# Goal 9. Industry, Innovation and Infrastructure

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

# **Labelling Instructions**

### **Key Concepts of Goal 9**

To be labelled with Yes, a project should explicitly or implicitly refer to at least one of:

- Quality, reliable, sustainable and resilient infrastructure
- Grow inclusive and sustainable industrialization and manufacturing
- Industrial SME access to financial services and markets
- Infrastructure upgrades and industry retrofits for sustainability
- · Resource-use efficiency and greater
- Clean and environmentally safe technologies and industrial processes\*
- Enhance scientific research\*\*
- Upgrade the technological capability of industry\*\*\*
- · Diversification to medium and high-tech industries
- · Access to ICT and internet

To be labelled with Yes, a project should explicitly or implicitly refer to at least one of these in a significant way.

\*As far as possible, this refers to the deployment of low carbon and sustainable technology in industrial processes, rather than the products themselves, although we acknowledge that it is not always easy to distinguish the two.

\*\*There are many projects about training centres for various disciplines. We are mostly interested in centres that relate to science, technology or innovation.

\*\*\*Many projects describe fundamental technological developments. This goal is concerned only with those that are deployed in an industrial setting, rather than basic R&D.

## **Labelling Tips**

• Many projects will cover more than one Goal, but to be tagged as this Goal they must include at least one of the Key Concepts above. Further information on other goals can be found <a href="here">here</a>.

- The documents are research projects so it may not be clear whether they actually contribute to achieving a Goal. That is fine - we are interested work that either contributes to achieving a goal or generates knowledge directly related to the Goal.
- In some cases the distinction between Yes and No will not be 100% clear. That's fine. Just use your best judgement. You can always use the Skip button (although it is best to try to make a decision).

## **Key terms (non-exhaustive)**

wireless networks, sustainable production, industry 4.0, 5G, ICT infrastructure, engineering, infrastructure development, manufacturing SMEs, fourth industrial revolution, energy efficient, energy recovery, economic complexity, internet access, centre for excellence, low carbon manufacturing, STEM

#### Not to be confused with

- 8. Decent Work and Economic Growth
  - · Covers more general economic policies and growth
- 12. Responsible Production and Consumption
  - Covers post-production and consumption based waste and environmental impacts

### **Examples**

Project description	Is Goal 9?
Long term investments in electricity grid	Yes
Research into new oil refinery designs	No
Industrial method to reduce water and energy use in textile processing	Yes
Development of new type of plant based fabric	No
New network for research on Industry 4.0	Yes
New training centre for theoretical physics graduates	No

**Optional:** You do not need to read this section before labelling the data. It contains the official UN SDG targets for this Goal and are provided for reference. You may want to use them if you are particularly confused by a project.

#### **Goal 9. Targets and Indicators**

• Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and

trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

- Indicator 9.1.1: Proportion of the rural population who live within 2 km of an all-season road
- Indicator 9.1.2: Passenger and freight volumes, by mode of transport
- Target 9.2: Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries
  - Indicator 9.2.1: Manufacturing value added as a proportion of GDP and per capita
  - Indicator 9.2.2: Manufacturing employment as a proportion of total employment
- Target 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
  - Indicator 9.3.1: Proportion of small-scale industries in total industry value added
  - Indicator 9.3.2: Proportion of small-scale industries with a loan or line of credit
- Target 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities
  - Indicator 9.4.1: CO2 emission per unit of value added
- Target 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending
  - Indicator 9.5.1: Research and development expenditure as a proportion of GDP
  - Indicator 9.5.2: Researchers (in full-time equivalent) per million inhabitants
- Target 9.a: Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States
  - Indicator 9.a.1: Total official international support (official development assistance plus other official flows) to infrastructure
- Target 9.b: Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities
  - Indicator 9.b.1: Proportion of medium and high-tech industry value added in total value added
- Target 9.c: Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020
  - Indicator 9.c.1: Proportion of population covered by a mobile network, by technology

Source: <a href="https://unstats.un.org/sdgs/metadata/">https://unstats.un.org/sdgs/metadata/</a>