Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

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Energy Newsletter

Bimonthly news on GIZ's work on energy and climate protection
A service by GIZ Energy

Dear readers,

The announcement by the EU Earth Observation Programme Copernicus that 2024 has been the hottest year on record will hardly surprise anyone. However, this year also marks a significant turning point in climate history: For the first time, the global average temperature has exceeded the 1.5 °C threshold above pre-industrial levels. According to IPCC reports, even a temporary overshoot of this threshold poses significant risks of irreversible damage. Moreover, bringing temperatures back below 1.5 °C will require the deployment of carbon removal technologies. The large-scale implementation of these technologies will be costly and require additional investment. Considering only the economic damage of climate change, the consequences of too little action are expected to be multiple times more expensive for the global economy.

In contrast, the trends in the clean-tech industry are encouraging. In 2024, it set new records. According to BloombergNEF, solar photovoltaic installations increased by 35 % compared to the previous year, wind energy by 5 %, and energy storage by 76 % (measured in megawatt-hours). The

share of electric vehicles is approaching a quarter of all new car sales. One particularly noteworthy development is battery prices, which saw their steepest annual decline since 2017. The price of lithium-ion battery packs dropped by 50% from 2023, reaching a record low of 60 US dollars per kilowatt-hour (at cell level). A study by Fraunhofer ISE from July 2024 shows that utility-scale solar farms combined with battery storage in Germany achieve levelized costs of electricity between 6 and 10.8 cents per kilowatt-hour – and this at battery costs between 400 and 600 euros per kilowatt-hour. This makes solar PV combined with battery storage the most cost-effective option for around-the-clock electricity supply. The good news: These market trends are so strong that even the most powerful economies will not be able to reverse course in favor of fossil fuels.

Against this backdrop, the renewed debate about nuclear power appears even more perplexing. A look at market data reveals a clear trend: For years, the number of newly commissioned nuclear power plants has barely kept pace with the number of decommissioned ones. According to the International Atomic Energy Agency (IAEA), only six new nuclear power plants went into operation worldwide in 2024 (2023: five). At the same time, four older nuclear power plants (2023: five) were permanently decommissioned. Given the steadily growing global electricity demand, the share of nuclear energy continues to decline. The reasons remain unchanged: extremely high and frequently escalating investment costs, very long construction times, and equally high financing risks. Small modular reactors (SMRs), touted as a solution to these problems, largely remain theoretical concepts. The planned SMR flagship project of the Utah Associated Municipal Power Systems (UAMPS) in the USA was abandoned due to skyrocketing costs.

The promotion of renewable energy, energy efficiency, sector coupling, and sustainable mobility concepts is without alternative to slowing climate change. This underscores the relevance of our work. In this edition, you'll find exciting project reports from our colleagues. We hope you enjoy reading and find fresh inspiration for your work!

André Eckermann
Head of Competence Centre Energy and Transport

Stefan Mager
Head of Infrastructure – Energy, Water, Mobility

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17 February to 19 February 2025
10th Energy Storage Summit 2025
London, UK

24 February to 28 February 2025
IOREC 2025: 6th International Off-Grid Renewable Energy Conference and Exhibition
Garbone, Botswana

11 March to 14 March 2025
SEforALL Global Forum
Bridgetown, Barbados

18 March to 19 March 2025
Berlin Energy Transition Dialogue
Berlin, Germany

07 April to 11 April 2025
20th Energy Efficiency Policy Training Week
Paris, France

08 April to 11 April 2025
Global Landscape Forum AFRICA 2024: GREENING THE AFRICAN HORIZON (Hybrid Event)
Kampala, Uganda

24 April to 25 April 2025
IEA International Summit on the Future of Energy Security
London, UK

07 May to 09 May 2025
Intersolar Europe
Munich, Germany

02 June to 03 June 2025
HSC 2025
Hamburg, Germany

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Strengthening Financial Support for the Biodigester Sector

Trainings boost demand for biodigester loans | Kenya

Financial Institutions trainings on supporting the Biodigester Sector © Michael Okoth

To empower financial institutions to better support biodigesters as viable, sustainable energy solutions, between May and November 2024, the African Biodigester Component (ABC) in Kenya held a series of targeted training sessions in 10 counties across Kenya to strengthen local financial institutions' understanding of biodigester financing.

The sessions attracted representatives from banks, microfinance institutions, Savings and Credit Cooperatives and biodigester companies, training more than 300 participants on biodigester business models. Through presentations, case studies and site visits, the participants gained insights into integrating biodigesters into their products, gathered feedback to address sector-specific challenges and explored the environmental and financial benefits of biodigesters, recognising their potential for boosting farmers' revenue and expanding energy access in underserved communities.

These engagements sparked collaboration between financial institutions and biodigester companies, so that over 280 loans were issued for biodigester installations by November 2024, reaching a key milestone in advancing Kenya's biodigester ecosystem.

Contact persons Michael Okoth

Project description

The African Biodigester Component (ABC) in Kenya aims to achieve a sustainable, stable and growing market for biodigesters that significantly contributes to achieving national energy access and climate targets.

» Enabling access to climate-friendly energy supply - giz.de

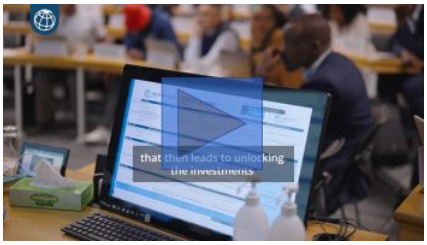
12 African Countries Boost Renewable Energy Tendering Capacities

First in-person training of the Policy Catalyst Effective Renewable Energy Tendering Window delves into successful auction design

Delegates at the first in-person training of Policy Catalyst Effective Renewable Energy Tendering Window © World Bank

The first in-person training of the Policy Catalyst Effective Renewable Energy Tendering Window brought together 62 delegates from 12 African nations in Cape Town to dive into the tools and knowledge needed to successfully design and implement renewable energy auctions.

The Effective RE Tendering Window is a joint initiative by GET.transform, the Power Futures Lab, the Sustainable Risk Mitigation Initiative (SRMI) of the World Bank's ESMAP programme and IRENA, and aims to enhance power procurement capabilities to pave the way for greater private sector involvement.



Training session at the first in-person training of Policy Catalyst Effective Renewable Energy Tendering Window

Over nine months, the public sector stakeholders participate in hybrid and in-person training sessions. These workshops combine technical expertise with hands-on learning to address key challenges in tendering for renewable energy projects, such as risk allocation, project financing, site selection, and Power Purchase Agreement (PPA) negotiations.

The innovative approach ensures that participants not only enhance their technical skills but also engage in peer learning and cross-country collaboration.

Contact person Ene Macharm

Project description
GET.transform is a technical assistance programme supporting national and regional partners in advancing their energy transitions. GET.transform is part of the European multi-donor platform Global Energy Transformation Programme (GET.pro), and supported by the European Union, Germany, Norway, Sweden, the Netherlands and Austria.
» GET.transform – Transforming Energy Sectors Globally (get-transform.eu)

Further information
» Global Energy Transformation Programme » GET.pro (global-energy-transformation.eu)
» 12 African Countries Boost Renewable Energy Tendering Capacities » GET.transform

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Spicing Up Horticulture

Sustainable Energy Boosts Income for Smallholder Farmers in East Africa

New technologies, higher productivity, and more stable incomes: “SEFFA” demonstrated how sustainable energy solutions can profoundly change the livelihoods of smallholder farmers © GIZ

The SEFFA (Sustainable Energy for Smallholder Farmers) project has concluded after four years of successful implementation. Over 5,000 farmers in Ethiopia, Kenya, and Uganda benefitted from the project that was co-financed by the IKEA Foundation.

Emmanuel Kifutuko, a Ugandan chilli farmer, used to lose 20% of his harvest during peak seasons. A partnership between Energising Development (EnDev) and Emrich Farms under the “SEFFA” project introduced a hybrid solar dryer, allowing him to dry chillies in approximately two days regardless of the weather, with real-time drying updates sent

Watch the video to learn more about how “SEFFA” project was implemented in Uganda © GIZ

to his phone. This innovation has boosted profits, reduced food waste, and added value to his produce.

Smallholder farmers in East Africa face challenges like unreliable rains, high irrigation costs, post-harvest losses, and labor-intensive tasks. Modern technologies can address these issues, but they require affordable energy sources. The "SEFFA" project provides sustainable solutions, including solar-powered water pumps, milk coolers, and dryers, which reduce energy costs and improve product quality, making farming eco-friendly and economically viable.

Read the news about how the “SEFFA” project has concluded © GIZ

Emmanuel is one of 5,455 smallholder farmers who are now using sustainable energy solutions and benefiting from more reduced post-harvest losses due to “SEFFA”s support.

Contact persons Helen Kyomugisha and Samwel Naimasia

Project description
Energising Development (EnDev) is an international flagship programme for providing energy access. The driving force behind EnDev is the partnership of Germany, the Netherlands, Norway, and Switzerland.
» Energising Change - EnDev

Reminiscence on ESDS Kenya Project Contributions

ESDS Kenya Project Closure © GIZ/ESDS Kenya

The Energy Solutions for Displacement Settings (ESDS) Project successfully came to an end in December 2024. ESDS aimed at strengthening the Turkana County Government and UNHCR by

focusing on access to sustainable, modern and affordable energy services for refugees and their host communities.

To achieve this, ESDS supported the development of enabling energy policies for the Turkana Energy Sector, the private sector electrification of 3,000 refugees' and host communities' households, businesses and social institutions and advised UNHCR on the greening of 42 field facilities through solarisation and energy efficient practises. Furthermore, it contributed to the institutionalisation of capacity building measures for local government officials, energy enterprises and industry practitioners. The project promoted the productive use of energy focusing on highly demanded appliances in Kakuma and Kalobeyei, while also raising awareness on sustainable e-waste management.

These activities enhanced the self-reliance of refugees and eased pressure on the host communities.

Contact person Wilkista Akinyi

Project description
The Energy Solutions for Displacement Settings Project, implemented by GIZ from 2019 to 2024, was part of the BMZ globally commissioned programme 'Support to UNHCR in facilitating the operationalisation of the Global Compact on Refugees in the Humanitarian-Development-Peace Nexus.
» Energy Solutions for Displacement Settings - energypedia

Project description
» ESDS Project Y4 Score Card

First Propane Air-Conditioning Chiller in Africa

Energy-efficient Cooling at nearly Zero Emission Building in Ghana

This building is naturally cool – thanks to the energy-efficient and climate-friendly Air Conditioning Chiller © GIZ Proklima

The cooling sector accounts for up to 10% of the global greenhouse gas emissions. These emissions could be reduced by 40% in industrialised countries, and by up to 60% in the Global South using only Chillers that combine energy efficiency and natural refrigerants. A pioneering

project in Accra, Ghana, showcases the potential of energy-efficient air-conditioning with the installation of Africa's first propane chiller.

The chiller uses the climate- and environmentally friendly refrigerant R290 (propane) and operates in an energy-efficient manner, particularly because it is mainly powered by a photovoltaic system. “The project proofs that R290 chillers can be installed and operated safely and efficiently in tropical countries of Africa”, says Philipp Denzinger, Project Manager of GIZ Proklima. The design and installation of the chiller has been supported by GIZ Proklima under the project Sustainable Energy for Climate Protection in cooperation with the Ghanaian Energy Commission. To guarantee a sustainable and effective operation in the future, training of local technicians and operators has been carried out.

Contact person Philipp Denzinger

Project description
The Sustainable Energy for Climate Protection (SustainE4Climate) project promotes renewable energy and higher energy efficiency in Ghana aiming at a cheaper, more reliable and climate-friendly electricity supply. The design and installation of the chiller has been supported by GIZ Proklima and HEAT GmbH.
» Green energy for climate protection in Ghana - giz.de

Further information
» First R290 Air-Conditioning Chiller in Africa - Green Cooling Initiative

Europe promotes local development in Southern Madagascar

Large-scale development of solar energy in southern Madagascar with 15,000 new connections

Solar mini-grid operated by ANKA Mangily, one of the major in the south-west © ANKA

Under the European Joint Strategy, the European Union, alongside Germany and France, is committed to supporting the development of Madagascar, with a particular focus on improving access to electricity in rural areas through the Renewable and Sustainable Energy Initiative. A concrete example of this commitment can be seen in the southwest of the island: with a grant from the French Development Agency (AFD) and the European Union, the company ANKA will expand its solar electricity grid in the region.

This funding, supported by the technical expertise (due diligence) of GIZ/TANGO, a project co-financed by Germany and the EU, will enable the construction of 13 new solar mini-grids and the addition of two additional batteries to the two already operational sites. This will benefit a total of 15,000 connected clients. Thanks to the due diligence conducted by GIZ/TANGO, detailed technical assessments have identified the specific financing needs for each site. In this way, Europe contributes to local development.

Contact person Carlos Miro

Project description
» Green electricity: driving Madagascar's development - giz.de

Further information
» L'électricité verte : un moteur du développement de Madagascar - giz.de

Transforming Lives with Renewable Energy: Community-led Solar Mini Grid Projects

Inauguration Event of Oda and Oborso Community-led Solar Mini Grid Sites

State Minister, Energy, Government of Ethiopia, Dr. Ing. Sultan Wali is inaugurating Oda Solar Mini Gridy @ GIZ-EnDev ET

The Energising Development (EnDev) Ethiopia Programme, implemented by GIZ and co-financed by the European Union, has successfully installed five community-led solar mini-grids with a total generation capacity of 648 kWp and integrated battery storage of 1,202 kWh.

Aerial view of Solar Minigrid at Oborso West Community @ GIZ-EnDev ET

This community-managed model provides a sustainable and cost-effective solution for electrifying rural Ethiopia and expanding energy access to dispersed communities. In December 2024, two of these five solar mini-grids sites at Oda and Oborso under the Oromia region of Ethiopia were officially inaugurated, marking a significant milestone in expanding energy access in rural areas of Ethiopia.

The solar mini-grid installation goes beyond simply providing electricity - it introduces a transformative approach to energy access. By establishing two electric user cooperatives, the project empowered local communities to take ownership of their energy supply. This model strengthens community engagement, improves management efficiency, and ensures that the benefits of renewable energy directly reach the grassroots level.

Contact person Honey Girmai

Project description
Energising Development (EnDev) Ethiopia is part of the EnDev global programme, financed by core donors Germany, the Netherlands, Norway, and Switzerland and received additional co- funding from Ireland, the Korean Foundation for International Healthcare, RVO, and the EU. EnDev Ethiopia aims to create self-sustaining markets for clean energy, focusing on renewable energy-based electricity and clean cooking solutions for low-income households, social institutions, and small to medium-sized businesses.
» Advancing clean energy access in rural Ethiopia - giz.de

The International Power-to-X Hub's Role in Advancing Kenya's Green Hydrogen Ecosystem

Kenya

International Power to X dialogue project country highlights @ International PowertoX Hub

Green hydrogen, as a key energy vector for the global energy transition, is increasingly seen as an opportunity for clean development in low- and lower-middle-income countries.

To improve Kenya's Green Hydrogen Ecosystem, the International Power-to-X (PtX) project supported sector-specific events such as the Regional Aviation Conference and Kenya's first Green

Shipping Week, uniting different stakeholders to explore hydrogen-based sustainable aviation fuels and fostering dialogue on maritime decarbonisation.

Kenya's Path to a Power-to-X economy: A Skills Development Perspective @ International Power to X Hub

The project also contributed to the development of Kenya's Guideline on Green Hydrogen and its Derivates, Kenya's National Action Plan on Maritime decarbonisation and a prefeasibility study to position Kenya as a pioneer in Green Shipping Corridors - a critical step toward zero-emission maritime trade routes. Finally, with its contributions to the capacity development of local expertise in green hydrogen technologies, the project supports Kenya's skill development roadmap.

Through these activities, the project has been significantly contributing to bolstering Kenya's Green Hydrogen Ecosystem.

Contact persons Kevin Mwangi Kerigu

Project description
The International Power-to-X Hub is a centre of expertise and collaboration for innovative and sustainable green hydrogen and Power-to-X value chains. Together with our partners, we identify Power-to-X solutions that are adapted to the specifics of each country and lead to sustainable economic transformation. The PtX Hub builds and fosters strong networks with industry, academia, administrations, and civil society with hubs in Africa, Asia, Europe, and Latin America.
» Start - PtX Hub

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ProTransición: An alternative for Bolivia to have a sustainable and inclusive energy future

Bolivia

Bolivian women visit the "Yunchará" photovoltaic plant in Tarija © GIZ Bolivia/ Elva Pacheco

In Bolivia, 60% of energy depends on natural gas, and, currently, there is a decrease in the production and gas reserves. This situation impacts the sustainability of the electricity supply as well as it affects the environment and the Bolivian economy. That is why GIZ is implementing the “Strengthening the Energy Transition in Bolivia” (ProTransición) program.

Bolivian women visit the "Yunchará" photovoltaic plant in Tarija © GIZ Bolivia/ Elva Pacheco

ProTransición has a technical assistance plan, approved by the government, which will develop activities for enhancing the technical capacities of the sector and promoting financing alternatives for the integration of renewable energies, the promotion of the use of distributed generation systems, as well as the stimulation of energy efficiency in public and private sectors, the use of electric mobility, and increasing the participation of women, based on the promotion of their leadership and decision-making in the electrical sector.

In this way, ProTransición will contribute to building a sustainable and inclusive energy future for Bolivia.

Contact person Claus-Bernhardt Johst

Project description
ProTransición promotes Bolivia's sustainable and inclusive energy development by improving the financial, operational, and technical conditions of the electricity sector. FactSheet ProTransición.
» Programa de fortalecimiento a la transición energética en Bolivia-ProTransición

GIZ and K-UTEC join forces to value reject brine and enhance Green Hydrogen projects‘ sustainability

Chile

K-UTEC and GIZ sign agreement © GIZ

The International Hydrogen Ramp-Up programme (H2Uppp) of the Federal Ministry for Economic Affairs and Climate Action (BMWK) initiated a Public-Private Partnership (PPP) between Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and K-UTEC to develop in Chile solutions for valuing reject brine as a result of seawater desalination process in the green hydrogen production.

The cooperation was officially kicked off on the 4th of December 2024 at the Hydrogen Dialogue in Nuremberg.

The PPP-project “Brine-to-Value: Valorisation of Reject Brine to Enhance Ecological and Economic Process Sustainability” focuses on converting reject brine into valuable products like sodium, potassium, and magnesium salts. This partnership seeks to reduce environmental impacts and improve the economic feasibility of green hydrogen projects using desalinated seawater.

Contact person Cristian Fuentes

Project description
The International Hydrogen Ramp-up Program (H2Uppp) of the German Federal Ministry for Economic Affairs and Climate Action (BMWK) promotes projects and market development for green hydrogen in selected developing and emerging countries as part of the National Hydrogen Strategy of Germany.
» MatchMaker - Discover new business opportunities in emerging markets. | MatchMaker (EN)

GIZ and RP Global join forces to develop of the pipeline of renewable hydrogen projects in the south of Argentina

RP Global and GIZ teams @ GIZ Cono Sur

Green hydrogen is vital for Argentina and Germany as it supports their energy transitions and climate goals. Argentina can leverage its renewable resources to become an important supplier, while Germany relies on imports of green hydrogen to decarbonise industries.

The International Hydrogen Ramp-Up programme (H2Uppp) of the Federal Ministry for Economic Affairs and Climate Action (BMWK) initiated a cooperation project (PPP) between GIZ and RP Global to support Argentina in the development of green hydrogen and green ammonia projects that could export to Europe. The cooperation was officially kicked off at the end of November 2024 at the Argentine-German Chamber of Industry and Commerce (AHK Argentina) in Buenos Aires.

The project includes a technical and economic analysis of the hydrogen production chain; a study on biodiversity and water in the Santa Cruz region, where the Gaucho Project of RP Global will be located; and an analysis of the regulations in force in Argentina, together with workshops to disseminate the results obtained.

Contact person Cristian Fuentes

Project description
The International Hydrogen Ramp-up Program (H2Uppp) of the German Federal Ministry for Economic Affairs and Climate Action (BMWK) promotes projects and market development for green hydrogen in selected developing and emerging countries as part of the National Hydrogen Strategy of Germany.
» MatchMaker - Discover new business opportunities in emerging markets. | MatchMaker (EN)

Brazil: Study will evaluate the Impacts of Climate Change in Energy Planning

The research involves public companies and international standards to evaluate variables in energy planning and operation

The BMZ Energy Systems of the Future project is promoting a study to assess how climate change should be incorporated into the planning of Brazil's electricity matrix, in partnership with the project's political partners, the Ministry of Mines and Energy and the Brazilian Energy Research Company (EPE).

The study aims to simulate the impacts of future scenarios on the country's electricity system, analysing precipitation, temperature, solar irradiation and wind variables and how these factors impact energy operation and planning. The project involves climate projections from the Intergovernmental Panel on Climate Change (IPCC) and projections from Brazil's National Institute for Space Research (INPE) and the National Water and Basic Sanitation Agency (ANA).

The study is expected to be finalised in July 2025 and should add to the formulation of energy transition policies and support a detailed diagnosis of how the electricity matrix will behave in the face of new extreme event scenarios.

Contact person Daniel Almarza

Project description
The Energy System of the Future Project improves conditions for the integration of renewable energy and energy efficiency in the Brazilian energy system. To this end, it offers advice on developing strategies, support in carrying out studies and developing pilot projects.
» Future-proofing Brazil’s energy systems - giz.de

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Supporting Long Term Energy Planning in Pakistan

Modelling two net-zero scenarios to visualise Pakistan’s decarbonised energy sector and generating a comprehensive sustainable energy blueprint to inform policies

Key players of Pakistan’s energy sector at GIZ premises to receive the TIMES model training for Long Term Energy Planning © GIZ Pakistan Faiza Batool

Pakistan’s power sector is beset with numerous challenges including a widening supply-demand gap, heavy energy import toll, inefficient grid infrastructure with high emissions burdening the end-consumer and the environment. Therefore, a robust long-term sustainable energy framework is essential for Pakistan.

Relevant energy sector stakeholders in the national TIMES workshop getting hands-on model operation training © GIZ Pakistan Saif Ur Rehman Memon

The German government is supporting the Energy Planning and Resource Centre (EPRC) to develop an Integrated Energy Model for Pakistan up to 2050 using TIMES, an energy modelling software. Interestingly, Pakistan is the first to implement GIZ's Long-term Energy Planning standard product under Vision 100 for energy transition.

To enhance the modelling capacities of Pakistan's energy sector key stakeholders alongside EPRC, a national TIMES training was conducted to commence model development.

The successful establishment of the TIMES model-based long-term energy plan and the resulting insights will steer Pakistan's energy policies towards a net-zero pathway and increased renewable energy supply, helping the country significantly in realising just energy transition and fulfilling its international climate commitments.

Contact persons Saif Ur Rehman Memon and Jens Brinkmann

Project description
The project "Decarbonisation and Digitisation of Power Distribution Networks" supports Pakistan's key power sector players to implement digital and regulatory solutions to achieve a just energy transition.

Viet Nam seeks cooperation in energy technology with Germany and France

Germany-France Study Trip 2024: Connecting for Energy Technology Innovation © GIZ ESP

In October 2024, Deputy Minister Hoang Minh from Vietnam's Ministry of Science and Technology (MOST) led a delegation on a study trip to Germany and France, organised by GIZ's IKI-supported CASE project.

The delegation engaged with partners like BMWK, ZIM, AHK, and leading manufacturing companies (e.g., Siemens Energy) to explore renewable energy technologies, including hydrogen, electrolysis, and wind turbines. They also exchanged insights with research institutes like Agora and France's Institute for Research and Technology, discussing global trends in renewable energy innovation and carbon reduction.

Roundtable Meeting on innovation in small and medium enterprises © GIZ ESP

Deputy Minister Hoang Minh praised Europe's advanced energy systems and highlighted lessons in policy support, innovation, and collaboration among government, businesses, and communities. The trip, co-organised with MOST's SATI, lays the groundwork for Vietnam's strategies in technology development and international cooperation for a sustainable energy transition.

Contact person Vu Chi Mai

Project description
The Clean, Affordable and Secure Energy for Southeast Asia (CASE) project aims to support Southeast Asian partner countries in the transition to a future energy system that provides reliable and affordable energy to the people while increasing political ambition to comply with the Paris Agreement.
» Home - CASE for Southeast Asia

Vietnam and Germany applaud success of rooftop solar power initiative

The closing event included an exhibition about Vietnam's and global rooftop solar power © GIZ ESP

The declining cost of solar photovoltaic has made it the world's most affordable power source, with Vietnam well-positioned for solar expansion due to local production, low labour costs and abundant solar irradiation.

GIZ and Vietnam's Ministry of Industry and Trade (MOIT) have celebrated achievements of the Commercial and Industrial Rooftop Solar project (CIRTS). With the participation of MOIT's Vice Minister, Nguyen Hoang Long and Germany's Ambassador to Vietnam, Helga Barth, the workshop on January 10 in Hanoi marked a significant milestone in the ongoing partnership between the two countries to advance energy sector transformation.

Panel discussion on the rooftop solar market in Vietnam at the CIRTS' closing event © GIZ ESP

Funded by BMZ, the CIRTS project was carried out by GIZ and the MOIT's Electricity and Renewable Energy Authority from February 2021 until January 2025. CIRTS addressed main technical, administrative and regulatory issues of rooftop solar operation and its integration with the grid, contributing to the further development of a stable, cost-effective and clean power system.

Contact person Philipp Munzinger

Project description
CIRTS focuses on strengthening its partners, Viet Nam's Ministry of Industry and Trade (MOIT) and the Vietnam Electricity, in the integration of rooftop solar into the electricity grid. The project contributes to technical topics, such as rooftop solar forecasting or remote monitoring and control, to regulatory issues, such as exports and compensation of surplus electricity from rooftop solar, and to strategic matters, such as change management for the energy transition.
» Commercial and Industrial Rooftop Solar - ESP

GIZ Side Event at India Water Conclave 2024

India

Participants of the side event @ GIZ India

GIZ, as a knowledge partner to the India Water Foundation, contributed to the International Conference on Deciphering the Interconnections of the Water-Energy-Environment Nexus. PSWP organised a side event titled “Water-Energy-Food Nexus: An Integrated Approach to Create Sustainable Ecosystems in Agriculture and Allied Sectors”.

The event was designed to line out an integrated approach to create a sustainable ecosystem in agriculture and allied sectors based on learnings from different activities taken under the PSWP Project. Experts from GIZ, IWMI and PwC shared their experiences leading to engaging discussions with the participants. The discussions were focused on different business models for the adoption of solar irrigation pumps. The learnings in terms of the local geographic and regional contexts were brought to the fore. Keeping the principal of Leave No One Behind, experiences were shared on the interplay of gender and energy access and how adopting micro solar water pumps can lead to a more inclusive transition into de-dieselising agriculture.

Contact persons Prasun Kumar Das and Ruchi Gupta

Project description
» Promoting Solar Water Pumps through the Indo-German Energy Programme - Promotion of Solar Water Pumps - giz.de

Women-Focused RE Development in State for Livelihood Generation

India

Participants of the event @ Pulkit, GIZ India

A recent meeting with GIZ Implementation of Energy Plans, Odisha's government departments, and industry stakeholders focused on integrating Distributed Renewable Energy (DRE) to empower women through sustainable development. Key discussions included introducing solar-powered spinning machines in the women-driven handloom sector to boost productivity, and transitioning diesel boats at Chilka Lake to electric alternatives for environmental and livelihood benefits.

The proposal for 'Mission RE-SHAKTI' aims to scale renewable energy-driven womens' empowerment initiatives under the Odisha's Mission Shakti framework, linking enterprises like weaving, fisheries, and food processing to clean energy. GRIDCO's renewable energy policy will align with these efforts, fostering synergies across Tourism, Fisheries, and MSMEs.

These initiatives support India's NDCs under the Paris Agreement by promoting clean energy and reducing emissions. Odisha's inter-departmental collaboration, technology adoption, and community engagement position it as a leader in renewable energy-driven socio-economic development.

Contact persons Pulkit Shrotri and Krushna Kaant Gupta

Project description
» Improving energy supplies in rural areas in India by using Decentralised Renewable Energy (DRE) sources - giz.de

Regional Frameworks for Cross-Border Renewable Energy Certificates (RECs) Trading on Grid-to-Grid Transmission Lines: Gap Analysis vis-à-vis International Standards

ASEAN Power Grid Advancement Programme (APG-AP) Policy Brief on RECs

APG-AP Policy Brief © ASEAN Centre For Energy

The ASEAN Centre for Energy (ACE), Southeast Asia Energy Transition Partnership (ETP-UNOPS), UN ESCAP, and CASE for Southeast Asia are releasing a series of policy briefs under the ASEAN Power Grid Advancement Programme (APG-AP).

This brief examines the role of Renewable Energy Certificates (RECs) in ASEAN, driven by multinational clean energy commitments and national decarbonisation goals. While RECs are actively traded domestically across ASEAN, cross-border transactions face challenges due to regulatory gaps. Key barriers include:

- Lack of shared energy sector regulations
- Need for harmonized REC standards
- Absence of regional governance for best practices

Additionally, RECs tied to cross-border electricity trade within ASEAN's grid connections are not recognised by international frameworks like RE100, limiting their value.

Addressing these issues requires harmonising REC standards, aligning cross-border regulations, and developing sub-regional REC markets to boost credibility and regional energy integration.

Contact person Maximilian Heil

Project description

The project CASE supports Southeast Asia's energy transition by combining research with local context to influence key stakeholders, balancing energy security and affordability while pursuing carbon neutrality goals through power sector reforms.

» Home - CASE for Southeast Asia

Powering the Future: REEP2 concludes with a Vision for Indonesia's Renewable Energy

Celebrating REEP2's achievements and looking ahead to Indonesia's energy transition

Group Photo of REEP2 Closing Event © Rahma/REEP2, GIZ Indonesia & ASEAN

On 19 November 2024, the 1,000 Islands Renewable Energy for Electrification Programme Phase II (REEP2) concluded through the event titled "Looking Back, Powering Ahead: REEP2's Journey and Future". Organised by GIZ Indonesia and MEMR of Indonesia, it was attended by government officials, industry leaders, and international partners. In attendance was DG of MEMR, Eniya Listiani Dewi, and Director of Various NRE, Andriah Feby Misna.

Amongst others, a talk show featuring pivotal partners of REEP2 throughout its implementation since 2019 was held. Discussed were key achievements such as policy recommendations for electricity regulations, technical studies, and pilot projects and also reflections on milestones, challenges and the partnerships that shaped the programme's impact.

Panel Discussion on REEP2's Achievements and Future Directions. Click to view REEP's journey - video displayed during the closing event © REEP2, GIZ Indonesia & ASEAN

During the event, the Renewable Energy to Grid (RE2Grid) programme was introduced as an upcoming project to continue the successes of REEP 1 and 2 that has established foundations for Indonesia's renewable energy transition, policy advancements and the empowerment of communities and institutional frameworks essential for a sustainable future.

Contact person Rahma Rahma

Project description

The 1,000 Islands-Renewable Energy for Electrification Programme Phase II (REEP2) is a project that focuses on renewable energy grid integration which aims to improve the institutional, regulatory, and technical conditions for achieving the policy target of 23% of RE by 2025 at national and regional level. The project is implemented by the Directorate General for New Renewable Energy and Energy Conservation (DG-NREEC) on behalf of the Government of Indonesia and GIZ/BMZ.
» Unleashing the potentials of renewable energies in Indonesia - giz.de

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Harnessing Solar Power for Sustainable Fisheries in Indonesia

Providing off-grid cold storage, reducing waste, and supporting a greener future for small-scale fishers in Kawa Village

Kawa fisherman holding up ice block produced by solar ice maker © IPNLF/SOCOOL/GIZ Indonesia & ASEAN

Kawa Village in Maluku is making strides in sustainable fisheries with the launch of a solar ice-maker facility, a collaboration between GIZ Indonesia, UNDP, PT ASTB, and the International Pole and Line Foundation (IPNLF). This initiative brings off-grid ice production to small-scale fishers, helping them preserve catch, reduce waste, and have access to better markets. Reliable cold storage is a challenge for communities in Indonesia. Limited access and unsteady supply of high-quality ice often lead to spoilage, income loss and fewer export opportunities.

The solar ice maker is not just a renewable energy solution. With its ability to produce up to one ton of ice per day, fishers gain steady and affordable supply, thereby reducing costs and carbon emissions.

Solar ice maker facility in Kawa village,

It empowers communities and supports a just and clean energy transition. The integration of solar power into fisheries strengthens livelihoods, enhances food security, and reinforces Indonesia's commitment to sustainability, paving the way for a greener, more resilient future.

Pulau Seram, Maluku ©
IPNLF/SOCOOL/GIZ Indonesia & ASEAN

Contact person Ni Made Chitra Anggraini

Project description
The Solar Cold Chains for a Green Economy in Indonesia (SOCOOL) project promotes energy-efficient cold chains using solar technologies to reduce CO2 emissions. Partnering with key stakeholders to supports Indonesia's renewable energy and climate goals, it enhances economic opportunities, and contributes to Vision 2045 for a green economy through standardised solar-powered cold storage and supply chains, particularly in fisheries and other key sectors. Implemented by DG-NREEC on behalf of the Government of Indonesia and GIZ on behalf of BMZ, the project fosters technology partnerships and develops solar cooling solutions.

• • • EUROPE • • •

Energy Community region detailed out how to achieve their 2030 energy and climate targets

Energy Community Contracting Parties including Albania, Bosnia-Herzegovina, Georgia, Kosovo, Moldova, Montenegro, North Macedonia, Serbia, Ukraine

Energy Community Members map © Energy Community Secretariat

The Energy Community (EnC) is an international organisation which aims to extend the EU's internal energy market rules and principles and lately also the EU climate ambition to its Contracting Parties (CPs). Most CPs are heavily reliant on coal-generated power, being a major cause for climate change and for some of the most air polluted regions in Europe. Robust policies, structured governance and targeted financing mechanisms are needed to facilitate a just and inclusive transition away from coal.

In December 2022, the EnC Ministerial Council adopted national 2030 targets for energy efficiency, renewables and reducing greenhouse gas emissions – an important impulse towards decarbonising the region's energy systems and economies. Two years later – in December 2024 – all nine CPs had submitted their (draft) National Energy and Climate Plans (NECPs) to the EnC Secretariat. These NECPs elaborate in detail on the policies, actions and financing schemes planned to achieve the 2030 energy and climate targets.

Contact person Anja Rosenberg

Project description

The Climate Diplomacy Action Programme supports the Federal Foreign Office in the implementation of German foreign climate policy and accompanies Germany's climate policy cooperation with its partner countries. The Programme seconds an expert to the Energy Community Secretariat to support NECP-related processes.

» Climate Diplomacy Action Programme | Internationale Klimaschutzinitiative (IKI)

Further information

The Energy Community Secretariat facilitates the NECP process by assessing draft NECPs, issuing country-specific recommendations and monitoring progress towards NECP implementation. When various GIZ bilateral and regional GIZ programmes started to support individual Contracting Parties in developing their NECPs, both organisations – the Energy Community and GIZ – decided to deepen their cooperation on the topic and formalised this intention in their 2019 Memorandum of Understanding.

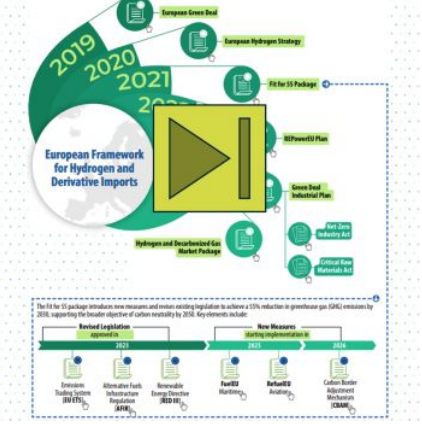
» Governance and NECPs - Energy Community Homepage

EU ETS, AFIR, RED III, FuelEU, RefuelEU, CBAM - but what does it mean for hydrogen?

Navigator on EU Regulations on Hydrogen and Derivatives launched at European Hydrogen Week 2024

The Navigator on EU Regulations on Hydrogen and Derivatives was launched at a roundtable during the European Hydrogen Week 2024 © International Power-to-X Hub

The European Union has the most advanced regulatory framework for hydrogen and Power-to-X products – but it is also very complex. That is why the World Bank, Hydrogen Europe and H4D, in collaboration with the International PtX Hub and the Brazilian Chamber of Electric Energy Commercialisation (CCEE), have developed an EU Hydrogen Regulatory Navigator.



Navigator on EU Regulations on Hydrogen and Derivatives © International Power-to-X Hub

The tool was officially launched at a roundtable discussion during the European Hydrogen Week on 19 November 2024.

For producers and investors outside the EU, it can be challenging to understand the existing EU regulations. The same is true for regulators who are considering aligning their national regulatory frameworks with the rules of the EU. The new Navigator therefore provides a simple but comprehensive overview of the main policies and regulations governing the import of hydrogen and its derivatives into the EU. The tool aggregates information and provides direct links to the relevant official regulatory documents.

Contact person Maren Schoettler

Project description
The International PtX Hub is a centre of expertise and collaboration for innovative and sustainable green hydrogen and Power-to-X value chains. Through policy and regulatory advice, training, and cross-sectoral stakeholder dialogues, the PtX Hub advocates for hydrogen and PtX approaches that promote sustainable market development.
» Start - PtX Hub

Resilient healthcare: A solar powered solution for Kyiv’s Maternity Hospital

Ukraine

Solar power station on the roof of the hospital © the gate agency

The 3rd Maternity Hospital in western Kyiv has provided 24/7 care to women and newborns for over 40 years, serving 10,000 patients annually. Amid frequent power outages caused by continuous attacks due to the war, the hospital sought energy independence and approached the city of Kyiv for support. The city administration applied to a grant offered by the FEER project, which enabled the installation of a 120-kW hybrid solar power station with a 60-kWh battery, ensuring stable energy supply and faster backup power during emergencies. "Every second counts in our work. This system is vital for the safety of mothers and newborns," says head physician Nazarii Hychka.

The eco-friendly system contributes to saving 283 MWt across three Kyiv hospitals that were supported via the grant. It demonstrates how renewable energy solutions can enhance healthcare resilience, sustainability, and safety. The 3rd Maternity Hospital is now better equipped to protect vulnerable mothers and babies, regardless of external challenges.

Contact persons Gregor Broemling and Katharina Schaake

Project description
The "Promotion of Energy Efficiency and Implementation of the EU Energy Efficiency Directive in Ukraine (FEER)" project's goal is to promote the implementation of the EU Energy Efficiency Directive, reduce energy consumption at the municipal level and among industrial companies, and create modern opportunities for obtaining qualifications in the field of energy efficiency. The project is cofinance by Swiss SECO.
» Raising energy efficiency in Ukraine - giz.de

• • • MENA • • •

Empowering Algeria's Green Future: Pioneering Workshops and Green Hydrogen Potential

TaqatHy Program Accelerates Renewable Energy Integration and Positions Algeria as a Global Green Hydrogen Leader

Capacity-Building Workshop on Conducting Impact and Compliance Studies for the Integration of Renewable Energies-Algeria, 13-15.01.2025 @ HiveDigit for TaqatHy

From January 13 to 16, 2025, the TaqatHy project, implemented by GIZ Algeria in partnership with the Ministry of Energy, Mines, and Renewable Energies, hosted a series of high-impact workshops to accelerate Algeria's energy transition.

Workshop on the Presentation of the Study: "Comparative Profitability Analysis for the Export of Green Hydrogen from Algeria to EU Markets-Algeria, 15-16.01.2025 @ HiveDigit for TaqatHy

The first sessions focused on renewable energy impact and compliance studies, offering advanced technical expertise. The final session introduced a cutting-edge methodology for flexibility studies to address energy intermittency, engaging key stakeholders such as the power utility Sonelgaz, the regulatory body CREG, and Sonatrach. These initiatives not only bolster Algeria's grid resilience but also align with the country's 15 GW renewable energy goal, positioning it as a leader in the global energy transition.

On January 15 and 16, the project also unveiled the initial findings of a study on exporting Algerian green hydrogen to Europe. The results underscored Algeria's significant potential, driven by robust infrastructure, closeness to Europe and rising European demand.

Contact person Elisabeth Gager

Project description
TaqatHy - Technology and socio-economic development for renewable energies and green hydrogen in Algeria.
» Shaping economic prosperity through renewable energies and green hydrogen - giz.de

• • • GLOBAL • • •

GET.invest Funding Database: 270+ funds for renewable energy projects and companies

Sub-Saharan Africa, Caribbean, Pacific

GET.invest Funding Database: 270+ funds for renewable energy projects & companies © GIZ

In response to the growing complexity of the financing landscape for renewable energy projects and businesses, GET.invest offers a user-friendly Funding Database with over 270 entries to pick from. This up-to-date list provides detailed insights into each fund, including eligibility criteria, requirements

and key contacts, enabling users to compare and identify the most suitable funding opportunities. This is done with co-funding from the European Union, Germany, Norway, Netherlands, Sweden and Austria.

The Database covers all market segments and offers a variety of financing instruments, such as debt, equity,
grants and guarantees. It features funds with a wide range of ticket sizes, available in euros, US dollars, British pound and various local currencies. Geographically, the database includes funding options for projects in Sub-Saharan Africa, the Pacific and the Caribbean. It also features several funds with a gender and diversity focus, enabling users to identify financing options that promote inclusive investment.

Contact person Ibidun Oludipe

Project description
GET.invest is a European programme that mobilises investment in renewable energy, co-funded by the European Union, Germany, Norway, the Netherlands, Sweden and Austria. It is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). Since 2022, GET.invest serves as the Team Europe One Stop Shop to help companies and project developers navigate and access European support and financing instruments for green energy.
» GET.invest website

Further information
The Funding Database is available » Funding Database - GET.invest
For further information, please reach out to GET.invest at » info@get-invest.eu

Europe Remains a Global Leader in SDG7 – Finance in Africa

New report provides a data-driven look into Europe's support to Africa's energy development
AU & EU

Evolution of SDG7 indicators (2014 – 2022) © Africa-EU Energy Partnership (AEEP)

The European Union (EU) and its Member States remain critical contributors to achieving SDG7 in Africa. The third edition of the Africa-EU Energy Partnership's (AEEP) report 'European Financial Flows on SDG7 to Africa' shows that European institutions and EU Member States provided EUR 61.7 billion in public funding for Sustainable Development Goal 7 (SDG7) projects during 2014-2022.

The majority of this was directed towards renewable energy (EUR 34.3 billion) and electricity access (EUR 22.2 billion).

Between 2014 and 2022, African states invested EUR 105 billion in energy, driving growth in renewable capacity and expanding electricity access. However, 588 million people still lack electricity, and progress in clean cooking remains slow. With the 2030 SDG7 deadline approaching, the AEEP's report underscores the need for continued collaboration and increased investment to ensure universal access to clean, affordable, and sustainable energy in Africa.

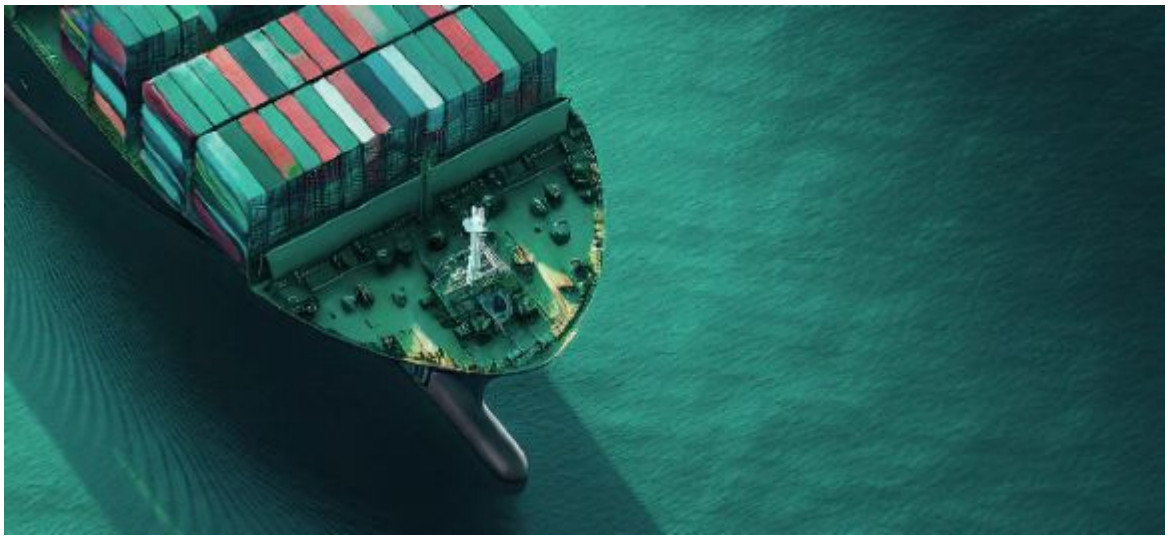
To learn more about the findings and key recommendations download the full report from the AEEP website.

Contact person Bezawit Demere

Project description
» AEEP | Africa-EU Energy Partnership

Energy-Efficient Shipping: GIZ Pioneers Propane Reefers

Costa Rica, South Africa



Energy-efficient reefers set sail to transform the shipping industry © creative republic

Shipping is responsible for 3% of global greenhouse gas emissions. That is due to 1.5 million refrigerated containers (reefers) which are used for the international transport of chilled and frozen goods using refrigerants with high global warming impact and have high energy demand.

The Greener Reefers project by GIZ Proklima collaborating with Thermo King aims to demonstrate the viability of energy-efficient, propane (R290)-based refrigerated reefers as a future friendly alternative.
While CO2-based reefers exist, they do not meet the energy efficiency needs. With R290, the goal is to outperform the existing R134a models by 10%.

The project will conduct risk assessments, develop safety standards, and train technicians in handling R290 to bridge the gap between safety and energy performance, providing a viable, future friendly solution for the shipping industry.

Contact person Kirsten Orschulok

Project description

The Greener Reefers project aims to show the shipping industry that R290 reefers are possible combining the use of future friendly natural refrigerants and energy-efficiency. Therefore, the project aims to facilitate a momentum to unite the private sector, international policies, and regulations in order to set the stage for a shift.

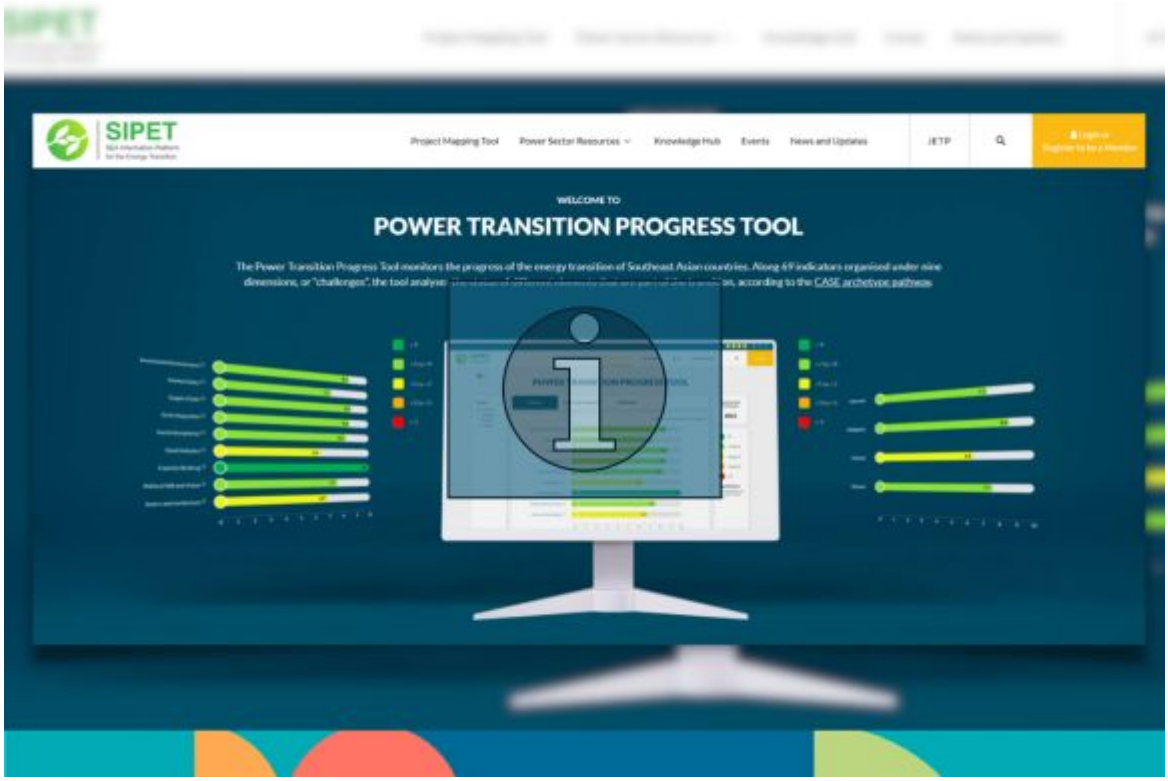
» Greener Reefers, Sustainable Cooling, Green Cooling Initiative - Green Cooling Initiative

Further information

» Green Cooling Initiative - Home

Connect to the Energy Transition Gateway of Southeast Asia now and become a SIPET subscriber

Empowering collaboration and knowledge-sharing to accelerate the region's shift toward sustainable energy solutions



SIPET website © GIZ

Southeast Asia's energy transition is shaping the region's future, and your involvement is crucial. The Southeast Asia Information Platform for Energy Transition (SIPET) is your go-to platform for staying informed, connected, and empowered in this transformative journey.

Visit SIPET to access the latest insights, join discussions, and collaborate with governments, businesses, academics, and civil society. Subscribe to our newsletter for curated updates, expert analyses, and opportunities to engage, delivered straight to your inbox.

Become a SIPET member to join a growing network of stakeholders dedicated to a sustainable energy future, gaining exclusive access to events, tools, and collaborations that amplify your impact. Visit, subscribe, and join SIPET today—be part of the change!

Contact persons Maximilian Heil

Project description

The project CASE supports Southeast Asia's energy transition by combining research with local context to influence key stakeholders, balancing energy security and affordability while pursuing carbon neutrality goals through power sector reforms.

» Home - CASE for Southeast Asia

Subscribe here: » SIPET: Central Hub for Southeast Asia Energy Transition

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Empowering a Just Energy Transition: How TVET Can Bridge the Green Skills Gap

Sectoral Study: TVET for Renewable Energies

Cover of the Sectoral Study “TVET for Renewable Energies” © GIZ

Without qualified personnel, no electric car will be maintained, no solar power system will be installed, and no hydropower plant will be operated. Against this background, GIZ’s Sector Project Technical and Vocational Education and Training (TVET) has published a variety of BMZ-commissioned studies on Skills for a Just Transition to a Green Future, including a discussion paper, a vision paper and three sectoral studies on renewable energies, sustainable construction and sustainable mobility with a geographical focus on selected partner countries in Africa and Asia.

Based on an analysis of data and literature and on interviews with government representatives and development projects from India, Brazil, Vietnam, Kenya, Nigeria, Uganda, and South Africa, the Sectoral Study “TVET for Renewable Energies” explores how development cooperation can help partner countries align initial and continuing TVET with the imperatives of a just energy transition. This is then distilled into recommendations for action that address those responsible for planning and implementing development projects.

Contact persons Annika Hornberger and Janet Gohlke-Rouhayem

Project description
The Sector Project Technical and Vocational Education and Training (TVET) supports the BMZ in developing strategies, methods and approaches to promote equal access to high-quality, inclusive TVET and higher education that is aligned with the needs of the labour market.
» Inclusive gender-sensitive TVET for a green and digital future - giz.de

Further information
Discover now why TVET is crucial for a just green transition! Read the full study here: » TVET for Renewable Energies : Sectoral Study

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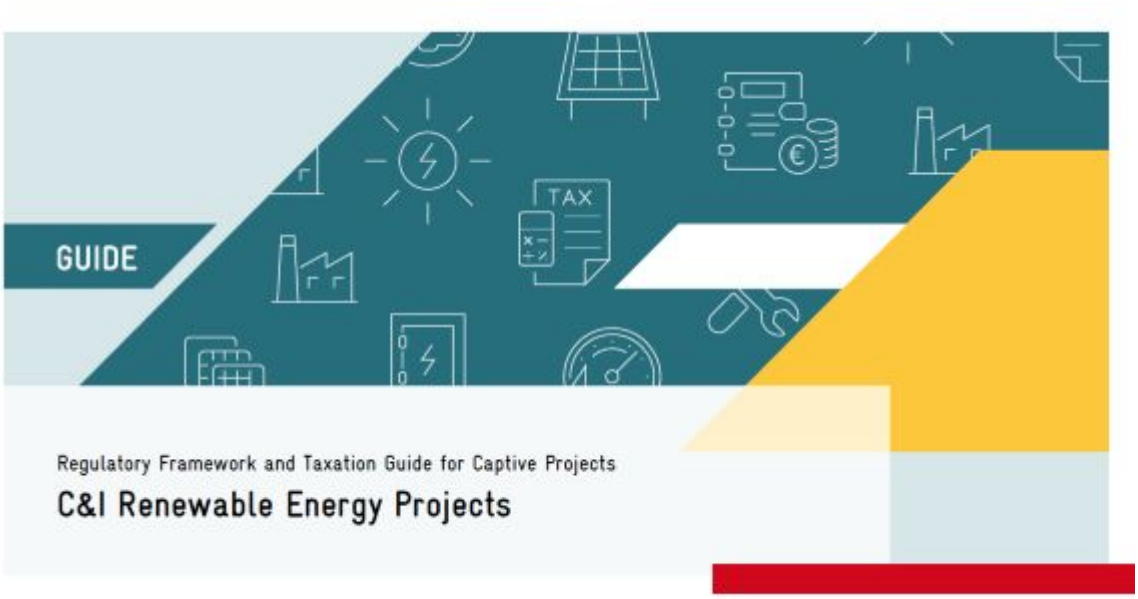
Navigating Regulatory and Taxation Frameworks for C&I Solar in Burkina Faso, Uganda, Rwanda, Ghana, Kenya, and Nigeria

New studies provide guidelines on regulatory and taxation frameworks for C&I solar projects Burkina Faso, Uganda, Rwanda, Ghana, Kenya, and Nigeria



PDP’s new regulatory and taxation frameworks studies © GIZ

Understanding national regulations is essential for businesses looking to develop renewable energy projects. To support this, the Project Development Programme (PDP) has published new studies to help companies navigate legal, tax, and investment conditions in six African markets.

In Burkina Faso, the legal framework for photovoltaic systems has advanced significantly in recent years, creating strong opportunities for independent power production and self-consumption in the commercial and industrial sectors. Two new guides for Uganda and Rwanda provide

Rising electricity prices make efficient and climate-friendly energy solutions increasingly attractive. PDP addresses this demand by connecting companies in developing countries with providers of climate-friendly energy solutions from Germany. How does this work? Find out in the new video. © GIZ

businesses with insights into regulatory, financial reporting, and taxation aspects, simplifying complex legal language and offering practical guidance for companies navigating the C&I solar market. Meanwhile, the regulatory and tax guides for Ghana, Kenya, and Nigeria help businesses better understand investment structures, taxation, and compliance for captive energy projects, supporting informed decision-making and risk assessment in these growing markets.

These resources provide businesses with the necessary tools to confidently develop renewable energy solutions in complex regulatory environments.

Contact person Domenica Edriss

Project description

The Project Development Programme (PDP), as a key pillar of BMWK's German Energy Solutions Initiative, operates at the intersection of development cooperation and private sector engagement at the local level. The PDP team collaborates with the C&I sector in developing countries to develop climate-friendly energy projects in the fields of photovoltaics, battery storage, energy efficiency, process heat, and green hydrogen. It provides free and neutral advice to local companies, facilitates connections with solution providers registered in the German Energy Solutions Initiative, and promotes market development through trainings, studies, and reference projects.

Further information

Studies:

» Burkina Faso: Examen des aspects juridiques et réglementaires - Projets commerciaux et industriels d'énergie renouvelable (PDF, 0,54MB, FR)

» Uganda: Commercial and industrial renewable energy projects - Review of the regulatory, financial reporting and tax aspects (PDF, 1,39MB, EN)

» Rwanda: Commercial and industrial renewable energy projects - Review of the regulatory, financial reporting and tax aspects (PDF, 1,63MB, EN)

» Nigeria: Regulatory framework and taxation guide for captive projects - C&I Renewable Energy Projects (PDF, 0,82MB, EN)

» Ghana: Regulatory framework and taxation guide for captive projects - C&I Renewable Energy Projects (PDF, 0,67MB, EN)

» Kenya: Regulatory framework and taxation guide for captive projects - C&I Renewable Energy Projects (PDF, 0,72MB, EN)

PUBLICATIONS

Energy Technology Perspectives 2024 – Analysis - IEA

October 2024

The deepening connections between energy, trade, manufacturing and climate are the focus of this latest edition of Energy Technology Perspectives (ETP), IEA's flagship technology publication. Building on the comprehensive assessment of clean energy technology supply chains set out in ETP-2023, this year's edition offers cutting-edge analysis based on rich and detailed new data, granular surveys of industry, and a bottom-up approach to fresh modelling. Its significance is amplified by what has been, until now, a dearth of information in this space, and it will provide policymakers with an in-depth, quantified basis to inform their deliberations for years to come.

» iea.org/reports/energy-technology-perspectives-2024

Estimating Investment Needs for the Power Sector in Africa 2023-2030
October 2024
This study is a contribution to the ongoing discussion on the costs and implications of addressing the two fundamental energy challenges facing the African continent, namely achieving universal access to electricity in line with Sustainable Development Goal number 7 and expanding power systems to support economic growth without getting locked into a high-emissions pathway.
» afdb.org/en/documents/estimating-investment-needs-power-sector-africa-2023-2030-africa-report

Energy Efficiency 2024
November 2024
The IEA's primary annual analysis on global energy efficiency developments shows recent trends in energy intensity and demand, prices and policies. The report provides sector-specific analysis on buildings, appliances, industry and transport and explores system-wide themes such as electrification, flexibility, investment and employment. This report is launched in parallel with the new IEA Energy Efficiency Progress Tracker, which can be accessed directly through the IEA website.
» iea.org/reports/energy-efficiency-2024

World Energy Transition Outlook (WETO) 2024
November 2024
IRENA's 1.5°C Scenario, set out in the World Energy Transitions Outlook, presents a pathway to achieve the 1.5°C target by 2050, positioning electrification and efficiency as key transition drivers, enabled by renewable energy, clean hydrogen and sustainable biomass. he 2024 Outlook provides an overview of progress by tracking implementation and gaps across all energy sectors, and identifies priority areas and actions based on available technologies that must be realised by 2030 to achieve net zero emissions by mid-century.
» irena.org/Publications/2024/Nov/World-Energy-Transitions-Outlook-2024

Empowering Ukraine Through a Decentralised Electricity System – Analysis - IEA
December 2024
This roadmap from the IEA, Empowering Ukraine through a Decentralised Energy System, outlines a pathway to rebuild and modernise Ukraine's power sector amid ongoing attacks on its energy infrastructure. Since Russia's full-scale invasion of Ukraine in February 2022, nearly two-thirds of Ukraine's dispatchable power capacity has been occupied, damaged, or destroyed. The report highlights distributed energy resources (DERs) as a vital solution to address their power deficit while enhancing Ukraine's energy security, resilience, and flexibility. DERs – such as solar PV, wind, batteries, and small modular gas turbines – enable local power generation while also reducing vulnerability to targeted attacks. IEA analysis shows that a diverse mix of DERs offers a cost-effective and resilient path for Ukraine's power system recovery.
» iea.org/reports/empowering-ukraine-through-a-decentralised-electricity-system

Off-grid Renewable Energy Statistics 2024
December 2024
The International Renewable Energy Agency (IRENA) analyzed off-grid renewable energy trends using surveys, administrative data, and research. Though often unrecorded, off-grid renewable electricity is growing rapidly. This publication presents 2014–2023 statistics in trilingual tables, covering diverse sources from isolated grids to solar home systems. Beyond households, off-grid renewables power cooking, water pumping, telecom towers, schools, clinics, and more. Key global trends are summarized in the accompanying Off-Grid Renewable Energy Highlights.
» irena.org/Publications/2024/Dec/Off-grid-Renewable-Energy-Statistics-2024

Planning and prospects for renewable power: Central Africa
January 2025
This report builds on IRENA's Regional Modelling Analysis & Planning Support Programme for Central Africa in partnership with the Central African Power Pool (2020–2023). It explores the power sector landscape of Central Africa, exploring scenarios for its long-term development. Despite an urgent need for investment to address low levels of electricity access in the region, there is potential

for significant demand growth. In all scenarios, renewables, especially hydropower, are able to meet the vast majority of projected demand to 2040 based on cost optimisation and resource quality. The study highlights untapped potential for cross-border electricity trade to reduce costs and enhance flexibility.
» irena.org/Publications/2025/Jan/Planning-and-prospects-for-renewable-power-Central-Africa

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» Kinshasa, Kongo: Technical assistant - Access to water and sanitation services
(French only)
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Application Deadline: 02/14/2025

» Different locations: Development workers (m/f/d) as Digital Ambassadors
Job-ID:V000059952
Application Deadline: 11/10/24

Current Vacancies
» Pretoria, South Africa: Team Leader (m/fd) “Bridging inequalities through greener municipalities”, South Africa
Job-ID:V000061173
Application Deadline: 07/01/2025

Current Vacancies
» Bonn/ Berlin, Germany: Legal trainee for CONNEX Support Unit
(German only)
Job-ID:V000051383
Application Deadline: 08/30/2025

INFORMATION and LINKS

GIZ – International Fuel Prices
To subscribe, please contact Armin Wagner.

GIZ offers a range of company-wide and subject-specific newsletters, e.g. on the topics of ‘Transport and Mobility’, ‘Low Emission Devleopment & Renewable Energy’ (English/French), and many more. The various newsletters are listed on » GIZ’s newsletter description page.

» Browse back issues of GIZ's energy newsletter.

Energising Development Bolivia (English / Spanish)
» Newsletter + Energy

» The Global Energy Transformation Programme - GET.Pro

» Energising Development – EnDev

» Energypedia

» REN21

» IRENA

» IEA

» SE4ALL

» Powering Agriculture (energypedia.info)

» German National Hydrogen Council (NWR)

IN A NUTSHELL

On 26 January, at the sidelines of the **Mission 300 Africa Energy Summit** in Dar es Salaam, Tanzania, the Africa-EU Energy Partnership (AEEP) organised a high-level dialogue bringing together 14 African and European stakeholders to explore how to meet Africa's energy needs and scale energy investments. The closed-door event allowed for a frank discussion under the moderation of Dr Towela Nyirenda-Jere, Head of AEEP Secretariat. The participants, including ministers and directors, discussed how to create a conducive environment for private investments and emphasised the importance of coordination and alignment between the multiple initiatives in the energy space in Africa to create synergies and accelerate progress on SDG7.
» AEEP high-level dialogue at sidelines of Africa Energy Summit emphasised need for close coordination of energy initiatives in Africa - Africa-EU Energy Partnership

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