

Green Jobs and Vocational Education and Training: Developing Skills for a Green Economy

Annual Report 2024 | GIZ Indonesia and ASEAN





Developing Skills for a Green Economy



As Indonesia moves toward a low-carbon, green economy where non-sustainable sectors are shrinking, its labour market welcomes nearly three million new job seekers every year. However, the Vocational Education and Training (VET) system – the backbone of workforce development – is struggling to keep up with the demand in the labour market, leaving a gap between the skills of the labour force and the needs of employers.

To bridge this gap, GIZ supports Indonesia’s transition to a competitive, environmentally sustainable, and inclusive economy by focusing on how the shift to green growth can create decent job opportunities for all. New approaches and strategies for adequately skilling,

Achievements in 2024



430 people have completed vocational training – 7,404 beneficiaries since 2021*



61 VET staff have completed a qualification measure – 358 since 2021*



1,401 people advised on options for regular migration and risks of irregular migration



112 Indonesian nurses found employment in German health institutions



355 nurses completed a German language class

* direct and indirect

upskilling and reskilling are needed, and our work aims to provide them.

In short, we support the government to help both young graduates and the existing workforce gain the necessary skills to work productively in the green economy.

Contributing to the priorities of Indonesian-German Development Cooperation, we provide green jobs and skills development expertise and international good practices in the fields of renewable energy and energy efficiency, forestry and sustainable land use, urban development and circular economy. This is complemented by advice on safe and regular migration, and by facilitating fair and sustainable labour migration for Indonesian skilled workers to Germany.

Pioneering Green Jobs and Skills Development

GIZ has played a pivotal role in Indonesia’s VET policy reform process in recent years, contributing to: the enactment of Indonesia’s first National VET Strategy, the establishment of the National VET Coordination Team, and the drafting of Indonesia’s Green Jobs Roadmap and Action Plan to guide coordinated national policies.

GIZ has also been pioneering green jobs, particularly in the renewable energy sector, and trained over 1,300 individuals in areas such as micro-hydro and wind power plants, project management, financial aspects and business development of solar and geothermal power plants, improving livelihoods in rural communities, as well as the performance of companies and their employees.

GIZ identifies labour market trends and the most pressing skills gaps in renewable energy and energy efficiency, forestry and circular economy and waste management to introduce additional demand-oriented upskilling courses for priority occupations.

We have also supported the Ministry of National Development Planning (Bappenas) in holding an annual Green Jobs Conference, fostering dialogue between stakeholders, and helped establish a Sector Skills Centre for Renewable Energy so private sector expertise is provided for curricula and training development.



2024 Highlights

- **Shift toward industry-driven education:** Indonesia's VET system is being transformed from supply-driven to comprehensive demand orientation and industry alignment. GIZ has played a key role in shaping this reform, working with key ministries and private sector representatives, to ensure Vocational Education and Training meets the constantly evolving needs of the labour market and private sector.
- **Awareness raising, stakeholder engagement, and policy planning:** We work closely with Bappenas to build awareness, integrate Green Jobs and related Human Resources development strategies into national policies, and engage private and public stakeholders to actively promote employment in Green Jobs.
- **The Renewable Energy Skills Centre:** We initiated a structured private sector participation model – leading to the establishment of Indonesia's Renewable Energy Skills Centre (PKET) – which brings together government, industry associations, and VET institutions to jointly shape competency standards, job profiles, and curricula in the renewable energy sector.
- **National competency standards for the renewable energy workforce:** To ensure Indonesia's renewable energy workforce meets industry needs, we work closely with private sector partners and industry associations to develop and formalise national competency standards (SKKNI) for key renewable energy jobs. They define the skills, training, and certification requirements for workers in the solar, hydro, and geothermal energy sub-sectors, helping to bridge the gap between education and employment.
- **Advice on safe and regular migration, assisting sustainable labour migration:** To ensure migration is well-informed and beneficial, we support the establishment of Centres for Migration and Development in Indonesia, serving as advisory hubs for individuals seeking regular migration pathways for work or education, as well as returnees needing reintegration support. Through the "Triple Win" approach, in partnership with the Indonesian Ministry of Migrant Worker Protection and the German Federal Employment Agency, we facilitate fair and sustainable labour migration by connecting qualified Indonesian nurses with employment opportunities in Germany.

Impact Story

Out of Darkness into Light

Through the Innovation and Investment for Inclusive Sustainable Economic Development (ISED) project, GIZ has been providing industry-based short-term training with companies with long track records in electrical planning and installation with renewable energy.

Apui Enjau travelled for three days from his home and family to receive training on Planning for Micro-Hydro Power Plants. Apui, leader of Long Kemuat village in Bahau Hulu District, Malinau Regency, North Kalimantan Province, was on a quest to bring his remote village – with no electricity – out of the darkness.

Apui wanted to use hydro-power, but did not know how. While five out of the six villages in the district were already powered by micro-hydro plants, Long Kemuat remained dependent on diesel generators.

Returning home, Apui wasted no time in putting his plan into action. He kept contact with the trainers, seeking advice on equipment specifications. But the biggest challenge was convincing his fellow villagers. Apui invited them to work together to build a micro-

hydro power plant on the Ilan River, about 3 kilometres north of the village.

Only a handful of young villagers joined him, but when the construction site gradually took shape, more started to participate. Everyone involved received a daily wage.

But days before launch, a flood destroyed the intake dam. The damage was devastating to the project, which had been built using limited village funds of Rp 1.7 billion. However, Apui refused to give up and rebuilt the damaged structure using available resources.

As the village prepared to welcome the new year, the micro-hydro plant finally came to life. Electricity from the river lit up Long Kemuat, providing free, sustainable, clean power to 158 residents.

"When the electricity was [switched] on, the residents were very proud, some even cried. So I salute and am very grateful to the GIZ project."



What They Say

Dr Ir Mohammad Rudy Salahuddin, MEM, Deputy V for Industry, Employment and Tourism, Coordinating Ministry for Economic Affairs



"The Coordinating Ministry for Economic Affairs would like to thank the German Government for its support for approximately 30 years in strengthening the VET system in Indonesia, and GIZ as the implementer of the VET System Reform project. I am sure that the results and legacy left behind from this joint agenda will have a long-term and sustainable impact."

What They Say

Ika Khairunisa, Triple Win Nurse employed at Siloah St Trudpert Klinikum, Germany



"I found it challenging to muster the enthusiasm to learn German, and had doubts asking myself if this was the right choice. Still, I was encouraged by the support given by the GIZ Triple Win Indonesia team, BP3MI Padang. Since college, I have wanted to work abroad. I hope to find a comfortable and suitable workplace so I can spend the rest of my productive life well."

Green Jobs and Vocational Education and Training At a Glance 2024

Work Areas



Our Commissioning Parties and Clients in 2024

Our work on a bilateral, regional and global level in the area of Green Jobs, Vocational Education and Training, and Labour Migration was implemented on behalf of the following commissioning parties jointly with our Indonesian government partners:



Achieving the SDGs: Green Jobs and Vocational Education and Training

We are committed to support our partners in achieving the Sustainable Development Goals. Our work contributes to the following SDGs:



Cooperation Partners



GIZ Indonesia and ASEAN Annual Reports 2024

Read more about our work in 2024 in the following reports:

	Introduction to GIZ Indonesia and ASEAN Annual Report		Urban Development
	ASEAN		Digital Transformation
	Energy Transition		Green Jobs and Vocational Education and Training
	Resilient Nature		

Contact Us

Thomas Foerch | Cooperation Area Lead
thomas.foerch@giz.de

Christian Wachsmuth | Green Jobs Lead
christian.wachsmuth@giz.de

Ruly Marianti | Green Jobs Co-Lead
ruly.marianti@giz.de

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Registered offices
Bonn and Eschborn, Germany

GIZ Office Indonesia
Menara BCA, 46th Floor
Jl. MH Thamrin No. 1
Jakarta 10310 – Indonesia

T +62-21-2358 7111
F +62-21-2358 7110
E giz-indonesien@giz.de
I www.giz.de/en

Responsible:
Hans-Ludwig Bruns

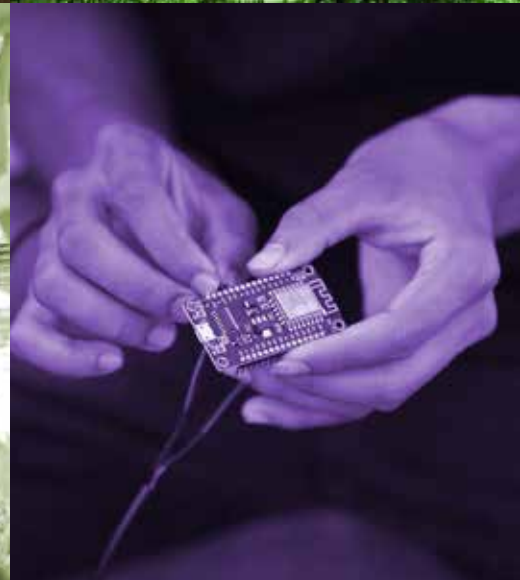
Content Contributors:
GIZ Green Jobs and Skills and Labour Migration teams

Editorial Team:
Mira Zakaria
Paul Goddard

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Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany

GIZ Office Indonesia
Menara BCA, 46th floor
Jl. M.H. Thamrin No. 1
Jakarta 10310, Indonesia

T +62 21 2358 7111
F +62 21 2358 7110