



INSIGHT





# MARGIN MAXIMIZER

An approach to boost your business performance

Global industry sectors are undergoing significant transformation and changes, creating opportunities for those who understand how to take advantage of disruption

GLOBAL INDUSTRY SECTORS OFFER ENORMOUS POTENTIAL OPPORTUNITIES

- Traditional manufacturing companies are under intense pressure, thanks to a seismic shifts across multiple industries
- This is putting enormous stress on established players, who now face a steady global stream of fast-growing challengers
- However, it has been shown that many of the restructurings undertaken fail
- But it is also clear that many failures could easily be avoided if the fundamentals of product cost structure (Euro/CO<sub>2</sub>) were better understood, AND if comprehensive profitability programs were applied more consistently
  - In order to be competitive across all sectors in the future, and enter the market as a cost-out champion, two areas stand out as being of significant importance:

     Cost/CO : Inpovative and state of the art technology are the only way to achieve a competitive factory and be achieved as a cost-out champion.
    - ✓ Cost/CO₂: Innovative and state-of-the-art technology are the only way to achieve a competitive factory cost base and define sustainable overheads
    - ✓ Price Performance: Optimizing costs for materials, manufacturing and overheads results in a net sales price that allows your product to successfully penetrate the market, and ensures your long-term business profitability
  - Healthy margins can only be achieved through a combined and detailed understanding of product, tooling, investment and CO<sub>2</sub> costs

FOCUS OF THIS PRESENTATION: **PERFORMANCE-ENHANCING LEVERS** THAT BECOME APPARENT, **ONCE THERE'S A CLEAR UNDERSTANDING OF PRODUCT COSTS** 

IS A HOLISTIC

THE KEY TO ACHIEVING

UNDERSTANDING OF

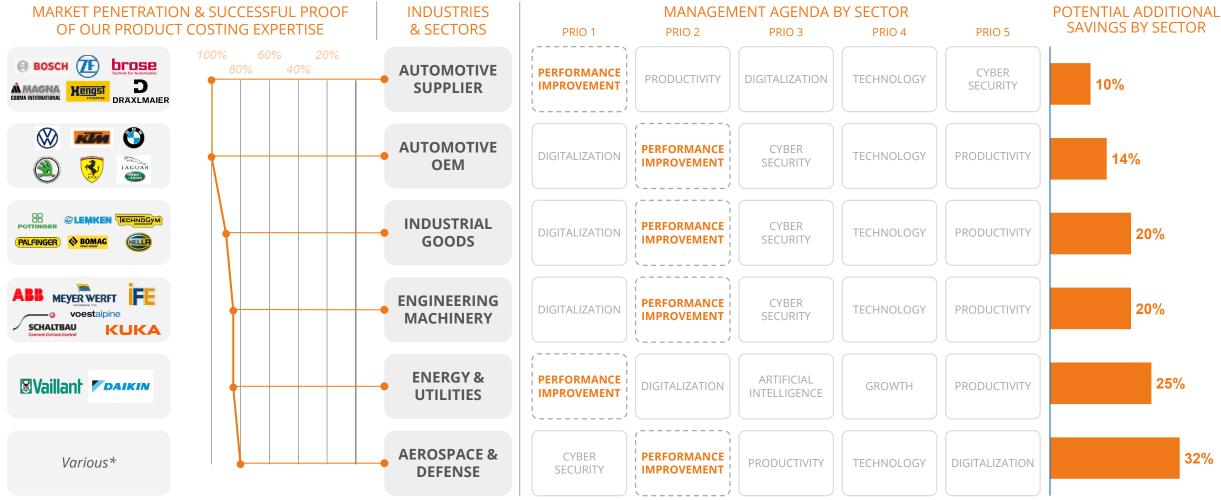
**PRODUCT COSTS** 

FUTURE-READY MARGINS

- The following paper presents our view on cost structure based on >20 years of consulting experience in cost engineering and management consulting as well as key insights on cost out maturity
- Past collaboration with OEMs, suppliers, specialists and start-ups across various industries puts us in a position to attack the areas of greatest potential with the right approaches

When it comes to identifying and realizing unused cost potential, nobody does it better than EFESO. Let us show you why we're the right partner to have by your side.

# Performance improvement is a top priority for management across all sectors. With our extensive experience, we're perfectly placed to help you achieve significant savings



Our goal is to unlock the full potential of your company. To do so, we take a holistic approach that analyses all of your major performance indicators, such as **price, costs and CO<sub>2</sub>**.

We are second-to-none in supporting our clients, based on our unique combination of endto-end consulting solutions along with a proven, consistent ability to deliver



Have we got your attention yet? Would you like to learn how YOU can benefit from this consulting service? Then allow us to introduce you to our **MARGIN MAXIMIZER**.

In tough times, when cost pressures and tight finances are the norm, trialling the MARGIN MAXIMIZER is a zero-cost way of seeing just how much we can do for you!

02

#### WE WILL CHECK YOUR MARGIN!

A ZERO RISK OFFER TO DEMONSTRATE OUR SKILLS

#### **ONE PART**

Let's define a specific part together. We'll calculate it

01

Our experts will evaluate one component of your choice, using 25 years of industry experience and cost engineering techniques. All we need is basic information about the selected part... we will take it from there.

#### THIS IS YOUR OPPORTUNITY TO SEE WHAT OUR MARGIN MAXIMIZER CAN DO

We all know the key to profitability and competitiveness is maintaining healthy margins. This requires continuous performance assessment and cost control. By analyzing the individual components of a product, and breaking down its costs - such as materials, manufacturing, overheads, and CO<sub>2</sub> emissions - companies can identify areas for improvement and find ways to maximize margins.

03

#### ONE WEEK

Within seven days, we will send you a comprehensive analysis of the chosen component

We will analyze the provided data without obligations. Based on your data, we will advise you of your chosen component's costs and  $CO_2$  consumption, assessing and comparing it with any and all benchmarking.

#### **ONE SOLUTION**

Our analysis will provide you with concrete levers for maximizing your margin

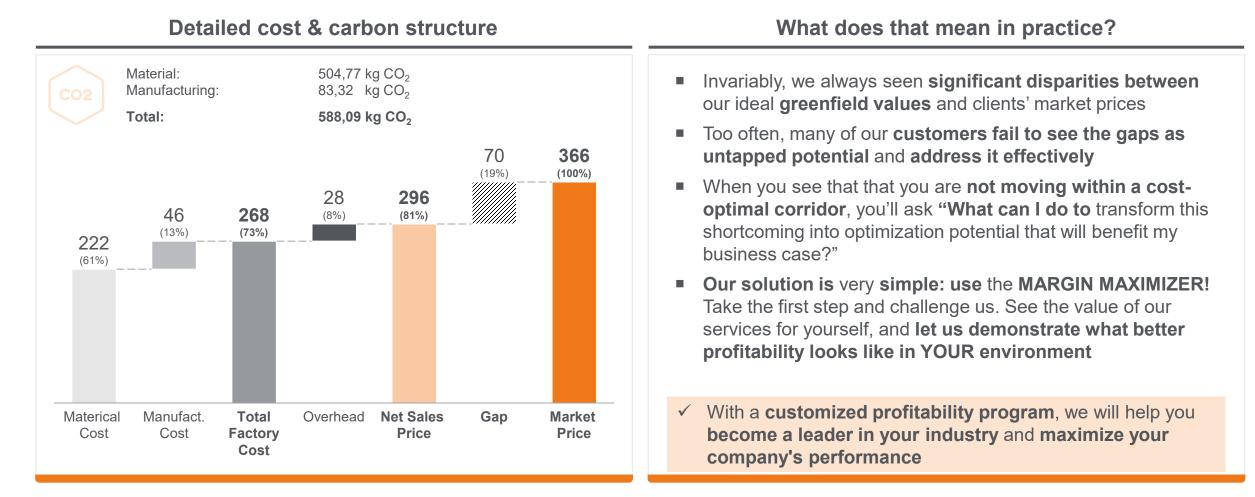
There's no catch... we WANT to share our report with you. It will contain detailed recommenddations that explain how you can enhance your profitability, offering insights into cost-out opportunities, optimizing your CO<sub>2</sub> footprint, refining manufacturing techniques, and boosting production volume.

#### **OUR SPECIALISTS**

Working with highly qualified EFESO Consultants is your guaranteed route to success

Speak with an expert in your industry who can help you move your company toward your specific goals. We implement our expertise in a particular and targeted way and tailor the choice of methods to your individual requirements. In this way, we can support your long-term success.

The benefits of our analysis will become abundantly clear when you see the final figures, data and conclusions. Trust us, you'll WANT to take action and get on with the process of identifying the rest of your untapped potential! Based on an example from the past, we can be specific – but the same picture of non-costoptimized product cost structures emerges across all analyses



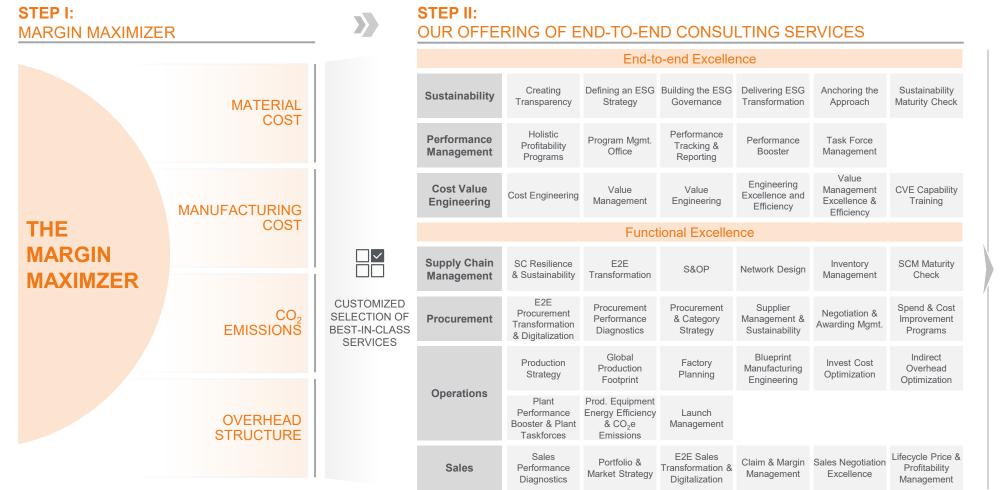
The **MARGIN MAXIMIZER** is our best-in-class solution for targeted gap closure – **EFESO** is the only consulting firm that fully integrates all the drivers of success to boost your business case!

When it comes to end-to-end success, cost-out projects require far more then just product cost-calculation capabilities. We provide MUCH more.

#### **Results summary of our analysis**

<b>Focus</b>	Product cost >2,000 specific processes and products	<b>Tooling cost</b> >620 specific benchmarks		Invest cost >1,500 unique datasets		<b>CO<sub>2</sub></b> All product, tooling and invest data
Optimi- zation	Commercial optimization based on best-practice calculation	Value-stream optimization based on supply chain transparency		Technical optimization based on in-depth technology expertise		Integrated cost and PCF optimization based on best- practice calculation
Tools & systems	Established solutions and databases such as TcPCM, SPHERA & Gabi, etc.		Unique solutions and databases such as our I-CAT (~600 CAPEX projects, ~500 datasets and ~8,800 pcs. component cost data)		Highly innovative solutions such as Tset (AI-based software, automating cost and $CO_2$ calculations)	
Savings <sup>1)</sup>	<b>15-30%</b> Manufacturing process	<b>7-35%</b> Direct materials		<b>15-35%</b> Tooling		25-35% Invest cost

Based on the results of the MARGIN MAXIMIZER analysis, we'll tell you exactly which selection of our unique services will pave the path to your future profitability

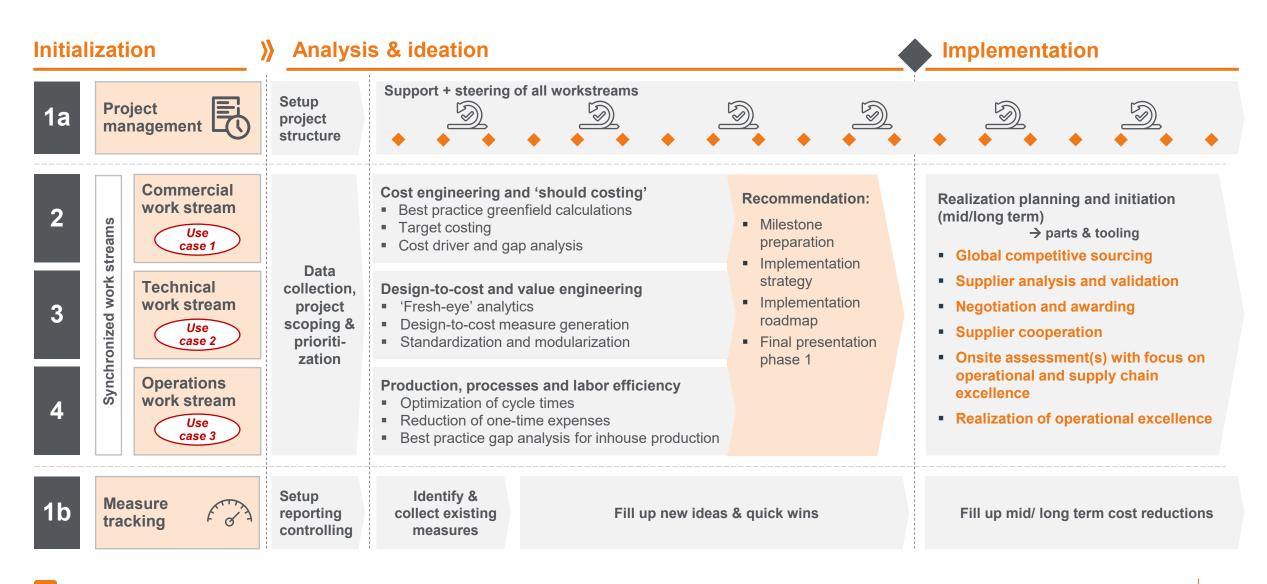


STEP III: CONTINUATION



To give you an idea of what a holistic profitability program with a **PRODUCT COST OPTIMIZATION** focus can look like, we'd like to show you a recent example of one that we successfully completed

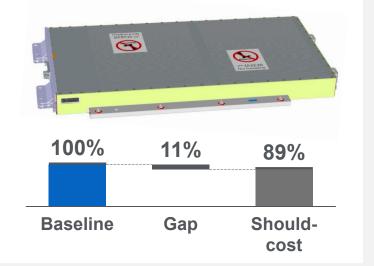
For an effective 'Product Cost Optimization' project, we recommend a project setup with three synchronized workstreams, supported by a strong project management



We recently helped an OEM to optimize its HV battery cost, during the development of its new vehicle



Use case 1 commercial work stream



#### **Initial situation**

- Client wanted the most cost-competitive battery design and price, mandatory in order to make an affordable EV
- Initial audit indicated that the current pricing from the battery system supplier was way too high
- Combined approach for technical and commercial optimization of the HV battery system was identified

#### Approach / method

Set-up of holistic cost-down approach:

- 360° HV analysis & product costing
- Design-to-cost measure development
- Business case calculations and forecasts, factoring in volatile raw material markets
- Risk mitigation strategies to secure supply, avoid raw material-related price increases
- Preparation of management negotiations, storyline w/ market and techn. insights

### **Customer value added**



Full cost, technical and commercial transparency



~11% cost reduction opportunities identified

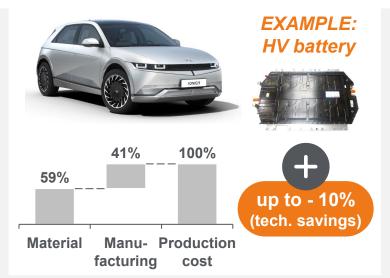


Risk mitigation plans and story developed for successful negotiations

We were tasked with analyzing every aspect of the IONIQ 5 in detail, and to develop commercial and technical cost-down measures (e.g., for an 800V battery)







#### Initial situation

- We have analyzed the IONIQ 5 for various automotive OEM and Tier 1 suppliers
- The entire vehicle was evaluated with regards to cost, invest and CO<sub>2</sub>e
- > Required a full tear-down and benchmarking of the entire vehicle

#### Approach / method

Benchmarking and cost structure analysis:

- Bottom-up cost calculation
- Set-up of battery module architecture
- Best practice production processes
- Invest cost model set-up
- CO<sub>2</sub>e emission
- Benchmarking
- 'Fresh-eye' analytics

# **Customer value added**



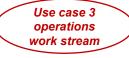
Full cost and technology transparency gained into an innovative electric vehicle



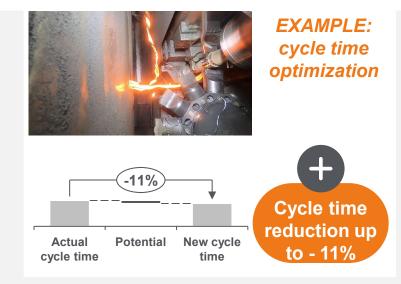
Detailed cost basis for benchmarking and definition of target costs established



Basis for the development of technical optimization ideas, leading to technical savings of up to 10% We were tasked with analyzing every aspect of the IONIQ 5 in detail, and to develop commercial and technical cost-down measures (e.g., for an 800V battery)







#### Initial situation

- Existing machining process at customer with less than competitive cycle times
- Potential for machining process optimization hard to see at first stage but other high hidden potential uncovered
- Focus was mainly on the secondary times (e.g., tool movement)

#### Approach / method

Video analysis of machining process:

- Step 1: record a video of the machining process and part changeover
- Step 2: derive potentials from the video footage with a special analysis tool
- Step 3: review potential optimizations with operations and feasibility analysis
- Step 4: implement potential optimizations in production

# **Customer value added**



Deep dive into cycle time of existing machining process



Detailed video analysis performed, with overall 18 new ideas generated



Ideas and savings can be adapted and ported to similar machining processes

