



Israel Electric

IEC Energy Journey



Israel Electric

all•for **power** 2024
conference & exhibition

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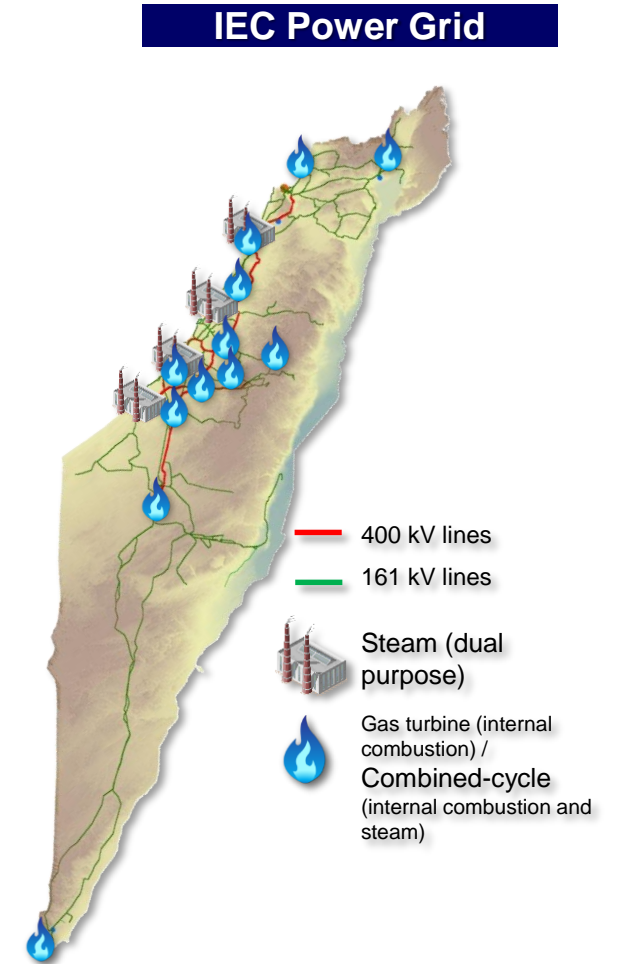
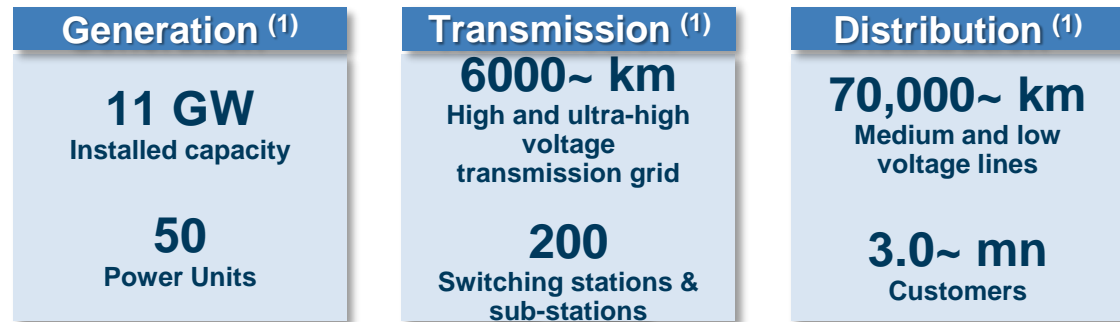


Who We Are

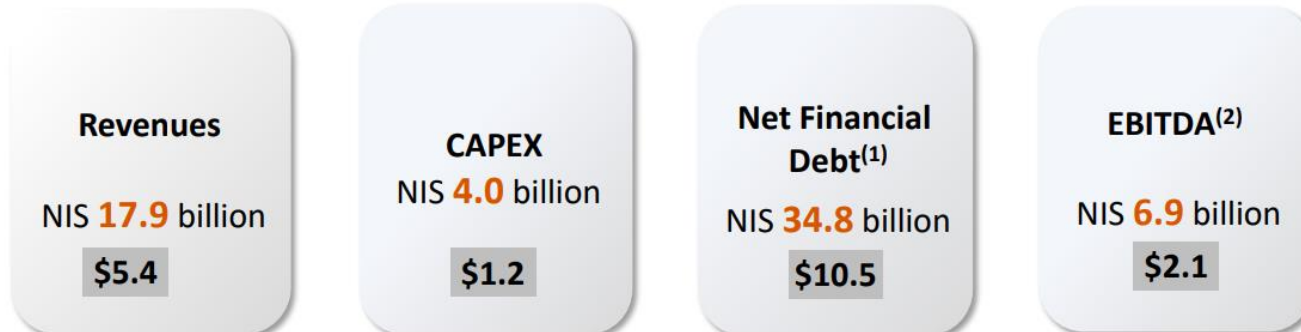


Israel Electric Corp. at a Glance

- Established in 1923, 97 years of operation, the Israel Electric Corporation Limited (“IEC”) is the sole vertically integrated electric utility company in Israel and generates, transmits, distributes and supplies most of the electricity used in Israel
- IEC is appx. 99.85% owned by the State of Israel
- IEC had total assets of NIS 90~ billion and 10,500 employees
- IEC serve 3 million residential, commercial, agricultural and industrial customers throughout the State of Israel, including East Jerusalem and the Palestinian Authority (PA)
- Total electricity sales of 40 GWh



Financial Statements for 9M 2022



IEC at a Glance



Sustainable Electricity Generation



Essential Service Provider

100+ years of operation
Vertically integrated
3 million customers
6K km of transmission lines
70K km of distribution lines.



Energy Island

Energy self-sufficient
Feasibility, design,
Procurement, construction
Own developments



Innovation Hub

Internal R&D, 1500+Eng & PhD
100+ new pilots with start ups
Equity investment
Build Ecosystems



Cyber Security

Leveraging the capabilities of the Israeli cybersecurity powerhouse
In-house development of unique solutions



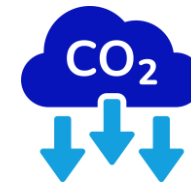
Ownership



Natural Gas Fuel Independence



Versatile Power Stations



Supporting environmental initiatives



Fast growth rate

IEC's Innovation at a Glance (per year)



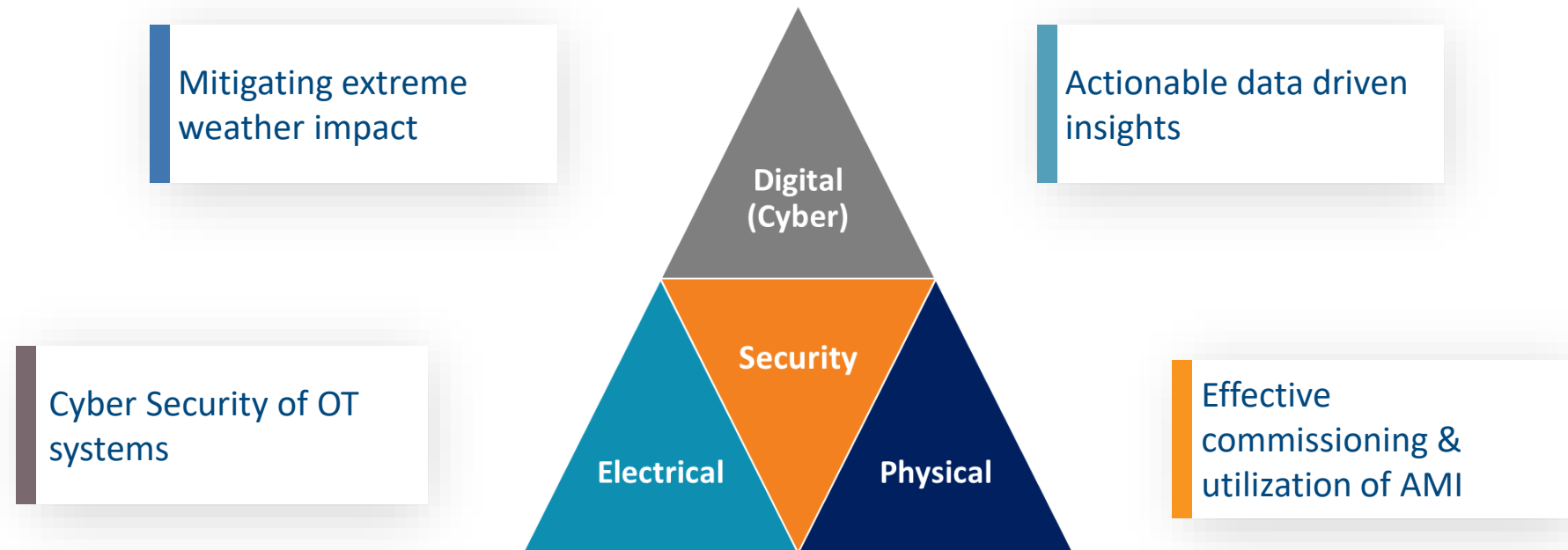
360° Electricity Security Concept

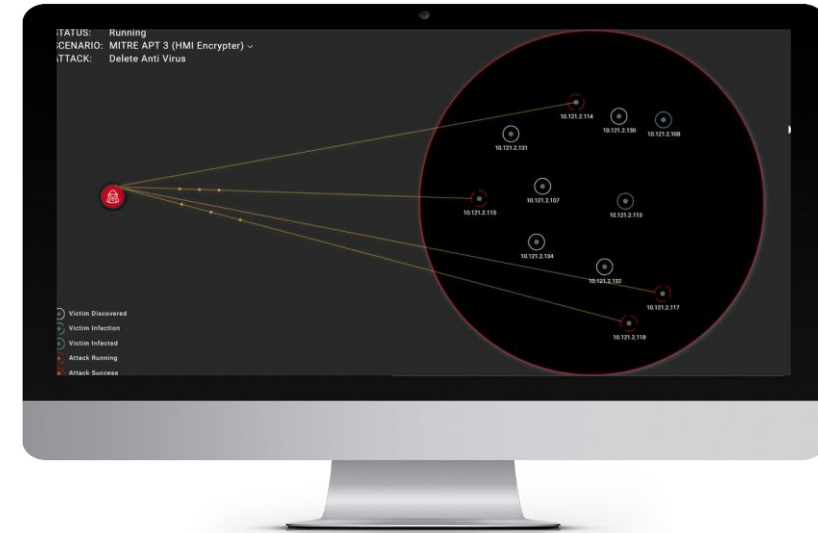
A comprehensive approach
for electrical, digital (cyber)
and physical threats



360° Electricity Security Pain Points

Identification





A digital twin of power utilities' critical infrastructures

Build the model that includes : OT, IT & control network in one place



Emulation of Current state

to identify risk and vulnerabilities



Simulation of Future scenarios

To plan system's development



Validation of tradeoffs

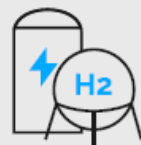
To support informed decision making

Summary

- Israeli targets are to decrease in GHG emissions by 30% till 2030 and 100% by 2050.
- IEC is almost 100% Gas Dependent and is looking for Green-fuel alternatives
- Given IEC and geographical uniqueness, IEC is investing in the future in many innovative initiatives in many aspects that goes from Hydrogen to Cyber Security.
- Given the incredible knowledge and expertise that company still holds in markets like **Turbine maintenance** or **Coal maintenance production plant and Coal to Gas Conversation** , we are happy to help where is needed.
- IEC has made significant progress in utilizing Hydrogen, Ammonia and e-methanol on its Gas Turbines and additional experiment are in Progress **with Inhouse expertise**.
- IEC has created a working group arena with peer companies that are interested to dive on specific topics like **Extreme Weather Events** and **Hydrogen Challenges**.

Working Group Goals & Agenda Program

- Collaboratively address the challenges and explore solutions for topics like integrating Hydrogen into Power Stations or Extreme Weather Events.
- Special emphasis on best practices related to all aspects that goes from planning to tangible action plans.
- Foster valuable discussions within the working group & spark broader conversations with colleagues.
- Write up of a joint report summarizing the topics discussed, integration of possible technologies, R&D activity and next steps.



Topics for Discussion

- Storage of hydrogen, its derivatives and carriers
- Transportation methods
- Distribution and infrastructure considerations
- Combustion challenges in the context of hydrogen-based power generation



Format

- Online meetings
- 30 min.** Guest expert presentation
- 60 min.** Open discussion

EXAMPLE





Thank you

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