

WFEO Engineering Capacity Building for Africa Programme (WFEO ECBAP)





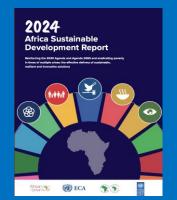


The lag in Africa's development and capacity building

- The United Nations General Assembly proclaimed the period 2016-2025 as the Third Industrial Development Decade for Africa (IDDAIII) in 2016. The Resolution specifically encouraged the United Nations Industrial Development Organization (UNIDO) to develop, operationalize, and lead the implementation of the program, in close collaboration with the African Union (AU).
- The theme of the High-Level event on 22nd September 2023 on the margins of the 78th UNGA was "Positioning Africa's Industrial Skills Development, Deployment, and Retention: Accelerating Manufacturing."
 The impetus for Africa's industrialization remains key to achieving both the United Nations Agenda 2030 for Sustainable Development and the African Union Agenda 2063.

For Africa, less than 6 percent of the 32 measurable SDG targets are on track to be achieved by 2030. Progress on the SDG agendas varies across subregions, but none of the subregions is on track to achieving the SDG goals.











The Importance of Engineering Capacity Building for SDGs

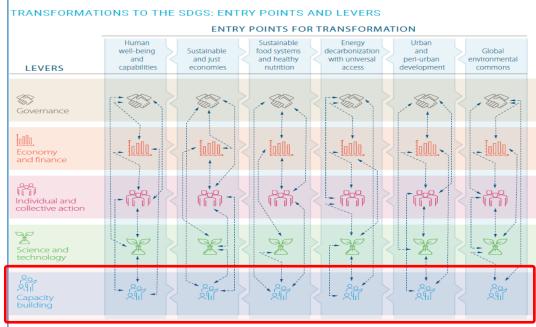
Global Sustainable Development Report (GSDR) 2023





Capacity building in all countries is needed to support decisive and transformative action through any entry point.

Capacity building needs to be applied cohesively with and in support of other levers including governance, business and finance, individual and collective action, and science and technology.



Entry Points and Levers for Transformations to the SDGs | Photo: 2023 GSDR





Challenges

- The multiple dimensional contents of "Capacity": Technical, Economical, Environmental, Social and Organizational Dimensions
 - to make innovative curriculum design by embedding the considerations of environmental impacts, social inclusion, etc. into technocal upskilling contents
- The diversity of engineering profession in technology
 - to find a handle (emerging digital technology, especially big data and AI, which
 is relevant to and could empower all engineering profession
- The lack of infrastructure and financial funds
 - to work with partners together to combine and leverage in given resources
 - to engage governmental, nongovernmental organization and corperate in to the program







WFEO's new Africa Program

WFEO recognizes the importance of capacity building for Africa to achieve the goals outlined in the Africa Agenda 2063 and to accelerate the implementation of the SDGs of the UN's 2030 Sustainable Development Agenda.

To address this need, WFEO proposes a 10-year Engineering Capacity Building for Africa Programme to be supported and initially funded by the China Association of Science and Technology (CAST).

nhance Capacity in Engineering dudation

to improve the quality and relevance of engineering education across the continent

Enhance Capacity in Continuous Pofessional

To enhance technical and soft skills required for Africal's digitalization and green transition

Enhance Capacity in Technology

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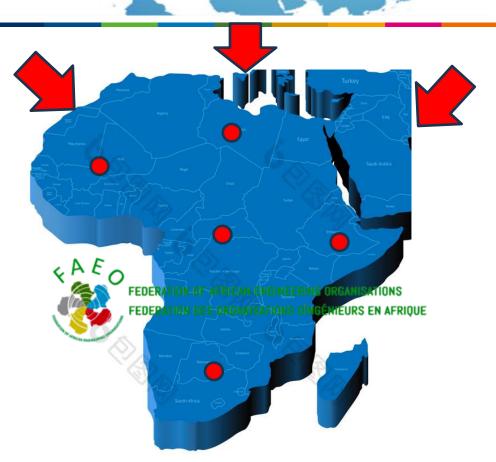
to the ress advanced technologies to address Aprices developmental challenges and promote innovation



World Federation of Engineering Organizations Fédération Mondiale des Organisations d'ingénieurs

Official partner of UNESCO (associate status)











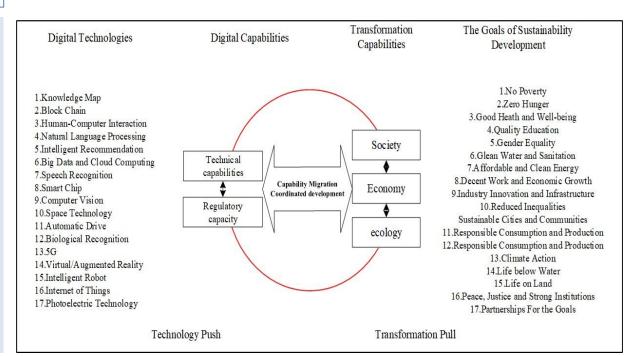
Resolution adopted by the General Assembly on 21 March 2024

[without reference to a Main Committee (A/78/L.49)]

78/265. Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development

Expanding participation of all countries, in particular developing countries, in digital transformation to harness the benefits and effectively participate in the development, deployment, and use of safe, secure, and trustworthy artificial intelligence systems, including by capacity building relating to artificial intelligence.

Capability for Digital and Sustainable Dual Transformation











Digital+ Energy transition



Digital+
Infrastructure
(Water)



Digital+
Agriculture
Food
security











Implementation Timeline

Phase I First two years

Planning, Pilot Training, Assessment

- Focus on enhancing engineering education, continuous professional development, and technology transfer through targeted interventions and partnerships
- Organise workshops, and exchange programs
- Hybrid format training

Phase III Final years

Scaling-Up and Sustainability

10-year programme with 3 phases

- Set SC, EC, IPO/LPO and 1-2 Training Centers
- Conduct assessment of existing capacities, needs, and challenges
- To develop a detailed action plan and implementation framework
- PO starts to operate pilot training programme with partner institutions in the set TCs in cooperation with WFEO Academy

Capacity Building Projects

Phase **II**Next five years

- Scale up successful projects across the continent
- Institutional frameworks,
 partnerships, and funding
 mechanisms will be optimized to
 ensure the long-term sustainability
 of capacity building efforts beyond
 the project's duration









WFEO

as the project organizer, will work with partners to oversee the implementation, collaborate with national engineering organizations, government institutions, and other stakeholders to ensure effective execution. WFEO's STCs and its member organizations will provide technical support, expertise, and guidance throughout the programme's duration.



We are sincerely seeking for

- local, especially governmental, support
- partners for the program design and jointly carrying out the trainings
- financial aids for various activities
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Engineering for Sustainable Development

WORLD FEDERATION OF ENGINEERING ORGANIZATIONS (WFEO)