \$1M investment will unlock additional \$1.3M grant from the IIA.

