EFESO
MANAGEMENT CONSULTANTS

UNLOCKING OPPORTUNITIES IN THE UK OFF-HIGHWAY VEHICLE AND EQUIPMENT SECTOR

The UK Off-Highway Vehicle and Equipment sector is entering a period of rapid growth and transformation. Revenues from the off-highway electric market are expected to soar from £122.4 million in 2023 to £324.6 million by 2030, reflecting a compound annual growth rate (CAGR) of 14.9%. This expansion is being driven by the global push for sustainability and electrification, coupled with technological advancements in vehicle design and manufacturing. In the UK, the additional 1.5 million new homes recently promised by the new Labour government will further drive this significant growth in the coming years.

However, the sector is not without its challenges. On November 21, 2024, Northvolt, Europe's most advanced battery manufacturer, declared bankruptcy, which has sent shockwaves across the entire industry and could especially affect the immediate future of the Off-Highway Vehicle and Equipment sector. Northvolt's collapse highlights the intense pressures European manufacturers face as they race to meet rising demand for electrified vehicles against very effective Chinese competitors. For the UK market, this adds further complexity to an environment already shaped by cost pressures, regulatory requirements, and supply chain volatility. Addressing these challenges demands clear strategies and practical solutions.

AN EVOLVING LANDSCAPE

Over the last five years, the UK Off-Highway Vehicle and Equipment market has experienced significant shifts. Brexit has reshaped trade routes by increasing costs and creating logistical challenges. The lingering effects of the COVID-19 pandemic have disrupted supply chains and dampened demand in some sectors, delaying recovery efforts. The many geopolitical unrests add uncertainty to both international commodity markets and the timing of manufactured goods deliveries.

Meanwhile, the drive toward sustainability has accelerated. All manufacturers are under pressure to reduce emissions and adopt cleaner technologies. Transitioning to electrified and hybrid models requires substantial investment in new systems, facilities, and materials, amplifying operational complexity and financial strain. Compounding these issues are rising costs for labour, materials, and energy, alongside growing global competition and unpredictable market demands.

In this context, EFESO's targeted strategies – focusing on maximising revenue, reducing operating costs, and improving product costs – offer a roadmap for manufacturers seeking to navigate this volatile environment and secure long-term profitability. It is, of course, always about costs, but there are also other issues that require careful consideration.

MAXIMISING REVENUE

In a competitive market, revenue growth requires aligning product portfolios with customer demands while streamlining offerings to focus on high-margin opportunities. EFESO's expertise in market and portfolio reviews enables manufacturers to eliminate redundancies, reduce complexity, and target emerging growth areas, such as electrified Off-Highway Vehicle.

For instance, EFESO's benchmarking projects for electric trucks and tractor cabins have helped manufacturers refine product features, optimise pricing strategies, and expand into new market segments. These initiatives also demonstrate the potential of premium features like advanced telematics and sustainability credentials to unlock additional revenue streams.

REDUCING OPERATING COSTS

Reducing costs across the supply chain and manufacturing operations is essential to remain competitive. EFESO's methodology includes lean production techniques, digital tools like predictive maintenance systems, and advanced supply chain management strategies to optimise efficiency and reduce waste.

EFESO's production footprint optimisation has yielded significant savings by aligning facility locations with demand patterns, cutting unnecessary transportation and logistics costs.

Another example highlights EFESO's role in sourcing components for an electrified truck platform. By engaging suppliers early in the design process and negotiating favorable agreements, EFESO delivered substantial savings on material costs while maintaining product quality and timelines.

IMPROVING PRODUCT COSTS WITHOUT COMPROMISING ON QUALITY

Product cost optimisation focuses on simplifying design and manufacturing processes without compromising quality. EFESO employs techniques like design-to-cost and modularisation to standardise components and streamline assembly, making production more cost-efficient.

EFESO's work in redesigning sprayer booms for agricultural vehicles exemplifies this approach.

By optimising the design, EFESO reduced tooling costs and shortened production cycles, achieving both operational and financial efficiencies. Similarly, benchmarking projects for tractor cabins and vehicle chassis enabled manufacturers to achieve more competitive cost structures, ensuring market-leading quality at lower production costs.

CLEAR STEPS FOR IMPLEMENTATION

EFESO's strategies are implemented through a structured process designed to deliver measurable results:

01. Initialisation and prioritisation

The process begins with defining project scope and identifying key pain points. Through benchmarking and cost driver analysis, EFESO lays the groundwork for impactful changes, as demonstrated in a recent modular vehicle platform project.

02. Detailed analysis and measure generation

EFESO conducts in-depth evaluations of cost-saving opportunities, focusing on areas like product cost optimisation and supplier negotiations. In one case, EFESO's design-to-cost analysis for electric truck components uncovered savings of 15% by standardising parts across models.

03. Realisation

Savings opportunities are assessed alongside implementation costs and timelines to create actionable roadmaps. For example, EFESO's work on continuously variable transmission systems provided a detailed plan to reduce costs without sacrificing performance.

04. Execution and monitoring

EFESO ensures seamless implementation through robust tracking mechanisms and close collaboration with suppliers. Their advanced sourcing strategies for electrified pallet trucks resulted in cost reductions that exceeded initial targets.

05. Training and capacity building

To sustain improvements, EFESO embeds cost management practices within organisations and provides targeted training for staff. This approach fosters a culture of operational excellence and continuous improvement.

PROVEN RESULTS

EFESO's track record demonstrates the tangible benefits of its strategies. Projects like the redesign of tractor axles and cost structure analysis for hydrostatic units have delivered savings of up to 33%. In another case, EFESO's modularisation approach for electric pallet trucks simplified assembly processes, reducing complexity and achieving 17% cost savings. During one of our previous missions, cost structure analysis for hydrostatic units achieved a 22% reduction in operational costs by streamlining supply chain networks and redesigning production workflows.

These examples underscore the practical impact of EFESO's methodologies, offering manufacturers clear pathways to enhanced profitability and market competitiveness.

HOW TO UNLOCK THE POTENTIAL?

The UK Off-Highway Vehicle and Equipment sector presents both immense opportunities and significant challenges. The industry's rapid growth, driven by the transition to electrification, requires manufacturers to overcome obstacles ranging from cost pressures to supply chain disruptions. The recent bankruptcy of a supposed future European key battery supplier further emphasises the importance of resilience and innovation in this dynamic landscape.

EFESO's three levers—maximising revenue, reducing operating costs, and improving product costs—provide manufacturers with a comprehensive framework for navigating these challenges. By implementing these strategies, companies can secure their market positions, streamline operations, and achieve sustainable growth.

The time to act is now. With EFESO's expertise and structured approach, manufacturers can unlock the full potential of the UK Off-Highway Vehicle and Equipment sector, building a profitable and resilient future for their company.

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