

NETO MANAGER COMPETENCE MAP

Carbon Management Training course for entrepreneurs of a net zero tomorrow



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Created by project Partners:



University of Applied Sciences and Arts
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SUPSI

INTRODUCTION TO THE NET0 MANAGER COMPETENCE MAP

Background

Net0Manager Competence Map is setting the pathways structure to Net Zero training course and aims to equip learners with the knowledge, skills, and responsibility necessary to understand and implement initiatives aimed at achieving Net Zero emissions. This innovative 6-fold Net Zero training toolkit offers a modular training path on understanding of Net Zero concept and acquiring all the necessary skills to truly embrace Net Zero. This training initiative aims to empower SMEs to mitigate their carbon emissions and actively participate in the global action towards achieving Net Zero emissions. By providing SMEs with access to expert knowledge and practical skills, the program equips them to effectively address climate change challenges and implement sustainable practices within their operations.

Target group

This course is designed for SME managers, their employees, and entrepreneurs across all sectors and has no formal entry requirements; however, it is recommended that the participants have experience in a practicing role that will enable them to understand and to apply Net0 knowledge and skills in a practical environment.

Structure:

The course is divided into six modules:

- 1. Understanding Net Zero Concept:** Learners will gain a comprehensive understanding of the Net Zero concept, including its importance and implications.
- 2. Possible Responses and Measures to Net Zero:** Participants will explore various measures and responses towards achieving Net Zero, encompassing different aspects of business operations. Each subsection within the module explores the sources of carbon emissions related to the respective area and offers potential solutions.
- 3. Creating a Plan for Net Zero:** This module covers the steps involved in creating a comprehensive plan for achieving Net Zero emissions, including assessing current emissions, establishing targets, identifying reduction strategies and assessing financial implications.
- 4. Advantages of Becoming Net Zero:** Learners will explore the benefits and advantages associated with

transitioning to Net Zero emissions focusing on financial benefits and market competitiveness, social benefits, stakeholder engagement, resilience, and environmental sustainability.

5. Net Zero Across the Value Chain: Participants will learn about the importance of considering Net Zero initiatives across the entire value chain, including topics such as supply chain resilience and adaptation, regulatory compliance, sustainable sourcing strategies, product lifecycle considerations, and energy and waste management through the supply chain.

6. Communicating Net Zero: This module focuses on the importance of effectively communicating the Net Zero concept within organizations, including topics such as valuing sustainability, profitability of sustainable measures, company culture and problem framing, and the importance of individual initiative.

Throughout the course, learners will engage in a variety of learning activities, including lectures, discussions, case studies, practical exercises, and assessments. By the end of the course, participants will have the knowledge, skills, and responsibility to contribute effectively to achieving Net Zero emissions in their respective organizations and industries.

MODULE	LEARNING UNIT	LEARNING OUTCOMES The learner is expected to ...		
		Knowledge	Skills	Responsibility and autonomy
M1: Understanding Net Zero concept	1.1. Definition and principles of the Net Zero concept	1.1.K1. Define the basic concepts and principles of Net Zero concept	1.1.S1. Assign the various interpretations of net-zero to specific sectors/functions correctly within SMEs	1.1.RA1. Develop strategies and recommendations for promoting a unified understanding of net-zero concepts and goals among within an SME
	1.2. The Net-zero Transition	1.2.K1. Identify policy and governance frameworks supporting the transition to Net Zero among SMEs	1.2.S1. Classify current trends and developments in the Net Zero practices specifically tailored for SMEs personnel	1.2.RA1. Recommend practical steps/actions SMEs personnel can take to support the transition to Net Zero
	1.3. Net zero Glossary	1.3.K1. List the most common key terms and concepts associated with achieving net zero	1.3.S1. Use the correct technical key words related to net zero process and beyond	1.3.RA1. Explain the most appropriate key terms and concepts for implementing net zero process
M2: Possible responses and most common measures to Net Zero	2.1. Emissions of Equipment	2.1.K1. Understand the sources of carbon emissions related to equipment and potential solutions	2.1.S1. Explore advantages, disadvantages, and resource and expertise demand of different strategies to reduce emissions related to equipment	2.1.RA1. Select more appropriate solutions to reduce energy consumption and emissions by equipment

	2.2. Emissions in Manufacturing Process	2.2.K1. Understand the sources of carbon emissions related to the manufacturing process and potential solutions	2.2.S1. Explore advantages, disadvantages and resource and expertise demand of different strategies to reduce emissions related to the manufacturing process	2.2.RA1. Select more appropriate solutions to reduce energy consumption and emissions of the manufacturing process
	2.3. Emissions in Logistics	2.3.K1. Understand the sources of carbon emissions related to the company logistics and potential solutions	2.3.S1. Explore advantages, disadvantages and resource and expertise demand of different strategies to reduce emissions related to logistics	2.3.RA1. Select more appropriate solutions to reduce emissions caused by company logistics
	2.4. Emissions of staff travelling and workers behavior	2.4.K1. Understand the sources of carbon emissions related to the staff travelling and behavior and potential solutions	2.4.S1. Explore advantages, disadvantages of different strategies to reduce emissions related to staff travelling and behavior	2.4.RA1. Select more appropriate solutions to reduce emissions caused by the staff travelling and behavior
	2.5. Compensation strategies	2.5.K1. Identify possibilities of compensation for residual emissions	2.5.S1. Explore different possibilities and implications of carbon compensation strategies	2.5.RA1. Select initiatives to compensate for residual emissions
M3: Creating a plan for Net Zero	3.1. Assessing Current Emissions	3.1.K1. Describe methods for conducting a baseline assessment of current emissions.	3.1.S1. Collect data related to energy consumption, transportation, and waste generation. 3.1.S2. Analyze data related to energy consumption,	3.1.RA1. Recognize the importance of accurately assessing current emissions to inform the development of a Net zero plan.

			transportation, and waste generation.	
	3.2. Establishing Net Zero Targets	3.2.K1. Understand the process of setting clear and achievable Net zero targets.	3.2.S1. Develop short-term and long-term goals for emissions reduction.	3.2.RA1. Recognize the significance of setting ambitious yet realistic targets to drive action towards Net zero.
	3.3. Identifying Emissions Reduction/ Net0 Strategies and Action Plans	3.3.K1. Learn about different strategies for emissions reduction, such as energy efficiency and renewable energy integration.	3.3.S1. Develop action plans tailored to address specific sources of emissions.	3.3.RA1. Recognize the importance of implementing effective strategies to achieve emissions reduction goals.
	3.4. Assessing Financial Implications	3.4.K1. Understand the financial implications of Net zero initiatives and the importance of budgeting and resource allocation.	3.4.S1. Identify funding sources and investment opportunities for Net zero projects.	3.4.RA1. Recognize the need for responsible financial management to support the implementation of Net zero plans.
M4: Advantages of becoming Net Zero	4.1. Economic, Financial Benefits and Market Competitiveness	4.1.K1. Elaborate basic financial principles relevant to becoming Net Zero 4.1.K2. Understand the economic incentives provided by governments and international bodies to encourage Net Zero transitions	4.1.S1. Compare the financial and economical advantages of transitioning to a Net Zero approach. S2. Recognize the potential for market competitiveness and brand enhancement	4.1.RA1. Promote the benefits of Net Zero within the organization and engage with stakeholders

			through Net Zero initiatives.	
	4.2. Stakeholder Engagement and Social Impact	4.2.K1. Identify the broader social implications of Net Zero initiatives 4.2K2. Gain insights into effective communication strategies for engaging various stakeholders in Net Zero projects	4.2.S1. Develop the ability to identify and analyze the interests, influences, and expectations of different stakeholders in the context of Net Zero initiatives	4.2.RA1. Manage collaboration with external stakeholders including suppliers, customers, investors and regulators, to advocate for supporting policies and incentives to achieve Net Zero
	4.3. Environmental Sustainability, Resilience, and Long-term Benefits	4.3.K1. Comprehend the principles and methodologies for achieving Net Zero in the context of environmental sustainability and resilience 4.3.K2. Gain insight into global, national, and local policies and regulations that encourage or mandate the shift towards Net Zero	4.3.S1. Articulate the Significance of Fundamental Strategies in Minimizing Environmental Footprint and Enhancing Sustainability 4.3.S2. Advocate the transition to Net Zero methodologies over traditional practices, illustrating how such a shift significantly amplifies ecological resilience and sustainability	4.3.RA1. Assess how transitioning to Net Zero enhances environmental sustainability 4.3 RA2 Encourage collaborative Net Zero initiatives within organizations and sectors to boost sustainability and resilience.
M5: Net Zero across the value	5.1. Supply Chain Resilience	5.1.K1. Comprehend the interpretation and	5.1.S1. Develop the ability in Supplier Environmental	5.1.RA1. Conduct supply chain mapping exercises

chain	and Adaptation	<p>practical meaning of carbon emissions across different stages of the value chain.</p> <p>5.1.K2. Gain insight into strategies and tools for reducing carbon emissions within the supply chain, e.g. local sourcing, transportation optimization, and supplier engagement</p>	<p>Performance Evaluation - assessing suppliers' environmental practices and integrating sustainability criteria into supplier selection</p>	<p>and analysis using available data and tools and suggest strategies for reducing emissions –</p> <p>5.1.RA2. Independently collect and analyze data from suppliers, transportation partners, and other stakeholders to assess carbon footprint</p>
	5.2. Sustainable Sourcing Strategies	<p>5.2.K1. Learn about strategies to source materials and components from environmentally responsible suppliers</p>	<p>5.2.S1. Develop and implement strategies to source materials and components from environmentally responsible suppliers</p>	<p>5.2.RA1. Identify sustainable sourcing opportunities, negotiating contracts with suppliers, and making autonomous decisions to prioritize suppliers with lower carbon footprints.</p>
	5.3 Product lifecycle, design and innovation	<p>5.3.K1. Understand the principles of assessment of product lifecycle and associated environmental impacts and risks</p>	<p>5.3.S1. Design products with a focus on environmental sustainability, including materials selection, product longevity, and end-of-life considerations.</p> <p>5.3.S2. Develop sustainable products and processes that</p>	<p>5.3.RA1. Conduct lifecycle assessments to identify environmental impacts throughout the product lifecycle</p> <p>5.3.RA2. Analyze data and identify areas for improvement in terms of carbon emissions, also</p>

			reduce carbon footprint	regarding innovations
	5.4 Energy and waste management through the supply chain	<p>5.4.K1. Understand energy and waste management principles and techniques for improving energy efficiency in operations.</p> <p>5.4.K2. Familiarize with renewable energy technologies and their potential applications within the organization.</p> <p>5.4.K3. Know of waste reduction strategies, including waste minimization, recycling, and waste-to-energy initiatives.</p>	<p>5.4.S1. Assess suppliers' environmental practices and performance, including carbon emissions, energy efficiency, and waste management.</p> <p>5.4.S2. Identify and implement energy-saving measures, such as equipment upgrades, process optimization, and energy monitoring systems.</p> <p>5.4.S3. Evaluate the feasibility of renewable energy projects and integrating them into the energy mix.</p> <p>5.4.S4. Implement waste management practices to minimize carbon emissions</p>	<p>5.4.RA1. Evaluate suppliers based on predetermined sustainability criteria and to make autonomous decisions regarding supplier selection and engagement.</p> <p>5.4.RA2. Identify and Implement opportunities regarding energy and waste management in the company's operations</p>

			and environmental impact	
M6: Communicating Net Zero	6.1. Profitability of a sustainable-friendly business model	6.1.K1. Comprehend the reasoning behind the profitability of sustainable measures (or comprehending long-term profitability of sustainability)	6.1.S1. Advocate for the added value of implementing specific initiatives.	6.1.RA1. Assess the long-term profitability of a specific Net 0 initiative
	6.2. Net Zero company culture & problem framing	6.2.K1. Identify the underlying problems in the realm of corporate jargon and sustainability	6.2.S1. Formulate potential challenges stemming from erroneous framing of Net Zero culture within a company	6.2.RA1. Frame the current fallacies in the company framing of the Net Zero approach in its culture
	6.3. Importance of individual initiative	6.3.K1. Understand the significance of leading by example and the importance of individual initiative in the Net Zero sphere	6.3.S1. Convey efficiently and effectively the importance of individual actions in the realm of sustainable Net Zero practices	6.3.RA1. Convince others of the undeniable short- and long-term impact of individual initiative