



# RENEWABLE ENERGY SKILLS DEVELOPMENT

<b>Mandated by</b>	Swiss State Secretariat for Economic Affairs SECO
<b>Indonesian Partners</b>	Ministry of Energy & Mineral Resources, Ministry of Education, Culture, Research and Technology, National Professional Certification Board (BNSP), polytechnics, training providers, private sector, sector associations
<b>Implemented by</b>	GFA Consulting Group (lead), AMC, PCS, and SFIVET
<b>Period</b>	December 2020 – June 2025 (4.5 years)
<b>Budget</b>	CHF 6,500,000 Swiss Government grant

The Renewable Energy Skills Development (RESD) project aims to enable competent design, planning, installation, operation and maintenance of renewable energy power plants in Indonesia through the availability of qualified staff relevant to labor market needs.

## Context

Global warming, climate change, resource management issues, and high potential to increase the production of renewable energy (RE) due to its geography, topography, and geology have motivated the Government of Indonesia (GoI) to introduce ambitious plans to increase energy from renewable sources within its energy mix to 23% by 2025 (Government Regulation 79/2014).

## Challenges

With the issuance of Regulation 31/2009 by the Ministry of Energy and Mineral Resources, national and international companies are ready to invest in RE power plants and thus expand the RE sector across the country. However, over the past years, regulations as well as a reluctance due to lack of reliability caused by poor maintenance, have prevented rapid growth of the RE ratio in the Indonesian power production. Updated regulations provide the framework for the RE market to grow, but only if sufficient qualified workforce for planning, construction, and operation of various RE technologies is available.

Furthermore, President Joko Widodo announced that skills development has become an even higher priority during his second term, as reflected in the current National Medium-Term Development Plan 2020–2024.

## Project Scope

**COMPONENT 1 — FORMAL EDUCATION:** By the end of the project, it is expected that formal, multidisciplinary RE specialisation programs at D4 level are in place and produce relevant graduates for the labour market in the RE sector. This will be done by: (i) clarifying and establishing roles and responsibilities among project partners; (ii) developing and accrediting a curriculum for D4 specialization program on RE; (iii) procuring required laboratory equipment and carrying out instructors' training on lab equipment usage; (iv) developing instructional materials; (v) clarifying and implementing qualification standards & assessment procedures for D4 RE specialization; (vi) developing internship programs to be adopted by the private sector; (vii) training and certifying teachers on methodology and content; (viii) launching

and enrolling students in the D4 RE specialization programs; and (ix) conducting tracer studies and monitoring the adoption of job placement services in polytechnics.

**COMPONENT 2 — NON-FORMAL EDUCATION:** Under this component, it is aimed that various training providers offer modular non-formal trainings in line with national skill standards, therefore enabling skills & knowledge upgrade relevant to the RE labour market. Project assistance will be provided in: (i) clarifying and establishing roles and responsibilities among project partners; (ii) defining curricula for modular solar PV and hydropower short-courses; (iii) developing instructional materials; (iv) procuring laboratory equipment and carrying out instructors' training; (v) reviewing qualification standards (IQF 3–4) and assessment procedures for solar PV and hydropower short courses; (vi) assessing teacher training needs, conducting trainings to fill in gaps and certifying trainers; (vii) introducing modular RE courses at public and/or private training providers; and (viii) monitoring implementation in cooperation with the private sector.

**COMPONENT 3 — INFORMATION EXCHANGE & COMMUNICATION:** Through this component, it is expected that exchange and understanding within the RE sector and with the education sector leads to a higher acceptance and use of RE in Indonesia. Support will be provided in: (i) enhancing web, or other digital platform(s), on the Indonesian RE sector (technologies, policies, training options, private sector companies, services, experts, etc.); (ii) organising and/or contributing to RE sector conferences; (iii) providing expert support in carrying out awareness raising campaigns for wider introduction of RE technologies; and (iv) linking national and international training institutions, such as twinning between Swiss and Indonesian polytechnics.

## Project Structure

The project is led by a Steering Committee, chaired by the Human Resources Development Agency (BPSDM) of the Ministry of Energy and Mineral Resources.

## Contact

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