Energy Efficiency in Manufacturing

EY's Holistic Approach

13 / 06 / 2024

Building a better working world

Today’s speakers

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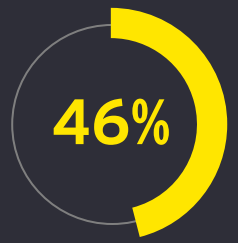
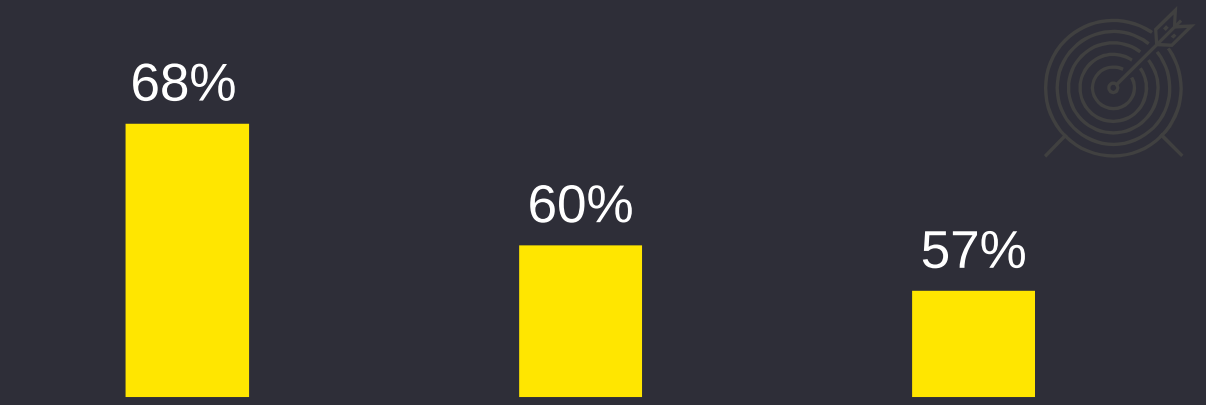
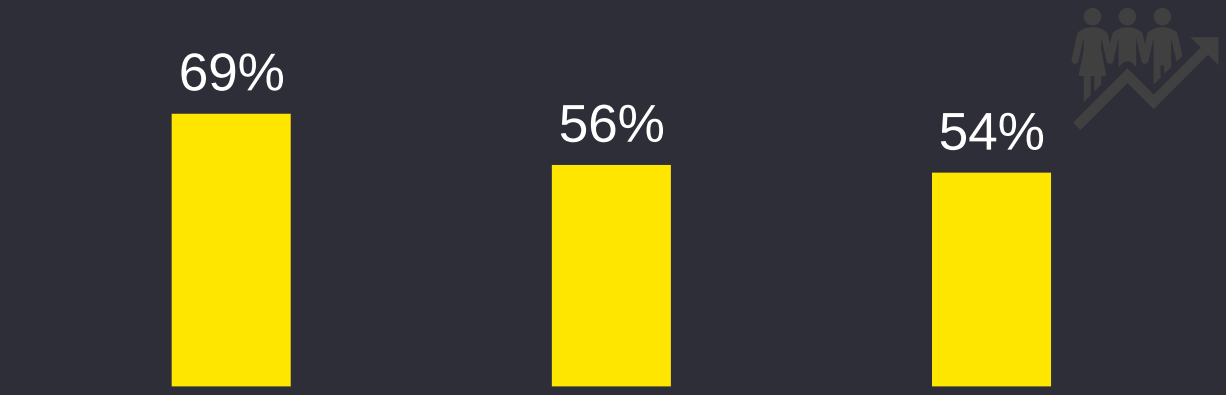
EY-SEV survey: Greek manufacturers response to **Sustainable Manufacturing**



High familiarity with sustainability & ESG principles



Already creating strategies towards sustainability



The recent study conducted by **EY Greece**, in collaboration with **SEV - Hellenic Federation of Enterprises**, analyzes the next day of the Greek manufacturing sector. The study features the views of 112 representatives of manufacturing enterprises in Greece, on three key pillars: manufacturing excellence, digital transformation, and **sustainability**.

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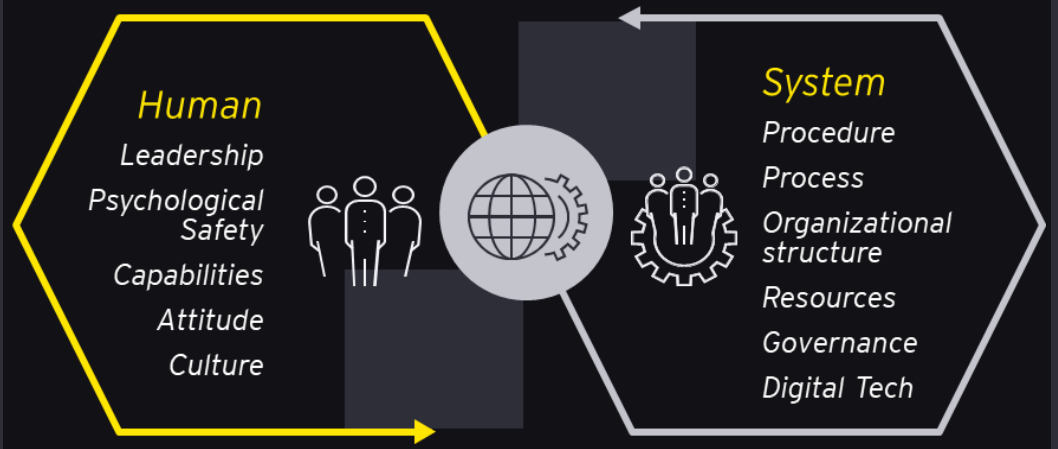
ΣΕΒ
Σύγχρονες Επιχειρήσεις, Σύγχρονη Ελλάδα

What Energy Efficient Manufacturing looks like

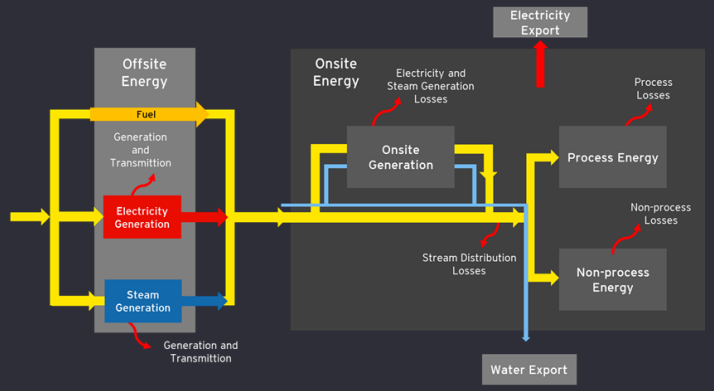
- ✓ Sustainable factory design
- ✓ Sustainable materials
- ✓ Digital Manufacturing
- ✓ Smart Energy Management Systems
- ✓ Industry 4.0
- ✓ Predictive maintenance
- ✓ Sustainable logistics
- ✓ Circularity
- ✓ Circular water management models
- ✓ Sustainable water sourcing

Humans @ center

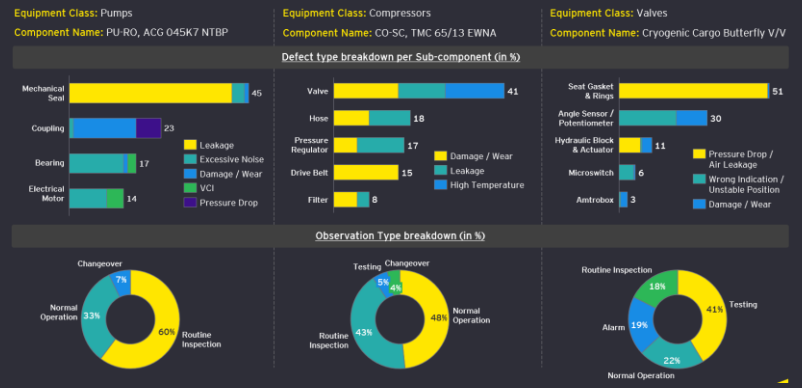


Energy loss analysis exercise

Energy flow mapping



Data analysis



Ideal & Future State

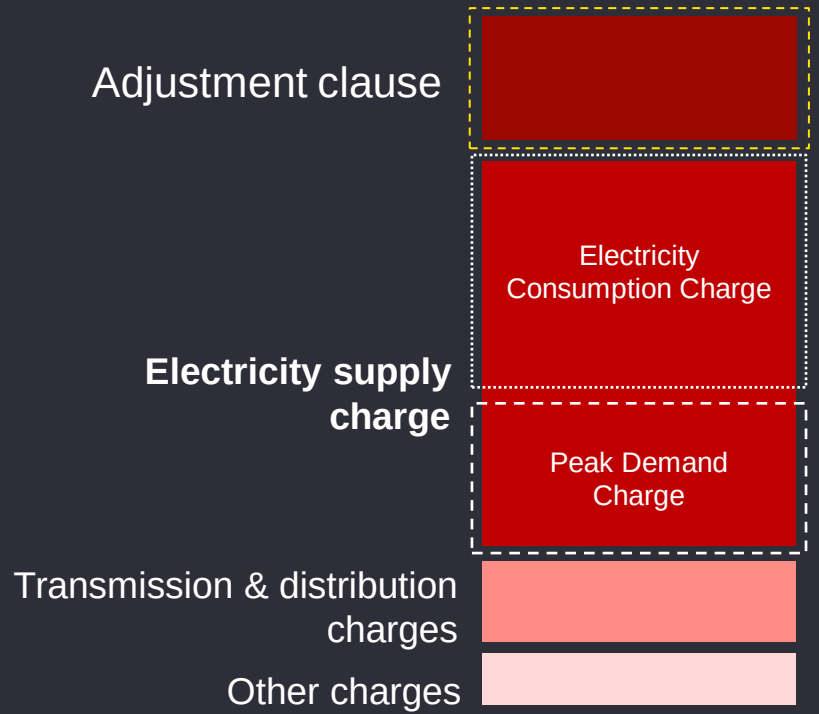
- ✓ Action planning
- ✓ Targeted KPIs
- ✓ Sustainability

Current State

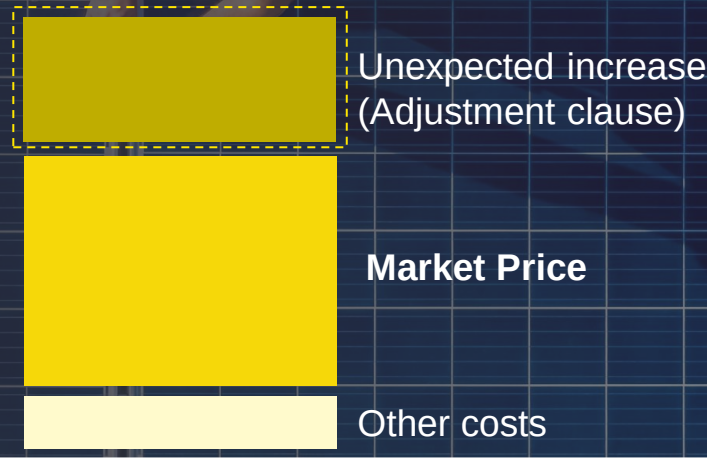
- ✓ Teams' training
- ✓ Data interpretation
- ✓ Brainstorming

Electricity Cost for Customer and Provider

Cost of Electricity Customer



Cost of Electricity Provider



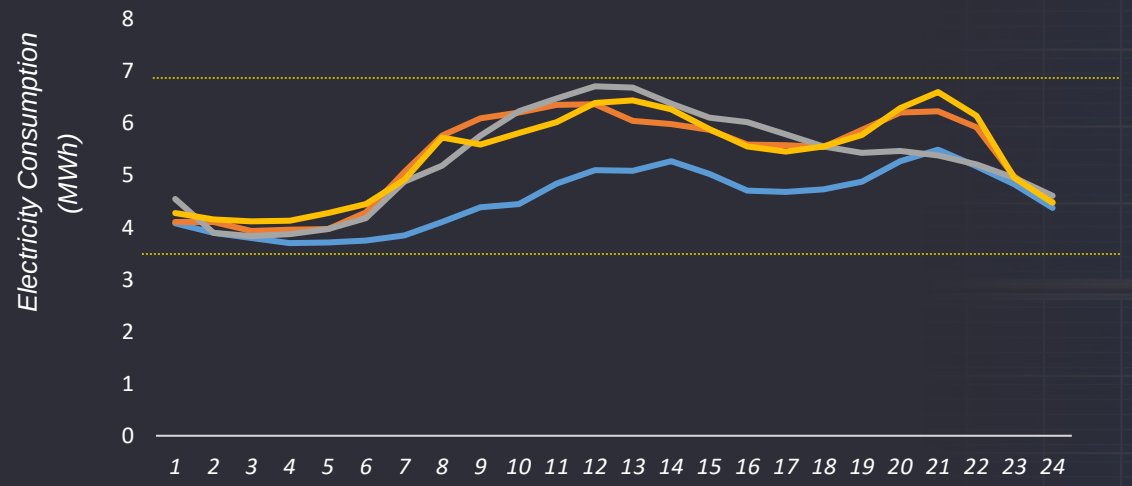
Energy Consumption

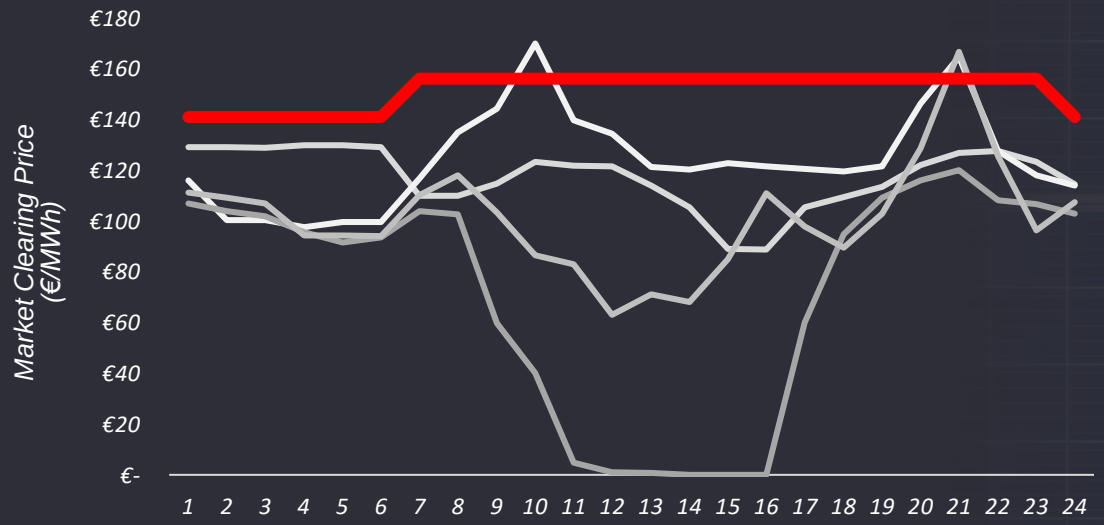
Can be optimized

Can be negotiated with retailer

Can be complementary purchased
(PPAs, own RES, energy communities)

Wholesale Electricity price : Understanding Retail Electricity Supply





Daily energy consumption, per month:

- ✓ Consumption pattern view, to optimize energy price procurement

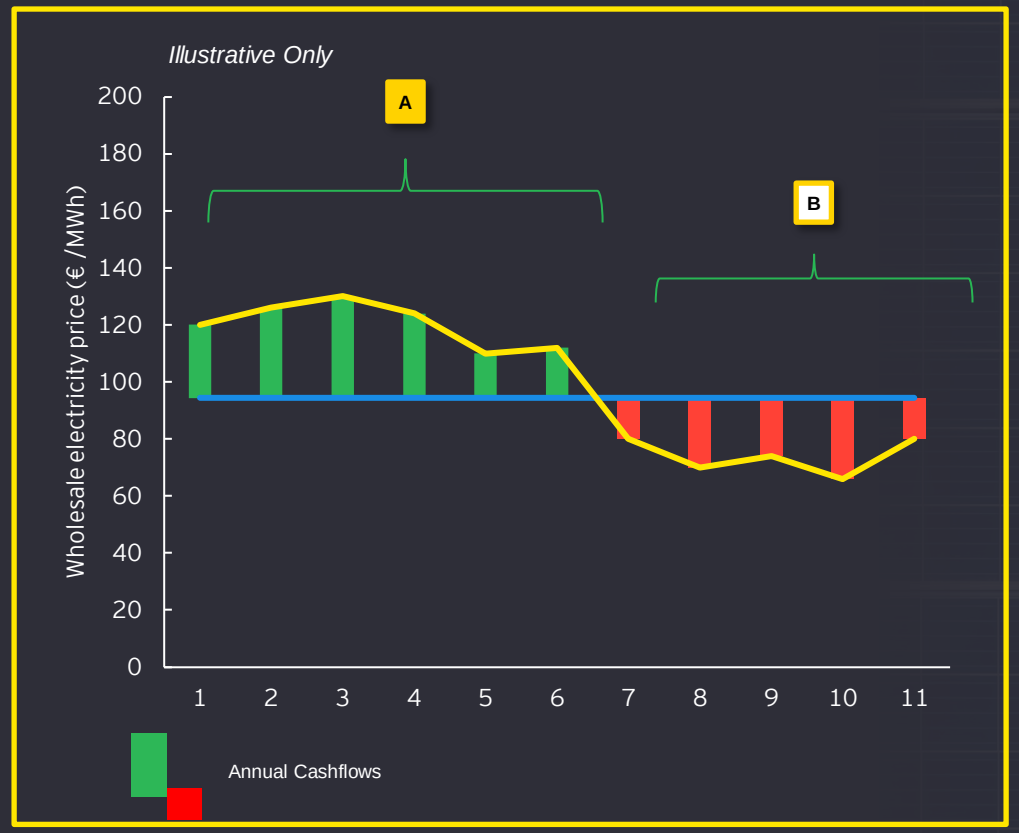
Daily wholesale energy prices, per month:

- ✓ **Red line is the Retail energy price received**

Virtual PPA is a Contract-for-Difference (CfD) financial settlement

Cash flows on the CfD offset higher/lower payments under the retail supply agreement

Virtual PPA Cashflows



Corporate Perspective

A ▶ Payments from the Generator to the Corporate in scenario ‘A’

B ▶ Payments from the Corporate to the Generator in scenario ‘B’

PPA Price Structure

- ✓ Fixed Price
- ✓ Floating with a cap and floor
- ✓ Hybrid structure (fixed period and floating period)

EY global network of experts creates and delivers end to end sustainable transformations, across the Value Chain

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Thank you!

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