Carbon Border Adjustment Mechanism (CBAM)

Banking Operation

8639-1

In-Class

16 hours

EGP 12,900

Introduction:

In line with the EU's commitment to fight climate change, the European Green Deal set out a clear path towards achieving the EU's ambitious target of a 55% net reduction in greenhouse gas emissions compared to 1990 levels by 2030 and to become climate-neutral by 2050. The EU's Carbon Border Adjustment Mechanism (CBAM) is the EU's tool to put a fair price on the carbon emitted during the production of carbon-intensive goods that are entering the EU, and to encourage cleaner industrial production in non-EU countries. The CBAM will ensure the carbon price of imports is equivalent to the carbon price of domestic production, and that the EU's climate objectives are not undermined. The CBAM is designed to be compatible with the World Trade Organization (WTO) rules. CBAM will apply in its definitive regime from 2026, while the current transitional phase lasts between 2023 and 2025. This gradual introduction of the CBAM is aligned with the phase-out of the allocation of free allowances under the EU Emissions Trading System (ETS) to support the decarbonization of EU industry. Egypt is one of the countries that will be impacted by CBAM due to its exports of goods in sectors at high risk of carbon leakage, including iron/steel, cement, fertilizers, aluminum, hydrogen, and electricity generation. CO2 emissions tariffs on imports implemented under the CBAM could threaten the export competitiveness of developing countries, including Egypt, in the EU market. Egyptian industries need to invest in advanced technologies that reduce carbon emissions. This includes upgrading machinery, adopting energy-efficient processes, and transitioning to renewable energy sources. The banking sector in Egypt should seek the opportunity to support the Egyptian industries in "greening" their products or decarbonizing their production.

Target audience:

This training would support functions of Corporate, Risk, Credit Risk, E&S Risk, Sustainability & Sustainable Finance to understand the requirements of CBAM and methods of calculations of the carbon emissions associated with CBAM goods in light of the EU requirements.

Course Objectives:

Explain the causes, impacts, and global framework of climate change.
Describe key concepts and standards for corporate carbon footprint reporting.
Clarify GHG emission calculation methods using activity data and emission factors.
Summarize main EU climate regulations and CBAM compliance requirements.
Demonstrate CBAM calculation process for sector-specific carbon emissions.
Calculate GHG emissions for the cement sector using real case data.
Analyze CBAM reporting requirements for cement and iron & steel sectors.
Evaluate embedded carbon emissions for fertilizers and aluminum industries.
Assess direct and indirect emissions under CBAM for electricity and hydrogen.

Course Outline:

Module 01: Basics of Climate Change

- What is Climate Change?
- Greenhouse gas emissions (types and sources) and global warming potential
- Causes and Impacts of Climate Change
- International Framework, Conventions, and Agreements
- Egypt's GHG contribution and commitments
- Climate risks for financial institutions: physical and transitional

Module 02: Carbon Footprint Reporting

- What is a Carbon Footprint?
- International Standards and Guidelines
- GHG Protocol Corporate Accounting and Reporting Standard: Scope 1, Scope 2, and Scope 3
- Organization vs. Product Carbon Footprint
- Setting Boundaries

Module 03: GHG Calculation Methodology

- Sources of GHG emissions
- Calculation Tiers
- GHG emission calculation methodology: Activity Data and Emission Factors
- Group Exercise: Determine sources of emissions and scopes for the provided case studies

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Module 04: Overview of EU Climate Regulations
- EU Climate Change Commitments
- EU Emission Trading Scheme (ETS)
- Overview of CBAM
- CBAM process for importers and non-EU establishments
- Timeframe: transitional and effective periods
- Reporting templates and other requirements

Module 05: CBAM Calculation Methodology and Case Studies
- Embedded Carbon
- Direct and Indirect Emissions
- Sector-specific considerations
- Cement Sector
- Iron & Steel Sector
- Fertilizers Sector
- Aluminum Sector
- Electricity
- Hydrogen

Module 06: GHG accounting Exercise
- Cement Sector (Energy and Industrial Process)

Module 07: CBAM Case Studies and Exercises
- Cement Sector
- Iron & Steel Sector

Module 08: CBAM Case Studies and Exercises -1
- Fertilizers Sector
- Aluminum Sector

Module 09: AM Case Studies and Exercises -2
- Electricity Sector
- Hydrogen Sector

Assessment Strategy:

The participants will be evaluated based on an "online" assessment at the end of the 2nd training day.

Course Language:

English

Instructor(s)

Dr. Dalia Sakr

Senior Energy, Resource Efficiency, and Climate Change Consultant.

Dr. Dalia Sakr has more than 23 years of experience in providing sustainability, circular economy, and climate change related advisory services in the Middle East, Africa, and Asia regions. She is at present the founder of SHiFTERRA Consultancy and adjunct faculty at the American University in Cairo in the Professional Program on Environmental Sustainability. She has a PhD degree on Cleaner Production, Cleaner Products, Industrial Ecology and Sustainability from Erasmus University of Rotterdam in the Netherlands and Master of Science in Environmental Engineering Specialization from the American University in Cairo.

Dr. Sakr is a seasoned expert in providing consultancy services to multilateral organizations, such as UNIDO, UNDP, EBRD, and GIZ. Moreover, she has led the International Finance Corporation (IFC) Resource Efficiency (REF) Program, under the World Bank Group (WBG), in the extended MENA region. In terms of green and climate finance, she supported the capacity building and technical assistance for financial institutions in relation to climate risk assessment and decarbonization strategies under USAID Business Egypt project with DAI Global and in collaboration with the Egyptian Banking Institute (EBI). Furthermore, Dr. Sakr supported KfW (German Development Bank) to prepare Project Concept Document on the establishment of Energy Efficiency Fund in Egypt. In preparation to COP27, she drafted climate finance proposals for the Ministry of Electricity and Renewable Energy in cooperation with UNDP and Updates to Egypt's Nationally Determined Contributions (NDC). She prepared GHG estimations for Clean Development Mechanism (CDM) projects under Kyoto Protocol and voluntary carbon markets, Egypt's Greenhouse Gas Inventory for National Communications to UNFCCC, and carbon footprint reports for financial institutions and multiple industrial sectors, energy and water utilities, and waste management companies. She provided numerous climate change and sustainability trainings to private sector, governments, and academia. Dr. Sakr is listed as climate change expert under the UNFCCC on GHG inventory, mitigation, adaptation, and financial support.

She is a certified expert under the Egyptian Environmental Affairs Agency (EEAA) on environmental risk assessments (qualitative and quantitative), environmental management systems, and solid waste management. She also received GRI Certified Sustainability Professional Training 2021. Moreover, she holds a certificate on "Green

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Banking MENA: Applying Green Energy Finance Programme" from Renewables Academy (RENAC Germany) on green energy finance and international climate finance.
Under Quality Austria, she was a certified environmental & quality manager and ISO 14001 & ISO 9001 auditor and trainer. She has co-/authored numerous policy papers, peer reviewed journal papers, and technical reports, such as: World Bank policy paper on recommended measures to scaling up distributed solar (off-grid) in emerging markets with the focus on Egypt, Circularity as Green Recovery Industrial Strategy with Alternative Policy Solutions at AUC (food & beverages, textiles, and cement sectors), Egypt's Country Environmental Analysis 2024 (circular economy), among others.

Dr. Dalia Nakhla

Dr. Dalia Nakhla - is an environmental engineering and management consultant with more than 25 years of experience. She is certified as an Environmental Impact Assessment (EIA) and Solid Waste Management (SWM) Consultant by the Egyptian Ministry of Environment and was a member of the Board of Directors of the National Waste Management Regulatory Agency, Ministry of Environment.
She is registered in Egypt's Roster of Experts in the United Nations Framework Convention on Climate Change (UNFCCC) as she has contributed in the preparation of the first Biennial Update Report (BUR) for Egypt through preparation of the greenhouse gases inventory resulting from industrial processes and has reviewed other developing countries BURs as part of a Team of Technical Experts.
She has also been appointed a member of the Editorial Board of the Emission Factor Database (EFDB) for the Industrial Processes and Product Use sector (IPPU) by the Intergovernmental Panel on Climate Change (IPCC).
Dr. Nakhla is also certified by the United Nations Industrial Development Organization (UNIDO) as a national Energy Management Systems (EnMS) Expert and has worked extensively with a number of energy intensive industries such as cement, ceramic, iron and steel and petrochemicals in planning and implementing energy management systems and energy efficiency measures in their industries.
She is also an expert in preparation of life cycle assessment studies. She is currently acting as a Pollution Abatement Key Expert as part of the Technical Assistance team of the Egyptian Pollution Abatement Program (EPAP III) to support the industrial enterprises to improve performance and comply with environment regulations.
Moreover, she is an Adjunct Faculty in the Professional Engineering Program at The American University in Cairo as well as the Masters of Science Program in Engineering at Ain Shams University teaching courses in the field of environmental impact assessment, environmental management, solid
waste management, life cycle assessment, cleaner production, greenhouse gases and climate change and energy management systems.