

Annex 1: Results matrix of module

Title of module
Vocational Training in the Field of Renewable Energy (TVET4RE)

Country/region/global
Bangladesh

Project number
2022.2158.8

Term
July 2025 to June 2028

Results matrix created on
28 April 2025

Objectives	Indicators	Definitions, data sources and information on data collection
DC programme objective Consumers and the environment benefit from the economic, environmental, reliable and efficient provision and use of power in Bangladesh.	DC programme objective indicator 1 The installed RE capacities have risen to 6,145 MW by 2030. Baseline value: 1,205 MW Target value: 6,145 MW (2030) Actual value: 1,205 MW Probably achievable within the term: yes	SREDA
	DC programme objective indicator 2 The German DC contribution will reduce greenhouse gas emissions in Bangladesh. Baseline value: 39,775 t CO _{2eq} Target value: 850,000 t CO _{2eq} (2027) Actual value: 39,775 t CO _{2eq} Probably achievable within the term: yes	Reports from DC executing agencies and consultants
	DC programme objective indicator 4 1,000 people, 250 of them women, have successfully completed a training course or further education programme in the field of sustainable energy systems. Baseline value: 100 people, 10 of them women Target value: 1,000 people, 250 of them women	Evaluation of participant lists

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Objectives	Indicators	Definitions, data sources and information on data collection
	Actual value: 100 people, 10 of them women Probably achievable within the term: yes	
Assumptions for achieving the DC programme objective	Economic growth and the related demand for low-cost energy generation continue in the long term. RE expansion remains a government priority. The private sector and private households continue to invest in RE.	
Module objective The Bangladeshi TVET system is more strongly geared towards the needs of the emerging labour market in the sustainable energy sector.	Module objective indicator 1 The percentage of potential employers involved in the implementation of training programmes on sustainable energy who confirm that students or trainees have skills relevant to the labour market. Baseline value: 10% of 80 employers surveyed (October 2024) Target value: 40% of 80 employers surveyed (March 2028)	The TVET (Technical Vocational Education and Training) system in Bangladesh includes formal TVET (Technical Schools and Colleges, polytechnics). This is provided and implemented by the Ministry of Education, its departments (Technical and Madrasah Education Division, Directorate of Technical Education) and downstream authority BTEB (Bangladesh Technical Education Board) and is distinct from the short-term courses managed by the NSDA (National Skills Development Authority). Sustainable energy sector primarily covers topics of renewable energy (RE), but also related topics such as energy efficiency (EE) and energy supply. Potential employers are companies or individual entrepreneurs who provide mandatory internships as part of training programmes in the TVET system. Students are participants in the vocational branch of secondary education that leads to a Secondary School Certificate (SSC Voc: grades 9 and 10) or a Higher Secondary Certificate (HSC Voc: grades 11 and 12). After completing the SSC Voc or HSC Voc, trainees take part in a longer certificate course, developed under the project, at a vocational school and/or polytechnic. This certificate course sits between secondary vocational education and diploma training and is accredited and certified by BTEB. 'Confirm' means that potential employers can cite three examples in interviews to describe how students or trainees were able to apply their theoretical knowledge and practical competencies in real work situations. Data source: own representative surveys of potential employers Data collection: first collected by October 2025, then annually
	Module objective indicator 2 The number of agreements concluded as part of a cooperation format for labour market-oriented	A cooperation format is a regular, formal meeting of TVET actors (including government agencies, business membership organisations, companies and civil society) with a focus on designing, governing and implementing TVET.

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	<p>TVET in the sustainable energy sector, involving state, private sector and civil society stakeholders.</p> <p>Baseline value: 0 agreements (there are no agreements or no cooperation format as yet) (October 2024)</p> <p>Target value: 3 agreements (March 2028)</p>	<p>At each meeting of the format, a comprehensive agreement on improving co-operation in TVET is to be adopted (e.g. regulations on joint labour market/skills needs analyses and on extended practical experience in training programmes and courses).</p> <p>The basic agreement on cooperation (statutes, mandate, declaration of intent for regular meetings, etc.) is documented in writing at the inaugural meeting (1 agreement).</p> <p>Data source: own survey</p> <p>Data collection: analysis of minutes and further documentation of the inaugural meeting on the mandate, statutes, procedure of the cooperation format (December 2026); minutes of subsequent meetings with agreements (August 2027, February 2028).</p>
	<p>Module objective indicator 3</p> <p>The percentage of students surveyed who confirm that the teachers trained under the project in the field of sustainable energy are competent.</p> <p>Baseline value: 15% of 500 students surveyed (October 2024)</p> <p>Target value: 45% of 500 students surveyed (March 2028)</p>	<p>Data source: own surveys (e.g. questionnaires, group interviews)</p> <p>Data collection: 'confirm' means that students (or trainees) give a value of 3 or higher on a scale of 1 to 10 (1 = not competent; 10 = very competent) when rating the competence of teachers in a survey and cite an example to substantiate the rating; annual collection.</p>
	<p>Module objective indicator 4</p> <p>The number of young women who have started a VET programme or certificate course in sustainable energy field.</p> <p>Baseline value: 25 young women (October 2024)</p> <p>Target value: 100 young women (September 2027)</p> <p>The baseline and target values for module objective indicators 1, 3 and 4 are provisional. They will</p>	<p>Data source: own surveys at selected vocational schools and/or polytechnics</p> <p>Data collection: gender-disaggregated analysis of DTE/BTEB enrolment statistics; data collected annually</p>

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	be reviewed during the first year of implementation and adjusted in the first report in consultation with BMZ where necessary.	
Assumptions for achieving the module objective	<p>Improving the TVET system remains a government priority.</p> <p>The assumption is that public and private TVET actors recognise the economic benefits of transformative business models relating to the sustainable energy transition and increased employment of women, and are willing to strengthen their capacities and skills and to cooperate with each other now and in the future.</p>	
Output 1 The information basis on supply and demand with regard to gender-responsive and labour market-oriented TVET in the sustainable energy sector, has improved.	Output indicator 1.1 Number of students and school leavers reached by gender-responsive information and awareness-raising campaigns in the field of sustainable energy. Baseline value: 1,000 students and school leavers, 500 of them young women (October 2024) Target value: 3,000 students and school leavers, 1,500 of them young women (March 2028)	Adequate information includes gender-responsive information on TVET and employment options, as well as an institutionalised cooperation mechanism between TVET actors to collect and provide relevant labour market data for the sector. Information campaigns are designed with gender equality in mind and include press and public relations campaigns, social media feeds, etc., on TVET, employment and career options. Awareness campaigns focus in particular on raising awareness of gender equality in education and employment and include peer learning programmes, events and workshops. 'Gender-responsive' means that causes of gender inequalities are identified and specific gender needs, especially those of women, are systematically included in the content and implementation of campaigns. 'Achieved' means, for example, that students and graduates are able to reproduce campaign messages in a survey or, in the case of social media campaigns, respond positively to content. Data source: own survey Data collection: conduct of annual cumulative reach measurements (media campaigns), focus group interviews and interview analysis, disaggregated by groups reached (young women, young men, people in rural and urban areas), data traffic analyses (data first collected: October 2025, then annually)
	Output indicator 1.2 A mechanism, agreed between BTEB and representatives of the organised private sector, is set	'Mechanism' describes the method agreed between BTEB and representatives of the organised private sector to collect sectoral labour market data for the sustainable energy sector. The mechanism is managed by BTEB and includes, for example, annual surveys of sector companies, the evaluation of labour market studies, the processing of this data in an IT-supported

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	<p>up to collect and evaluate sectoral labour market data.</p> <p>Baseline value: No, there is no such mechanism as yet (October 2024)</p> <p>Target value: Yes, mechanism set up (September 2026)</p>	<p>application and the feeding of the data into a labour market information system that is currently being developed by the Department of Inspection for Factories and Establishments, Ministry of Labour and Employment.</p> <p>'Set up' means that BTEB and business associations have signed a declaration of intent on how to collect sectoral labour market data, and that initial data has been collected.</p> <p>Data source: own survey</p> <p>Data collection: evaluation of the declaration of intent to set up the mechanism and of the data collected (collection: August 2026)</p>
<p>Output 2</p> <p>The institutional and individual capacities of TVET actors have been strengthened with regard to the shaping of transformation processes.</p>	<p>Output indicator 2.1</p> <p>The number of capacity development strategies jointly developed by TVET stakeholders to shape transformation processes.</p> <p>Baseline value: One capacity development strategy (there is an Integrated Development Action Plan, but this only addresses transformation requirements in the TVET system to a limited extent) (October 2024)</p> <p>Target value: 2 capacity development strategies (May 2026)</p>	<p>The capacity development strategies are considered developed when jointly identified needs, objectives and measures (including a time frame) have been documented.</p> <p>Transformation processes are socio-economic development and realignment processes that require the TVET system to be accordingly adapted.</p> <p>Data source: own survey</p> <p>Data collection: analysis of capacity development strategies with regard to development and transformation objectives (collection: February 2026)</p>
	<p>Output indicator 2.2</p> <p>Number of employees of TVET actors who have the knowledge and skills to organise transformation processes.</p> <p>Baseline value: 25 employees, 5 of them women (October 2024)</p> <p>Target value: 75 employees, 40 of them women (March 2028)</p>	<p>Knowledge and skills refer, for example, to strategy development, project management, leadership and communication.</p> <p>Having the knowledge and skills means that employees provide an example of how the knowledge and skills they have acquired in further training (including coaching) can be applied to shape transformation processes.</p> <p>Data source: own survey</p> <p>Data collection: surveys of TVET actors with regard to examples of knowledge/skills application (May 2026; May 2027; February 2028)</p>
Output 3	Output indicator 3.1	Elements of sustainable energy include theoretical and practical modules on RE, EE, and energy supply.

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Objectives	Indicators	Definitions, data sources and information on data collection
Training offers in the vocational branch of secondary education and long-term certificate courses are expanded by elements of sustainable energy.	<p>The number of gender-responsive, adapted and new curricula that include the teaching of theoretical knowledge and practical competencies in the field of sustainable energy.</p> <p>Baseline value: 2 curricula (October 2024) Target value: 5 curricula (February 2027)</p>	<p>Adapted curricula are for vocational secondary level 1 or 2, which culminate in an SSC Voc or an HSC Voc.</p> <p>New curricula are for certificate courses that sit between SSC Voc/HSC Voc and diploma training programmes.</p> <p>Data source: own survey</p> <p>Data collection: annual evaluation of BTEB training programme documents on new and adapted curricula (data first collected: February 2027)</p>
	<p>Output indicator 3.2</p> <p>The number of students and graduates of vocational schools who possess theoretical knowledge and practical competencies in the field of sustainable energy.</p> <p>Baseline value: 10 students and graduates, 5 of them women (October 2024) Target value: 100 students and graduates, 30 of them women (March 2028)</p>	<p>'Possess' means that students and graduates of project-supported educational institutions can demonstrate their knowledge and competencies under examination/assessment conditions.</p> <p>Data source: own survey</p> <p>Data collection: annual survey based on analysis of BTEB examinations at selected educational institutions with regard to the content of training programmes on sustainable energy (data first collected: October 2027)</p>
Output 4 Existing diploma programmes are expanded by elements of sustainable energy.	<p>Output indicator 4.1</p> <p>The number of diploma curricula adapted for gender-responsiveness that include theoretical knowledge and practical competencies in the field of sustainable energy.</p> <p>Baseline value: 1 diploma curriculum (October 2024) Target value: 4 diploma curricula (July 2026)</p>	<p>Diploma curricula are 3 to 4-year training programmes offered by polytechnics, which can be attended after obtaining an HSC Voc or an SSC Voc.</p> <p>Data source: own survey</p> <p>Data collection: annual own evaluation of BTEB training programme documents with regard to content on sustainable energy (data first collected: August 2026)</p>
	<p>Output indicator 4.2</p> <p>Number of students in diploma programmes who possess theoretical knowledge and practical competencies in the field of sustainable energy.</p>	<p>"Possess" means that diploma students can prove, based on their examination results, that they have acquired knowledge and competencies. Data source: own survey</p>

Kommentiert [RB1]: @Grekova, Natalia GIZ BD @Parvin, Ruqsana GIZ BD : I gave a second thought and now it seems to me that the original term "practical experiences" was more appropriate for two reasons - (1) If we say competency then adding "practical" is not required. (2) It is unlikely that within the duration of the project students will complete the whole program. So, it would be difficult to say that they possess competencies. However, our aim is to complete the theory part and the internship. So, retaining "possess theoretical knowledge and practical experiences" would be more realistic within the project duration. The same is applicable for Output-4. What do you think?

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Objectives	Indicators	Definitions, data sources and information on data collection
	Baseline value: 40 students, 10 of them women (October 2024) Target value: 160 students, 50 of them women (March 2028)	Data collection: annual survey based on analysis of BTEB examinations at pilot polytechnics (data first collected: February 2027)
Assumptions for achieving the outputs	<p>Young people are interested in training in sustainable energy sector.</p> <p>Business Membership Organisations (associations, chambers) and companies – in close coordination with state actors – play a stronger role in TVET.</p> <p>Companies see added business value in employing graduates from formal training programmes in the field of sustainable energy.</p> <p>TVET stakeholders consider the change in societal attitudes towards equal participation of women in TVET and employment as relevant.</p> <p>TVET actors take up recommendations for designing gender-responsive TVET offers and implement them in their work.</p> <p>BTEB accredits revised SSC Voc and HSC Voc curricula and new long-term training programmes during the module term.</p>	

Outputs	Core activities for outputs	Inputs/planned instruments
Output 1	<ul style="list-style-type: none"> Advising TVET actors on developing a dialogue format or a platform for cooperation between BTEB and the private sector Advising BTEB on initiating a mechanism for regular sectoral labour market and training skills needs analyses and other dialogue formats Advising TVET actors on developing and implementing information/awareness-raising campaigns on vocational training and employment options in the sustainable energy sector and on 'women in green jobs' 	---
Output 2	<ul style="list-style-type: none"> Analysing the need to build capacity and train employees of TVET actors, enabling them to shape and steer transformation processes Developing and implementing a cross-actor capacity development strategy for TVET actors and their employees 	---

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Outputs	Core activities for outputs	Inputs/planned instruments
	<ul style="list-style-type: none"> Developing and implementing training measures for employees of TVET actors, in particular, to strengthen digital skills Advising TVET actors on improving TVET governance and coordination (e.g. thematic working groups) and harmonisation with the skills development system 	
Output 3	<ul style="list-style-type: none"> Advising BTEB on the gender-responsive revision and expansion of SSC Voc and HSC Voc curricula to include topics relating to sustainable energy Developing (digital) teaching/learning materials and methodological-didactical implementation guidelines for teachers, including the development and implementation of a gender-responsive training-of-teachers programme with a focus on sustainable energy sector Advising BTEB on developing and piloting two labour market-oriented, practice-intensive long-term training programmes in the sustainable energy sector at selected institutions Advising TVET actors on the development and trialling of innovative concepts for acquiring practical professional experience (subject-specific classroom, training workshop, compulsory company internships) Feasibility study for 'dual certification' 	---
Output 4	<ul style="list-style-type: none"> Advising BTEB on the gender-responsive revision and expansion of three diploma programmes at selected polytechnics to include sustainable energy topics, including the development of (digital) teaching/learning materials Advising BTEB on the gender-responsive revision and expansion of methodical-didactical guidelines for lecturers at selected polytechnics, including appropriate training courses Advising TVET actors on the development and trialling of innovative concepts for acquiring practical professional experience (subject-specific classroom, training workshop, compulsory company internships) 	---