

Professional Education in Industrial and Environmental Safety (PRECISE)

Background

Industrial and environmental safety are crucial preconditions for a sustainable economy in Bangladesh. So far, there has been a lack of industry-attached Technical and Vocational Education Training (TVET) for professionals in this field. Greater inter-ministerial networking and cooperation with the private sector is required to form a strategy for collaborative “dual” TVET in industrial and environmental safety. TVET institutions need methodological support to develop, adapt and teach courses in green professions, such as specialists in occupational safety, environmental engineering or eco-mechatronics. TVET does not yet have the reputation it should deserve among young people, the private sector and society at large. Raising awareness about its potential as backbone of the industry and economy is necessary.

Objective

The project seeks to improve the quality, relevance and inclusivity of TVET in industrial and environmental safety by establishing dual training programmes, closely aligned with national industry demands and sustainability requirements of the European Union.

Our approach

PRECISE promotes for the first time in Bangladesh a dual TVET approach that links training institutes and companies through structured partnerships. To achieve the project objective, there is constant consultation with the Delegation of the European Union to Bangladesh and the Team Europe

Project name	Professional Education in Industrial and Environmental Safety (PRECISE)
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Commissioned value	€ 7.00 million
Project region	Bangladesh
Partner ministry	Ministry of Education (MoE) – Technical and Madrasah Education Division (TMED) – Government of the People’s Republic of Bangladesh
Implementing agencies	Directorate of Technical Education (DTE), Bangladesh Technical Education Board (BTEB)
SDG contribution	Quality Education (SDG 4), Gender Equality (SDG 5), Decent Work and Economic Growth (SDG 8), Responsible Consumption and Production (SDG 12)
Duration	July 2025 – June 2029

Initiative Decent Work. In partnership with the Ministry of Education and its TVET authorities, further Ministries, the private sector and civil society, the project strengthens institutional capacities to plan, deliver, and coordinate long-term Diploma in Engineering Technologies and Trades related to industrial and environmental safety for market competitiveness and sustainable economic growth.

Primary **beneficiaries** are students and graduates of polytechnic institutes as well as industrial workers seeking further training at government institutions. Intermediaries are managers from TVET authorities, teachers, in-company training staff and management.





Areas of intervention and activities

The project is active in three intervention areas, all of which are closely interconnected:

1. Capacity strengthening

Area 1 strengthens the capacity of the Ministry of Education and its TVET authorities Technical and Madrasah Education Division (TMED), Directorate of Technical Education (DTE) and Bangladesh Technical Education Board (BTEB) to coordinate demand-driven, dual education in industrial and environmental safety. For policy coherence, inter-ministerial networking will be fostered with the Ministry of Industries and the Ministry of Environment. The Ministry of Labour and Employment plays a vital role in view of job monitoring and placement. To achieve this, the project sets up steering and working groups between the ministries and companies and trains employees in specific areas.

2. TVET curricula development

Area 2 concentrates on the development and delivery of application-oriented TVET programmes through structured partnerships between Polytechnics and industry (dual model). Based on industry demand, activities include modernising or newly developing eight Diploma in Engineering Technologies or Trades, developing training materials and teacher training, all embedded within the national TVET system. Five selected Polytechnics will be counselled in technical, organizational and personal (TOP) management aspects as lighthouses for dual TVET and green jobs.

3. Innovation in TVET

Area 3 is about innovation in TVET to make this education stream more attractive to young people, the private industry and the society at large. Activities include, for example, awareness raising campaigns including branding of new dual TVET in Bangladesh. This area is also addressing access barriers through gender-responsive career counselling, inclusive learning environments, and mentoring schemes. Support structures will be set-up to help girls, women and marginalised learners enter engineering and future-oriented green professions.

Expected results

Through PRECISE and its interventions, the Bangladeshi youth will have clear job perspectives in future-proof professions, guaranteed on high demand of the industry. Bangladeshi companies obtain a highly qualified workforce, which can better comply with required standards – securing access to international markets, increasing efficiency, and enhancing industrial safety and environmental performance. The results will be greater competitiveness, more decent jobs, and a stronger green industrial base for Bangladesh.

Published by Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn, Germany

Professional Education in Industrial and Environmental
Safety (PRECISE)
GIZ Bangladesh
PO Box 6091, Gulshan 1
Phone +880 2 5506 8744-52, +880 9 666 701 000

giz-bangladesh@giz.de
www.giz.de/bangladesh

As at July 2025

Text Dr. Christian Bochmann, Bikash Chandra Sarkar, Afia
Rashid, Mynul Kader Mahmud

GIZ is responsible for the content of this publication.

On behalf of German Federal Ministry for Economic
Cooperation and Development (BMZ)

In cooperation with Ministry of Education (MoE), Government of the
People's Republic of Bangladesh