



Frank van Rompaey

Introductory Lectures for Engagement

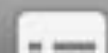
2030 Development Agenda and Sustainable Development Goals (Foundational Level)



Ulla Eide



0:06 / 39:39





Speakers



Frank van Rompaey
*Representative to the UN
and other International
Organizations in Geneva*



Lichia Yiu
President
Centre for Socio-Eco-Nomic
Development (CSEND)

SDG 1-2-3 Series Host



Frank Van Rompaey is Head of the UNIDO Liaison Office in Geneva. In this capacity he engages in policy advocacy for Inclusive and Sustainable Industrialization - in the context of trade, investment and employment discussions in Geneva - and develops partnerships with Geneva-based institutions in support of countries' Industrialization efforts.

He has been with UNIDO for close to 30 years- working in various capacities including in research and policy advisory functions. His main area of interest and expertise lies in industrial policy and in the strategies and policies for environmentally sustainable economic transformation. He has published on the topic of environment and industry in developing countries.

As a UNIDO representative in several African countries, Frank has worked on technical cooperation programmes promoting sustainable industrial development. Prior to joining UNIDO, he worked in the private sector. Frank holds a Master's degree in Economics from the University of Brussels



UNIDO: A Specialized Agency

UNIDO is an autonomous organization, linked to the United Nations through a relationship agreement. UNIDO has its -

- Own Member States (170)
- Own policy-making organs (General Conference, Industrial Development Board, Programme and Budget Committee)
- Own executive head (Director General)
- Own regular budget from assessed contributions and voluntary contributions for implementation
- Own mandate and strategic framework



2:48 / 39:39





UNIDO
was established in **1966**
and became a
specialized agency of
the United Nations
in 1985



Gerd Müller
(Germany) was appointed as the
Director General of UNIDO at the
nineteenth session of the General
Conference (December 2021)

170
Member
States



(as at 31 December 2021)

682



staff members

As well as 1,691 consultants on
ISA contracts from 135 countries
(as at 31 December 2021)

UNIDO at a glance

The value of technical
cooperation delivery in
2021 amounted to
2017 2021

\$179.4
million



\$197.3 million

net voluntary contributions in 2021
for project implementation, with a
total portfolio of projects in hand of
\$125.3 million

€85.3 million

regular and operational budget
(expenditure of UNIDO in 2021)



Projects
implemented
in **121**
countries
in 2021

Source: Annual Report 2021, UNIDO.



3:58 / 39:39





UNIDO and the 2030 Agenda (3)



Contribution of the
UNIDO portfolio to the
SDGs (2021):

Source: *UNIDO Annual Report 2021*,
pp. 77.



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

5:01 / 39:39





Introductory Course

**2030 Development Agenda and
Sustainable Development Goals
(SDGs 1-2-3)**

Infrastructure, Industry & Innovation

Frank Van Rompaey
United Nations Industrial Development
Organization



5:22 / 39:39





Lecture Overview



- Brief Description of **SDG 9**: Summary of targets & indicators and links to other SDGs
- Current State of implementation, progresses, and an example of good practice where youth are active
- Key issues & challenges related to the achievement of this Goal
- Suggested action areas for the youth to engage and contribute





Question 1a:

What is **SDG 9** and why it matters?



5:50 / 39:39





9 INDUSTRY, INNOVATION
AND INFRASTRUCTURE



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

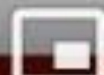


Why?

- > Infrastructure provides the basic physical systems and structures essential to the operation of a society or enterprise.
- > Industrialization (i.e. the development of manufacturing industries on a wide scale) drives economic growth, creates job opportunities and thereby reduces income poverty.
- > Innovation advances the technological capabilities of industrial sectors and prompts the development of new skills.



6:05 / 39:39





Why Industrialization – is it not something of the past?



- not a single country in the world has reached a high stage of economic and social development without having developed an advanced industrial sector. ***Manufacturing matters especially for the growth of developing countries;***
- however, at all levels of development, manufacturing industry can be an important driver in fighting poverty, ensuring food security and preventing social polarization;
- one consequence of the past and current patterns of industrialization is their considerable environmental footprint. **Manufacturing is a main source (30%) of global carbon emissions;** urgent need for decoupling of economic growth from environmental degradation.



8:56 / 39:39





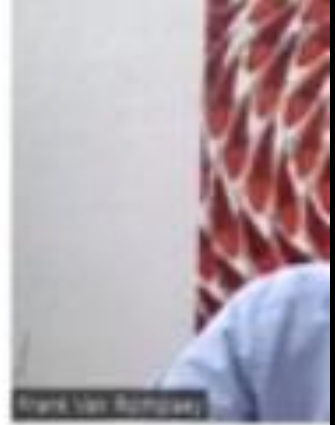
Linkages to other SDGs

SDG-9 is closely linked to other SDGs - with many other Goals and Targets - including industry-related targets associated with job creation (SDG 8), ending poverty and sustainable livelihoods (SDG 1, 15), improved health (SDG 3), technology and skills development (SDG 4), gender equality (SDG 5), food security (SDG 2), green technologies and climate change (SDG 13).

Some examples of linkages between SDG 9 and other SDGs are elaborated below.

- **Linkages with SDG-13 (green technologies and climate change):** improving the environmental performance, resource productivity and safety of existing industries, as well as to supporting the creation of new industries providing environmental goods and services.
- **Linkages with SDG-2 (food security), 5 (gender equality), 8 (sustained, inclusive and sustainable economic growth and decent work):** improving their international competitiveness, particularly through a focus on SME value chain, development, acquiring the necessary technologies and quality infrastructure, enhancing productivity and export potential, and developing entrepreneurial human resources, particularly among women and young people





Question 1b:

What does it entail in terms of targets & Indicators?



Targets & Indicators

TARGET 9-1



DEVELOP SUSTAINABLE, RESILIENT AND INCLUSIVE INFRASTRUCTURES

TARGET 9-2



PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION

TARGET 9-3



INCREASE ACCESS TO FINANCIAL SERVICES AND MARKETS

TARGET 9-4



UPGRADE ALL INDUSTRIES AND INFRASTRUCTURES FOR SUSTAINABILITY

TARGET 9-5



ENHANCE RESEARCH AND UPGRADE INDUSTRIAL TECHNOLOGIES

TARGET 9-A



FACILITATE SUSTAINABLE INFRASTRUCTURE DEVELOPMENT FOR DEVELOPING COUNTRIES

TARGET 9-B



SUPPORT DOMESTIC TECHNOLOGY DEVELOPMENT AND INDUSTRIAL DIVERSIFICATION

TARGET 9-C



UNIVERSAL ACCESS TO INFORMATION AND COMMUNICATIONS TECHNOLOGY



Industry-related indicators



SDG-9 industry-related indicators cover all three dimensions of sustainable development:

- **Advancing economic competitiveness**
 - SDG Indicator 9.2.1: Manufacturing value added as a proportion of GDP and per capita →
 - SDG Indicator 9.b.1: Proportion of medium and high-tech industry value added in total value added
- **Creating shared prosperity**
 - SDG Indicator 9.2.2: Manufacturing employment as a proportion of total employment
 - SDG Indicator 9.3.1: Proportion of small-scale industries in total industry value added
 - SDG Indicator 9.3.2: Proportion of small-scale industries with a loan or line of credit
- **Safeguarding the environment**
 - SDG Indicator 9.4.2: CO₂ emissions per unit of value added





Question 2:

**How much progress regarding
SDG 9 have we made since the
launching of the 2030 Agenda for
Sustainable Development in 2016?**



17:18 / 39:39





Assessment made by UNSDSN (2021)



Industry, Innovation and Infrastructure

Exploring Ratings

Ratings provide a visual representation of a country's performance on the SDG.

Legend

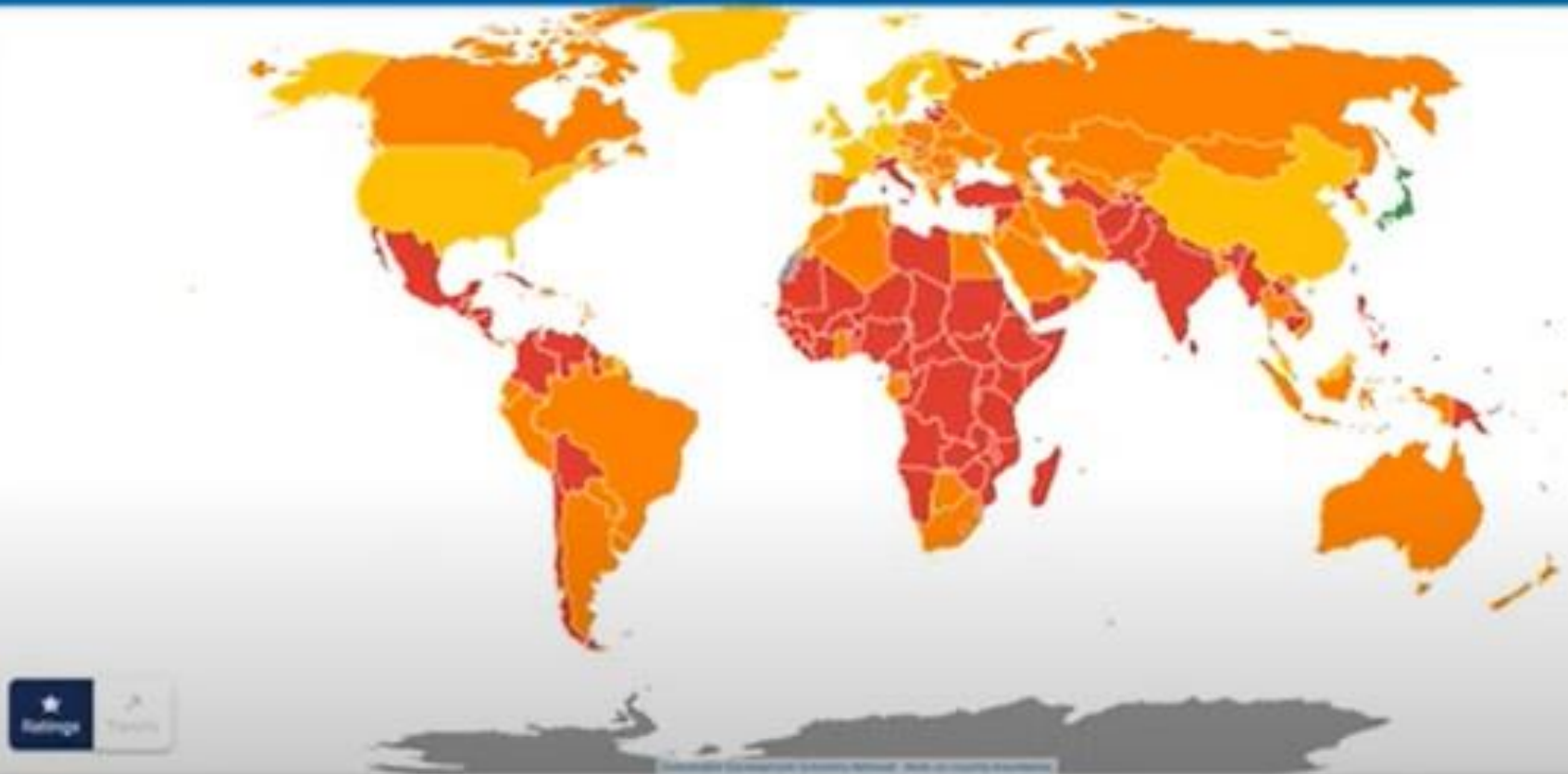
- SDG achieved
- Challenges remain
- Significant challenges remain
- Major challenges remain
- Information unavailable

Description

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Indicators

- Fixed broadband subscriptions per 100 population using the internet
- Mobile broadband subscriptions per 100 population
- Logistics Performance Index: Quality of infrastructure and transport-related infrastructure
- The Times Higher Education Innovative Learning Average score of top 2 universities
- Articles published in academic journals
- Expenditure on research and development



Settings

Tools

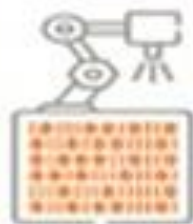
Select one of the SDGs to see it on the map or [display the overall scores](#)



BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

GLOBAL MANUFACTURING PRODUCTION PLUMMETED

AS A RESULT OF THE COVID-19 CRISIS



MANUFACTURE OF MEDIUM- AND HIGH-TECH PRODUCTS FUELLED ECONOMIC RECOVERY IN LATE 2020

4% GROWTH COMPARED TO SAME PERIOD IN 2019 (4TH QUARTER 2020)

2020 WAS CATASTROPHIC FOR AIR TRAVEL DEMAND



AIR PASSENGERS DROPPED FROM 4.5 BILLION IN 2019 TO 1.8 BILLION IN 2020. A 60% DECLINE

ENHANCING RURAL ROAD CONNECTIVITY HELPS REDUCE POVERTY



ALMOST 300 MILLION WITH 520 MILLION RURAL DWELLERS LACK GOOD ACCESS TO ROADS IN 25 COUNTRIES

INCREASED INVESTMENT IN R&D IS ESSENTIAL TO FINDING SOLUTIONS FOR CRISES SUCH AS COVID-19

\$2.2 TRILLION GLOBAL INVESTMENTS IN R&D (2018)



1,235 RESEARCHERS PER MILLION INHABITANTS (2018)

THE SUSTAINABLE DEVELOPMENT GOALS REPORT 2021: UNSTATS.UN.ORG/SDGS/REPORT/2021/

Source: The Sustainable Development Goals Report, 2021

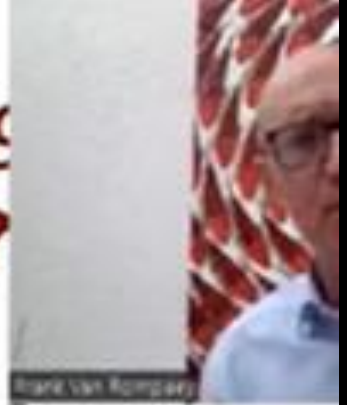
10:07 / 30:30





Are we on track to meet the *SDG-9 industry-related targets by 2030?*

- Industrialized countries continue to dominate global manufacturing industry, but their relative share has gradually declined over the past decade
- Progress among LDCs remains very diverse; growth pace of manufacturing in LDCs (as a group) is too slow to achieve the target by 2030.
- The rate of CO₂ emissions is decreasing globally, including in China and other developing countries.





Question 3:

What are the key challenges in implementing this particular SDG?

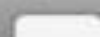


Key challenges

- Repercussions of the Covid-19 pandemic.
- Changes in established **trade arrangements**, bilateral tariffs and tensions between leading economies adversely affected global manufacturing production, causing a steady decline in growth after 2017.
- **Small-scale industrial enterprises**, crucial for driving industrial development in developing countries, need better access to financial services for everyday business activities.
- **Environmental impact and sustainability.**
- ~~SDG 9. one of the most underfunded global goals~~



04:05 / 00:00





Question 4:

Is there a good practice example in implementing this SDG goal? Can you give an example where young people have been active in contributing to this SDG Goal?



A good practice example in implementing this SDG goal

The Programme for Country Partnership (PCP) model

- **Government ownership**
 - High-level political commitment; inter-ministerial national coordination body
 - Leadership in partner and resource mobilization; involvement of the Ministry of Finance
 - National resource allocations to PCP programming and implementation
- **Multi-stakeholder partnership**
 - Involvement of different partners from the onset of programming; creation of synergies
 - Linking ISID efforts of national government, UN entities development partners, financial institutions, business sector, academia, civil society, etc.
- **Facilitation of public and private investment**
 - Coordination of development assistance, public finance, and business sector investment
 - Technical interventions are designed to support the government in mobilizing funding, with a focus on prioritized large-scale industrial projects





Youth Employment and Entrepreneurship



Job Seekers? Job Creators!

Young people can have a significant impact on developing economies by launching their own activities. By attending technical trainings, students can develop an entrepreneurial mindset to start and run their successful businesses; they can grasp innovation, introduce new competition in the labor market and therefore contribute to economic productivity of the local community.

Learning and knowledge development facility (LKDF)

Entrepreneurship and enterprise development programmes



22:55 / 20:20





Question 5:

Which area(s) do you suggest for young people to engage or participate in order to achieve this SDG Goal?



Recommendations

- Youth activism: to raise awareness, incite a and stimulate change for a **green economic transition** that leaves no one behind.
- Deploy **ICT technology for public interest** by generating data as basis for 1) monitoring & review SDG progress, 2) for future entrepreneurial initiatives, and 3) for collective action, such as reducing carbon footprints.
- Actively develop **STEAM-related competencies** for participating in the future work/jobs and generating **science & nature based solutions** to ~~current challenges.~~



Recommendations

Target 9.5: Enhance research and upgrade industrial technologies

SDG INDICATOR 9.5.1 Research and Development (R&D) spending

SDG INDICATOR 9.5.2 Researchers per million inhabitants

Goal: *Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, substantially increasing the number of research and development workers per 1 million people.*



Researchers in R&D per million people, 2015

Researchers in Research & Development (R&D) are professionals engaged in the conception or creation of new knowledge, products, processes, methods, or systems and in the management of the projects concerned. Postgraduate PhD students engaged in R&D are included.

Our World in Data



No data 0 30 300 500 1,000 2,000 4,000 6,000 8,500



38:46 / 39:39

