



## Building resilient supply chains for the energy transition

**Date:** Wednesday, 29 November 2023

**Time:** 2:00 – 3:30 p.m. (CET)

**Location:** Vienna International Centre, Vienna, Austria

### Overview

Promoting green industrialization and establishing sustainable value chains for low carbon technologies is pivotal in the effort to decarbonize the energy and transportation sectors, thus advancing towards the global net-zero target.

The importation of technologies like solar and storage batteries has surged over the last decade, yet supply chains for these technologies remain largely concentrated on a handful of countries. This dependency is particularly pronounced among lower-middle-income countries and will present a bottleneck for accelerating the energy transition.

The participation of developing countries in global supply chains remains relatively limited. For instance, in the solar industry, the International Solar Alliance (ISA) illustrates that solar manufacturing in the Middle- and low-income countries remains limited and is primarily represented by South East Asia. Data from the Global Wind Energy Council (GWEC) also reveals analogous trends in other critical value chains, such as wind and battery manufacturing, with China and the U.S. leading the production capacities, followed by the EU, Japan, and South Korea.

The energy transition presents an opportunity for developing countries to drive green industrialization especially with the resource endowment across the African continent. Key minerals are essential in the production of clean energy technologies, yet many nations export them without value addition through processing and refining. Middle- and low-income countries can increase their domestic value addition by localizing mineral processing and refining. These countries can also leverage their labor cost advantage to significantly reduce the manufacturing expenses of clean energy technologies. The goal to increase manufacturing value addition is in line with the Agenda 2063 of the African Union, which calls for a strong push for value addition and local manufacturing. As a key enabler, the African Continental Free Trade Area is expected to boost intra-African trade by about 33 per cent and cut trade



deficit by 51 per cent. Improved investments in local manufacturing of clean energy technologies in Africa will accelerate the energy transformation, help achieve the energy access agenda, reduce the trade deficit, and create new quality decent jobs. However, achieving this requires a conducive policy and enabling environment including investments in workforce upskilling to enable the production of clean technology.

### **Discussion points**

This side event will discuss, how the increase in the projected demand for critical raw materials and clean energy technologies open opportunities for low- and middle-income countries to reduce imports through local manufacturing and contribute to secure resilient and sustainable global supply chains. The discussion will elaborate on barriers and enabling factors for a diversification of supply chains and a reduction of the technological dependency of developing countries. The side event will also stipulate how development cooperation can effectively support the security of supply chains for Clean Energy Technologies.

The session will feature a moderated panel discussion (Davos style) and the presentation of the Gender Equality Mobilization Award. It will have simultaneous interpretation in all official languages of the United Nations and will be livestreamed on UNIDO's website: <https://www.unido.org/general-conference-20>.