

Net Zero 101: What, Why and How

E-learning Course Syllabus

Ver. 1 (as of 19 April 2024)

Course Overview

“Net Zero 101: What, Why and How” is a free e-learning course designed for anyone who wishes to develop a foundational level of understanding on basic sciences behind climate change, the environmental, social and economic impacts of climate change and actions we can take as a responsible citizen to prevent further climate change and achieve a net-zero society.

The course consists of three easy-to-follow short modules:

1. What is Net Zero?
2. Why Net Zero?
3. How to Net Zero?

Each module takes about 20-30 minutes, depending on how the learners explore the modules. This is a self-paced course, allowing learners to manage their learning time as they wish. Progress is saved automatically, granting learners the flexibility to complete Net Zero 101 in the schedule that best suits them.

At the end of each module, learners will be given a quiz. Upon successful completion of all the quizzes, the learners will receive a digital certificate issued by UNU-IAS.

Prerequisite

No prerequisite. Technical background in climate science is not required to complete this course. The course is conducted in English only.

Technical Requirements

- Device: A computer or a smartphone with internet access.
- Audio: Please note that this course does not include audio content.

Module Table of Contents

Module 1: What is Net Zero?	
<p>Module 1 discusses the foundational scientific principles behind climate change, essential for understanding the concept of net zero. It also covers key international organizations and agreements relevant to climate action.</p> <p><u>Learning Objectives</u> By the end of Module 1, learners should be able to:</p> <ul style="list-style-type: none"> • Explain how anthropogenic greenhouse gas emissions cause climate change; • Link climate change with the concept of net zero and carbon neutrality; and • Identify UN organizations, key milestones and international treaties relevant to climate action. 	
Session 1: Greenhouse Gas Emissions Session 2: Carbon Sinks Session 3: Net Zero Session 4: UN Climate Change Bodies and Treaties	Quiz (75% Passing Score)

Module 2: Why Net Zero?	
<p>Module 2 discusses the compounded impacts of climate change in our environment and everyday life and introduces the importance of a whole-of- society approach where different actors play their share of roles in creating and implementing net zero solutions.</p> <p><u>Learning Objectives</u> By the end of Module 2, learners should be able to:</p> <ul style="list-style-type: none"> • Analyze the environmental and socio-economic impacts of climate change; and • Explain the importance of a whole-of-society approach and the roles of different actors in achieving net zero. 	
Session 1: Environmental Impacts of Climate Change Session 2: Socio-economic Impacts of Climate Change Session 3: Why is Net Zero Important?	Quiz (75% Passing Score)

Module 3: How to Net Zero?

Module 3 provides practical tips on what we can do to achieve net zero, covering lifestyle choices to reduce carbon footprint and tools to calculate them. It also explains large-scale solutions such as transitioning to renewable energy and its pros and cons.

Learning Objectives

By the end of Module 3, learners should be able to:

- Explain the importance of contextualized measures to achieve net zero;
- Determine sustainable and practical ways to reduce one's carbon footprint; and
- Select the most effective and viable renewable energy solutions considering their cost-effectiveness and sustainability given different contexts.

Session 1: GHG Emission by Sector
Session 2: Carbon Footprint
Session 3: Renewable Energy Synthesis

Quiz
(75% Passing Score)

Certification

Learners will be provided a digital certificate of completion once all the following conditions have been met:

- Complete the three modules;
- Score at least 75% in the quiz of each module; and
- Complete the course evaluation survey.

Acknowledgement

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Contact Information

For any feedback and/or inquiries about this course, feel free to contact us at prospernet.lp@unu.edu.