

## 11 SDG9 Infrastructure, industry Innovation

**Speaker:** Frank van Rompaey

**Career/Experiment:** Representative to the UN and other International Organizations in Geneva

**UNIDO:** an autonomous organization.

1. Linked to the United Nations through a relationship agreement.
2. Has its:
  - Own Member States
  - Own policy-making organs
  - Own executive head

Overview

- I. **Brief Description of SDG 9:** Summary of targets & indicators and links to other SDGs
  - Q1a:** What is SDG 9 and why it matters?
  - Q1b:** What does it entail in terms of targets & Indicators?
- II. **Current State of implementation**, progresses, and an example of good practice where youth are active
- III. Key issues & **challenges** related to the achievement of this Goal
- IV. **Suggested action areas for the youth** to engage and contribute

- 
- I. **Brief Description of SDG 9:** Summary of targets & indicators and links to other SDGs

Q1a: What is SDG 9 and why it matters?

**A. What is SDG 9?**

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

**B. Why it matters?**

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

### C. Why Industrialization is it not something of the past?

1. 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
2. However, at all levels of development, manufacturing industry can be an important driver in fighting poverty, ensuring food security and preventing social polarization
3. 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.

### D. Linkages to other SDGs

1. 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).
2. Some examples of linkages between SDG9 and other SDGs are elaborated below.
  - a. Linkages with SDG-13 (green technologies and climate change):
    1. Improving the environmental performance, resource productivity and safety of existing industries
    2. Supporting the creation of new industries.
    3. Providing environmental goods and services.
  - b. Linkages with SDG-2 (food security), 5 (gender equality), 8 (decent work and economic growth):
    1. Improving countries' international competitiveness, particularly through a focus on small and medium-sized enterprises value chain,
    2. Acquiring the necessary technologies and quality infrastructure, and developing entrepreneurial human resources, particularly among women and young people

Q1b:

What does it entail in terms of targets & Indicators?

#### A. Classification of targets:

1. All 8 targets can be divided into 2 parts, target 9.1 to 9.5 are **outcome targets**,

and target 9.A to 9.C are **implementation targets**

2. implementation targets address concerns by developing countries. That is to say, developed industrialized economies are called upon to support developing countries in achieving these goals.
- B. As an Industry-related indicator, SDG9 cover all three dimensions of sustainable development:
1. Advancing economic competitiveness
    - a. SDG Indicator 9.2.1: Manufacturing value added as a proportion of GDP and per capita
    - b. SDG Indicator 9.b.1: Proportion of medium and high-tech. industry value added in total value added
  2. Creating shared prosperity
    - a. SDG Indicator 9.2.2: Manufacturing employment as a proportion of total employment
    - b. SDG Indicator 9.3.1: Proportion of small-scale industries in total industry value added
    - c. SDG Indicator 9.3.2: Proportion of small-scale industries with a loan or line of credit
  3. Safeguarding the environment
    - a. SDG Indicator 9.4.2: CO2 emissions per unit of value added

II. Q2:

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

- A. Assessment made by UNSDSN (2021) :
1. Japan is the only country which achieved SDG9's goal
  2. most of Africa countries still have a long way to accomplish it
- B. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
1. As a result of the covid-19 crisis, falling 6.8% in 2020, global manufacturing production plummeted
  2. Manufacture of medium-and high-tech product fuelled economic recovery in late 2020
  3. Infrastructure gap: the progress of building rural road helps reduce poverty, but we are still behind the target
  4. Increased investment in require and demand is essential to finding solutions for crises such as covid-19. We need more investment in

research and development

- C. Are we on track to meet the SDG-9 industry-related targets by 2030?
1. Industrialized countries continue to dominate global manufacturing industry, but their relative share has gradually declined over the past decade
  2. Progress among Least developed countries (LDCs) remains very diverse; growth pace of manufacturing in LDCs (as a group) is too slow to achieve the target by 2030.
  3. The rate of CO2 emissions is decreasing globally, including in China and other developing countries.

III. Q3:

What are the key challenges in implementing this particular SDG?

- A. Key challenges
1. Repercussions of the Covid-19 pandemic
  2. 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
  3. Small-scale industrial enterprises, crucial for driving industrial development in developing countries, need better access to financial services for everyday business activities.
  4. Environmental impact and sustainability.
  5. SDG 9. one of the most underfunded global goals

IV. Q4:

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. A good practice example in implementing this SDG goal: The Programme for Country Partnership (PCP) model
1. Government ownership
    - a. High-level political commitment; inter-ministerial national coordination body
    - b. Leadership in partner and resource mobilization; involvement of the Ministry of Finance
    - c. National resource allocations to PCP programming and implementation
  2. Multi-stakeholder partnership

- a. Involvement of different partners from the onset of programming; creation of synergies
  - b. Linking ISID efforts of national government, UN entities development partners, financial institutions, business sector, academia, civil society, etc.
  - c. Coordination of development assistance, public finance, and business sector investment
  - d. Technical interventions are designed to support the government in mobilizing funding, with a focus on large-scale industrial projects
- B. Youth Employment and Entrepreneurship: Be Job Creators
- 1. 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.
  - 2. Learning and knowledge development facility (LKDF)
  - 3. Entrepreneurship and enterprise development programmes

V. Q5:

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

- A. Youth activism: to raise awareness, incite and stimulate change for a green economic transition that leaves no one behind.
- B. Deploy **ICT technology for public interest** by generating data as basis for:
  - 1) monitoring & review SDG progress
  - 2) for future entrepreneurial initiatives
  - 3) for collective action, such as reducing carbon footprints
- C. Actively develop **STEAM-related competencies** for participating in the future work/jobs and generating **science & nature based solutions** to current challenges.
- D. Target 9.5: Enhance research and upgrade industrial technologies
  - 1. SDG indicator 9.5.1 Research and Development (R&D) spending
  - 2. SDG indicator 9.5.2 Researchers per million inhabitants
  - 3. 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.