

# CARBON TAXATION

## E-COURSE SYLLABUS

## ▲ BACKGROUND

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Recent years have seen renewed and growing interest in policy instruments that put a price on greenhouse gas (GHG) emissions through the adoption of carbon taxes. About half of the Nationally Determined Contributions (NDCs) submitted by governments under the Paris Agreement mention carbon pricing as a cost-effective tool to meet climate targets.

As pricing schemes multiply they become increasingly varied. Today, carbon taxes cover a broad range of sectors and include novel features, demonstrating their ability to adapt to varying policy goals and national contexts. The versatility of carbon taxes also means that policy makers need a clear picture of the available options and how those options fit with the jurisdiction's context and objective.

Responding to the knowledge and skills needs of policy makers, the Partnership for Market Readiness (PMR) and United Nations Institute for Training and Research (UNITAR) jointly developed a blended learning methodology comprising online and face-to-face instruction. The overall goal of the training is to build and strengthen capacities of policy makers in relation to carbon pricing. The training seeks to support the target audience in designing and implementing a tax that is best suited to their specific needs, circumstances, and objectives.

## ▲ TARGET AUDIENCE

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The online course provides clear, concise and up-to-date information for anybody interested in building a solid understanding of carbon taxation. The course should be of particular interest to the following audiences:

- Stakeholders who wish to follow the global discourse on carbon taxation or who are involved in designing and implementing carbon taxes
- Mid-level project developers and policy makers such as representatives from Ministries
- Technical experts and practitioners engaged in country-level work within the PMR

## ▲ LEARNING OBJECTIVES

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Building upon the Carbon Tax Guide: A Handbook for Policy Makers<sup>1</sup>, this learning experience aims to familiarize users with basic concepts, terminology and empirical evidence regarding carbon taxation. While the course is introductory in nature, learners will benefit greatly from a pre-existing, decent understanding of:

- The functioning of market economies, including basic concepts such as rational agency, the influence of prices on supply and demand, and investments
- The role of public policy in shaping economic, social and environmental outcomes and achieving international and national commitments

This pre-existing knowledge is not a prerequisite to take the course. You are invited to enroll even if you believe you're new to the topic. Upon completion, you will be able to:

- Describe how carbon taxes work in reducing greenhouse gas emissions
- Outline key considerations that shape the decision to adopt carbon taxes
- Summarize approaches for determining the carbon tax base and rate
- Differentiate main undesirable effects and mitigation measures
- List options for revenue use

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<sup>1</sup> Partnership for Market Readiness, 2017, Carbon Tax Guide: A Handbook for Policy Makers.

## ▲ METHODOLOGY

The course sets out to relate users to the presented content in an interactive format, including short activities, quizzes and different media to vary the instruction. The course is entirely self-paced. While a modular learning sequence is proposed, users can select modules based on individual preferences. The modules are completed with the purpose of achieving module-specific learning objectives.

Throughout the modules, users will be provided with references, publications and relevant databases to dive deeper into discussed topics. A glossary contains definitions of relevant concepts and technical terms. A note with additional resources, sorted by topics, is available if more in-depth study is desired. A final quiz assesses the achievement of the learning objectives for the entire course.

## ▲ STRUCTURE AND CONTENTS

To help reach the learning objectives, the course is divided into five modules. Each module takes approximately 1,5 hours to finish. The total seat time to complete the course is approximately 12 hours. The modules cover the following topics:

<b>Module 1: Carbon taxes – Why and when to use them</b>	<b>Module 2: Preparing for carbon tax adoption</b>	<b>Module 3: Key design decisions</b>	<b>Module 4: Avoiding unwanted effects</b>	<b>Module 5: Use of revenues</b>
<b>Section 1: What is a carbon tax?</b> <ul style="list-style-type: none"> <li>▪ Definition of a carbon tax</li> <li>▪ Externalities as a fundamental problem</li> <li>▪ Overview of carbon taxes worldwide</li> </ul>	<b>Section 1: Determining policy objectives</b> <ul style="list-style-type: none"> <li>▪ Emission mitigation</li> <li>▪ Government revenue</li> <li>▪ Low-carbon development</li> <li>▪ Tax system efficiency</li> </ul>	<b>Section 1: Determining the tax base</b> <ul style="list-style-type: none"> <li>▪ Scope of taxation</li> <li>▪ Point of regulation</li> <li>▪ Legal entities liable for payment</li> <li>▪ Thresholds of application</li> </ul>	<b>Section 1: Assessing leakage</b> <ul style="list-style-type: none"> <li>▪ What is carbon leakage?</li> <li>▪ Distinguishing leakage and competitiveness loss</li> <li>▪ Leakage channels</li> <li>▪ Evidence of leakage</li> </ul>	<b>Section 1: Magnitude of revenues</b> <ul style="list-style-type: none"> <li>▪ Actual revenue streams</li> <li>▪ Potential revenue streams</li> </ul>
<b>Section 2: Carbon taxes and policy instrument options</b> <ul style="list-style-type: none"> <li>▪ Barriers to emission mitigation</li> <li>▪ Amount of discretion</li> <li>▪ Distribution of costs</li> <li>▪ Difference between carbon taxes and emissions trading systems</li> <li>▪ Elasticity of demand</li> </ul>	<b>Section 2: Framing the national context</b> <ul style="list-style-type: none"> <li>▪ Government capacity</li> <li>▪ Emissions profile</li> <li>▪ Economic context</li> <li>▪ Political feasibility</li> </ul>	<b>Section 2: Setting the tax rate</b> <ul style="list-style-type: none"> <li>▪ Social cost of carbon</li> <li>▪ Abatement target</li> <li>▪ Revenue target</li> <li>▪ Benchmarking</li> </ul>	<b>Section 2: Assessing distributional impacts</b> <ul style="list-style-type: none"> <li>▪ Impacts on income groups</li> <li>▪ Impacts on regions</li> <li>▪ Models to estimate distributional risk</li> </ul>	<b>Section 2: Options for revenue use</b> <ul style="list-style-type: none"> <li>▪ General budget</li> <li>▪ Reducing taxes</li> <li>▪ Debt reduction</li> <li>▪ Rebates</li> <li>▪ Other specific purposes</li> <li>▪ Foregoing revenue</li> </ul>
<b>Section 3: Carbon taxes as part of a policy mix</b> <ul style="list-style-type: none"> <li>▪ Policy interaction</li> <li>▪ Legal, political and institutional issues</li> </ul>	<b>Section 3: Principles of carbon tax design</b> <ul style="list-style-type: none"> <li>▪ The FASTER principles</li> </ul>	<b>Section 3: Dynamics of the tax rate</b> <ul style="list-style-type: none"> <li>▪ Intended trajectory</li> <li>▪ Procedures for adjustments</li> <li>▪ Adjustment rules</li> </ul>	<b>Section 3: Designing measures to mitigate unwanted effects</b> <ul style="list-style-type: none"> <li>▪ Support measures</li> <li>▪ Reduced payments</li> <li>▪ Border adjustments</li> <li>▪ Tax coordination</li> </ul>	<b>Section 3: Revenue use in practice</b> <ul style="list-style-type: none"> <li>▪ Carbon pricing revenue data</li> <li>▪ Selected examples</li> </ul>

Each module is designed to meet its own learning objectives:

<b>Module 1</b>	<ul style="list-style-type: none"> <li>▪ Define what carbon taxes are</li> <li>▪ Differentiate carbon taxes and other policy instruments for emission mitigation</li> <li>▪ Outline the role of carbon taxes within broader policy mixes</li> </ul>
<b>Module 2</b>	<ul style="list-style-type: none"> <li>▪ Differentiate common policy objectives associated with carbon taxes</li> <li>▪ Describe factors for framing the national context</li> <li>▪ Outline criteria for evaluating carbon tax design</li> </ul>
<b>Module 3</b>	<ul style="list-style-type: none"> <li>▪ Summarize main decisions to be taken in defining the tax base</li> <li>▪ Outline approaches for setting the tax rate</li> <li>▪ List options for determining the tax rate trajectory</li> </ul>
<b>Module 4</b>	<ul style="list-style-type: none"> <li>▪ Outline considerations for assessing leakage risks</li> <li>▪ Outline considerations for assessing impacts of carbon pricing across society</li> <li>▪ Describe measures to mitigate leakage and potential adverse effects on segments of society</li> </ul>
<b>Module 5</b>	<ul style="list-style-type: none"> <li>▪ Illustrate the magnitude of actual and potential revenues</li> <li>▪ Describe options for revenue use</li> <li>▪ Highlight examples of revenue uses</li> </ul>

### ▲ CERTIFICATION

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Users obtain a certificate of completion upon completing all five modules and passing the final quiz. The quiz is successfully passed at a score of 70% or higher. Once the certification criteria are met, users can download the certificate from the course’s “Achievements” section.

### ▲ TECHNICAL REQUIREMENTS

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Browser:

- The course works best with Firefox 50 or higher (download for free at <http://www.mozilla-europe.org/en/firefox>)
- The course is also compatible with Google Chrome and Internet Explorer
- Note JavaScript & Cookies must be enabled

Platform: 2000, NT, ME, XP or superior; MacOS 9 or MacOS X

Hardware: 64 MB of RAM, 1 GB of free disk space

Modem: 128 K