



UNITED NATIONS, ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC, STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

e-Learning course Sustainable Development Goal 9 (SDG 9): Industry, Innovation and Infrastructure

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I. Introduction

Inclusive and sustainable industrial development (ISID) is a primary source of income generation, allows for rapid and sustained increases in living standards of people, and provides technological solutions for an environmentally sound development. ISID is an integral part of the SDGs, particularly SDG 9, which focuses on industry, innovation and infrastructure.

Promoting inclusive and sustainable industries and continuing to invest in physical infrastructure, innovation and research are vital to long-term economic development. Furthermore, industrialization not only contributes to economic growth and infrastructure upgrading, but can also directly and indirectly support the achievement of the SDGs' socio-economic and environmental objectives through the creation of jobs, improvements in working conditions, innovation, and the development of new and greener production technologies. In addition to SDG 9, all other SDGs incorporate some industry-related aspects and targets.





II. About the Course

This e-Learning course was developed by the United Nations, Economic and Social Commission for Asia and the Pacific, Statistical Institute for the Asia and the Pacific (SIAP) and United Nations Industrial Development Organization (UNIDO). In 2021, out of 62 participants from 25 different countries, 37 learners (60%) completed the course successfully.

This course provides opportunity for participants to learn about the main pillars of SDG 9, the relationship of this goal and the 2030 Agenda with ISID, including its contribution to building peace and prosperity for all.

The course is comprised of five modules, each of which consists of 30 to 40 slides. The first module starts with an overview of ISID, its contribution to the 2030 Agenda for Sustainable Development and the importance of industrialization and innovation for structural transformation and inclusive growth. The second module presents the industry-related targets of SDG 9, including measurement and methodological aspects. The third module gives a specific focus on the tools to monitor SDG 9, including the SDG 9 Industry tracker, part of UNIDO Industrial Analytics platform (IAP), and the latest statistics/indicators on ISID. Module 4 continues with industrial development projects in Asia and the Pacific region and worldwide. The last module highlights COVID-19 impacts on manufacturing industries and introduces digital transformation and industrial recovery strategies.

III. Target Audience

This e-Learning course is designed for government statisticians from national statistical offices, Ministry of Industry and Investment Promotion Agencies (IPAs) who are involved in compiling, disseminating and analysing statistics and indicators on industry, innovation





and infrastructure; conducting policy for industrial growth and attracting investments into their countries.

IV. Learning Outcomes

By the end of this course, participants will be able to

- a) Describe the main concepts of inclusive and sustainable industrial development
- b) Recognize the crucial role of infrastructure on economy, environment, and society
- c) Identify SDG 9 industry-related targets and indicators
- d) Describe the main data sources and methodologies applied for calculating SDG 9 industry-related indicators
- e) Access data on ISID, statistical country briefs and progress assessments through UNIDO Statistics data portal and the IAP's SDG 9 Industry tracker
- f) Gain knowledge on industrial development projects worldwide and its impact on well being
- g) Recognize the role of government and investment promotion agencies in economic growth attracting foreign direct investment and innovation projects
- h) Recognize the challenges in the face of COVID-19; digital transformation and industrial recovery strategies to overcome these challenges

V. Course Design and Content

The e-Learning course has been developed as an interactive training on the key concepts of industry, innovation and infrastructure, comprised of the following five modules. Participants are expected to complete one module each week. There will be two online meetings, each one hour long. First online meeting will be held during third week of the course and cover modules 1-3; second online meeting will be held during fifth week and cover modules 4 and 5. Each meeting will start with a short presentation to supplement the e-Learning course. Participants can ask questions about the content covered in the relevant





modules and lecturer can also ask questions to engage participants attention and encourage discussion. Instructions and discourse are in English.

The course is expected to take maximum 15 hours to complete including participation in online meetings and other course activities.

Module	Coverage
1. Overview of the Inclusive and	1.1. What is Industry?
Sustainable Industrial Development	1.2. The ISID Framework and 2030 Agenda for
(ISID) framework	Sustainable Development
	1.3. The Role of Industry in Economic
	Development
	1.4. How Industry Affects People's Lives
	1.5. Industry and Environment
	1.6. Role of Industrial Policy
2. SDG 9 industry-related Targets and	2.1. Monitoring Progress Towards the 2030
Indicators	Agenda
	2.2. SDG 9 Industry-related Targets and
	Indicators
	2.3. Data Sources and Computation Methods
3. Tools for Tracking Countries'	3.1. Tracking Performance and Progress on
Progress on SDG 9 Industry-related	SDG 9 Industry-related Targets and Indicators
Targets and Indicators	3.2. UNIDO Statistical Data Portal
	3.3. UNIDO Industrial Analytics Platform and
	its SDG 9 Industry Tracker
4. Selected Case Studies Highlighting	4.1 Reducing open burning in South-East Asia
the Role of ISID and SDG 9	4.2 Renewable energy and energy efficiency
	in Pakistan





	4.3 Knowledge sharing and capacity building
	in the shrimp industry in Bangladesh
	4.4 Job creation in Jordan
	4.5 Capacity building in ICT & electricity in
	Senegal
5. COVID-19 Impacts on Industry,	5.1. COVID-19 Impacts on Manufacturing
Digital Transformation, and Recovery	Industries in Asia and the Pacific
	5.2. Digital Transformation and Industrial
	Recovery Strategies

The course is hosted on the SIAP Learning Management System (LMS), which contains a discussion forum for general questions and interactions with the developers of the course material. Active participation and interaction in the discussion forum are strongly advised by the lecturer(s).

Lesson materials will be made available on a staggered basis to assist learners follow the required sequence in mastering the material and achieving the learning outcomes.

VI. Evaluation

Evaluation will be based on completing all 5 modules, attending online meetings and the passing *on-line Quiz successfully*.

- Quiz (80 points)-This will be undertaken once all five modules are completed.
 Participants are allowed to have maximum three attempts. Participants may not work on the test together.
- Two online meetings-Participation in online meetings (20 points, 10 points each)

Further details about the online meetings will be shared in due course.





The overall evaluation of the participants' performance is based on the total points obtained in the above.

A certificate of successful completion will be issued to participants securing a total point

of at least 80.

NO EXTENSION WILL BE GIVEN TO PARTICIPANTS WHO FAIL TO COMPLETE THE COURSE DURING THE DESIGNATED PERIOD.

Successful participants are required to complete a **course evaluation form**, <u>which will be</u> <u>available to them immediately after the completion of the course</u>. Participants will be able to print the certificates in the system in the third week of December.

VII. Source Material

- 1) UN The 2030 Agenda for Sustainable Development: Achieving the industry-related goals and targets
- UNIDO Trade, Economic Diversification & Sustainable Development Impact Stories
- UNIDO How Industrial Development Matters to the Well-Being of the Population (Report)
- 4) UNIDO Statistical Indicators of Inclusive and Sustainable Industrialization: Biennial Progress Report, 2021 (Report)
- UNIDO COVID-19 Implications & Responses Digital Transformation and & Industrial Recovery
- 6) UNIDO Industrial Development Report, 2020
- 7) UNIDO Industrial Development Report 2022, forthcoming.
- 8) UNIDO Impact Assessment of COVID-19 on Thai Industrial Sector
- 9) UNIDO Statistics Data Portal
- 10) UNIDO Industrial Analytics Platform SDG 9 Industry Tracker





- 11) UNIDO Open Data Platform
- 12) The Economist, The critical role of infrastructure for the Sustainable Development Goals, 2019
- 13) UN Environment Management Group Nexus Dialogue Outcome Statement, 2019
- 14) UNIDO Industrialization as the Driver of Sustained Prosperity, 2020
- 15) UNIDO Course on Industrial Policy for Field Offices and Regional Coordination Division, 2020
- 16) TUMIQUI Japon SASU (Senegal) / SUCRECUBE Japon Inc. Electricity and Internet to the very end of Africa [Made in Africa with Japan] 2020