

#### Issue no. 86 | December 2023

Contact

# **Energy Newsletter**



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

#### Dear readers,

on the publication date of this newsletter, the 28th UN Climate Change Conference will be taking place in Dubai. We have almost become accustomed to looking at this event with a good deal of skepticism and low expectations. However, this year is different: the IEA and other analysts have made a welcome and surprising statement: global annual CO2 emissions will peak and start to decline before 2030. The use of oil, gas and coal will (slightly) decrease in the "stated policy" scenario (which assumes the implementation of the policies that are in place) by the mid of this decade. According to the IEA energy outlook 2023 (if you don't have the time to scroll through the report: the executive summary is absolutely worth reading) and the DNV's world energy transition outlook 2023, the installation of PV and wind power plants is growing exponentially and production capacities accordingly. This leads us to expect further massive cost reductions. And this despite the fact that PV is already historically the cheapest source of electricity (cheaper than 1 Eurocent/kWh in the best locations). A similar effect can be expected for electric cars and batteries in the very near future. New resource-saving battery types such as sodium-ion batteries are being mass-produced and used in the first Chinese EV models since the beginning of 2023.

The manufacturer CATL expects this new technology, which does not require rare earths, to reduce production costs by a factor of three. Battery production capacities are currently being expanded at a

rapid pace.

For electricity generation, DNV assumes a global average cost of electricity provided by PV+battery systems of approx. 5 Eurocents/kWh by 2030. Such hybrid power plants can supply fully dispatchable electricity in a 24-hour cycle and thus replace all types of fossil fuel power plants while reducing costs. With these technologies, for which production capacities are being expanded very fast, we have for the first time a prospect of getting man-made climate change under control. Despite all the enthusiasm, however, it must be noted that even these unexpectedly positive trends are far from being enough to achieve the 1.5-degree target. Our joint efforts have to be increased and accelerated. This is particularly true for activities to speed up the energy transition in our partner countries in the Global South, many of which are expected to adopt climate-friendly policies and technologies with a significant delay.

With this in mind, we hope you enjoy reading the contributions of our colleagues from around the globe who are tackling climate change and energy poverty. We hope and wish that the articles will make you curious, so that in some cases you will just contact them and start an inspiring exchange with the authors of the contributions.

## André Eckermann

Head of Competence Centre Energy and Transport

Mike Enskat Head of Infrastructure – Energy, Water, Mobility

#### **Further information**

- » Energy Transition Outlook 2023
- » DNV's world energy transition outlook 2023

#### **UPCOMING EVENTS**

#### ••• AFRICA •••

- » Unleashing the Power of Renewable Energy for Local Economic Development The Emerging Role of Municipalities in the Next Frontier: Africa
- » AEEP Energy Talks Highlight Need for Trust-building for a Synergetic Africa-EU Collaboration Ahead of COP28
- » "This study is a godsend"
- » Power Trading Boost in Namibia: New Market Access Guide
- » Another Chance for Students with Disabilities
- » Boosting electricity trading in West Africa
- » Making Namibia's Power-to-X potential a reality

#### ••• AMERICAS •••

- » INERATEC and GIZ collaborate to push E-fuel production in Chile
- » With the presence of the Presidents of Chile and the European Union, the Renewable Hydrogen Development Project was launched in Chile
- » The fifth version of the Green Hydrogen Summit Chile LAC, co-organised by GIZ, was held with more than 1,500 attendees
- » Decarbonization of the industry and Just and Inclusive Energy Transition at the heart of the German-Brazilian Energy Partnership
- » Rural electrification in the community of Sabana Real
- » Proyecto Transición Energética Closing Congress: Achieving Renewable Energy Milestones in the Dominican Republic
- » Triangular Cooperation Culmination: Strengthening Ties Between Germany, the Dominican Republic, and Chile, Costa Rica, and Cuba
- » Inauguration of Eco-Friendly Electric Train: A Triangular Cooperation Success for Sustainable Mobility in Santo Domingo
- » Bolivia makes progress in the energy transition
- » Research enhances analysis in Brazil's Energy Efficiency Programme
- ••• ASIA •••
- » Establishing the Basis for Viet Nam's JETP Resource Mobilization Plan
- » Holkar Cricket Stadium embraces solar power with rooftop PV system launch
- » More Renewables, Less Emissions
- » Research Presentation at Solar World Congress 2023

••• EUROPE •••

- » Innovating at the water-energy nexus in Cyprus
- » Ukrainian Climate Office Centre of Excellence for climate topics discusses the shades of green
- » Shaping the Future of Blue Energy in Central and Eastern Europe
- ••• MENA •••
- » Energy minister inaugurates 5th German-Algerian Energy Day
- » Solar energy gets a boost in Algeria
- ••• GLOBAL •••
- » Launch of GeCCo at COP28
- » The Climate Club is officially launched!
- » Net Zero World Initiative and GIZ join forces to decarbonize global energy systems
- » Green hydrogen potential in the Commercial and Industrial (C&I) sector in Kenya, Ghana, Jordan & Vietnam
- » News on green hydrogen's potential for Germany's partner countries

PUBLICATIONS

# GIZ JOB OFFERS

# **INFORMATION AND LINKS**

# **UPCOMING EVENTS**

**30 November to 12 December 2023** 2023 United Nations Climate Change Conference (COP28) Dubai, UEA

**06 December to 08 December 2023** Off-Grid Expo + Conference (OEC) Augsburg, Germany

# ••• AFRICA •••

Unleashing the Power of Renewable Energy for Local Economic Development - The Emerging Role of Municipalities in the Next Frontier: Africa

3 - 5 October 2023, Nairobi, Kenya



Group Picture Nairobi Conference © Generative ART | Adobe Stock | Connective Cities

The conference delved into the potential of Renewable Energy, particularly within the unique contexts and opportunities present in Africa, aiming to foster knowledge exchange among cities and municipalities, catalyse project development, and ignite innovative solutions around transitions to renewable and sustainable energy provision. Additionally, the event highlighted financing options for project planning.

The workshop was attended by 30 practitioners from city governments, associations and the private sector representing 7 countries and 20 cities from Africa, as well as high-level guests including the Country Director of GIZ, the Kenyan Ministry of Energy, the head of the Romanian Development Agency (RoAid), the City of Gersthofen from Germany, and officials from the European Investment Bank (EIB) and the African Development Bank (AfDB). Representatives from various cities in Ghana, Kenya, Malawi, Nigeria, Senegal, Tanzania, and Tunisia also contributed to the success of the conference with their presentations of the framework conditions and project examples.

# Contact person Moses Munuve

# **Project description**

Connective Cities promotes the global exchange of municipal expertise and supports shared learning and peer consultation between German and international urban practitioners as well as the development of joint projects.

Our aim is to network municipal experts and to offer the opportunity to exchange international experiences on sustainable urban development at the local level within the framework of structured learning processes

» Connective Cities

» Connective Cities News

# AEEP Energy Talks Highlight Need for Trust-building for a Synergetic Africa-EU Collaboration Ahead of COP28

Professionalisation kits enable improved cookstoves (ICS) producers via tools and business development support to increase their production capacity



Banner for From ACS to COP28: Unlocking Opportunities for a Synergetic Africa-EU Climate and Energy Future © Africa-EU Energy Partnership (AEEP)

The project "Promotion of Climate-Friendly Cooking: Kenya and Senegal" has so far supported over 100 ICS producers by equipping them with a professionalization kit, The 12th AEEP Energy Talks, on 8 November 2023, summarised the outcomes of the Africa Climate Summit (ACS) held in Nairobi,

Kenya, 4 - 6 September 2023, and explored closer Africa-EU alignment on energy and climate ahead of COP28 in Dubai in December.



Findings from AEEP Energy Talks: From ACS to COP28: Unlocking Opportunities for a Synergetic Africa-EU Climate and Energy Future © Africa-EU Energy Partnership (AEEP)

## Contact person Michelle Marie Nolan Aguirre

The webinar explored challenges in private financing, the role of green hydrogen, and the crucial need for trustbuilding measures. The panel featured Mr Stefano Signore, European Commission, Syrine El Abed, IEA, Glenn Pearce Oroz, SEforALL, and Jabri Ibrahim, a High-Level Climate Champion.

With COP28 on the horizon, the AEEP Energy Talks underlined Africa's potential as a renewable energy leader. Green hydrogen was mentioned as a resilience source, with calls to incentivise its adoption. Trust-building, tangible actions, and effective EU initiatives were deemed essential for forging a sustainable future. Speakers also urged Africa to maintain high ambitions in the lead up to COP28.

## **Project description**

The Africa-EU Energy Partnership (AEEP) is Africa and Europe's gateway for joint action on a green energy future. AEEP monitors and convenes the actions and stakeholders that drive the African and European energy transformation.

» About the AEEP - Africa-EU Energy Partnership (africa-eu-energy-partnership.org)

#### **Further information**

» Findings from 12th AEEP Energy Talks



# "This study is a godsend"

Improving Minimum Energy Performance Standards in the Refrigeration and Air Conditioning Sector



From left to right: the ROCA Project Coordinator Ms Pauline Zaba Yameogo, the Director General of Environmental Preservation Mr Boukary Kaboré and Mr Lingani Bakary, Energy Expert from the Ministry of Energy © GIZ / Massaka

The refrigeration and air conditioning sector is responsible for up to 10% of the global greenhouse gas emissions. The cause? High global warming potentials of many refrigerants and huge energy consumption. The solution? Green Cooling: energy efficient appliances that run with natural refrigerants. One way for achieving more energy efficiency is to implement strict minimum energy performance standards (MEPS).

The ROCA project (ozone and climate friendly cooling in West and Central Africa) supports its partner countries in the development of those MEPS by conducting workshops and studies, e.g., an inventory of cooling equipment. Mr Lingani Bakary, energy expert from Burkina Faso, welcomes the contribution: "This document is a godsend, because previously, statistics for the sector were based on projections". In Mali, the work concluded in the adoption of a national energy efficiency strategy.

### Contact persons Nils Hansen and Kerstin Kreß

#### **Project description**

ROCA stands for the French letters of ozone and climate-friendly cooling in West and Central Africa. The project promotes Green Cooling technologies in Burkina Faso, Cameroon, Mali and Senegal. It is co-funded by the European Union and the German Ministry for Economic Cooperation and Development.

» green cooling initiative

#### **Further information**

- » Download the energy efficiency strategy Mali
- » Read about the energy efficiency workshop in Burkina Faso

# Power Trading Boost in Namibia: New Market Access Guide

ECB, NamPower and SAPP issue joint guide with support from GET.transform



Launch of the SAPP and MSB Market Access Guide in Windhoek,28 August 2023 © GIZ/GET.transform

Namibia's Electricity Control Board (ECB), NamPower and the Southern African Power Pool (SAPP) have issued a joint guide to support Independent Power Producers (IPPs) in accessing the national and regional energy trading market. The guide was developed with support from GET.transform and launched in Windhoek in August 2023.

By providing an overview of the market rules and roles in Namibia's Modified Single Buyer (MSB) and the SAPP regional market, this guide addresses the urgent need for consolidated information. It assists IPPs in understanding and navigating the necessary processes and outlines the requirements for active participation in both markets.

Through introduction of the MSB market rules, Namibia has partially opened its electricity market. This pioneering position makes the country a perfect model for lessons and replication in other SAPP members countries. The first edition of the SAPP and MSB Market Access Guide has been developed as a reference guide for future editions.

#### Contact persons Lovisa Neshila

#### **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, Sweden, the Netherlands and Austria.

#### **Further information**

- » Global Energy Transformation Programme » GET.pro (global-energy-transformation.eu)
- » GET.transform Transforming Energy Sectors Globally (get-transform.eu)
- » Power Trading Boost in Namibia: New Guide Helps to Unlock Access to MSB and SAPP Markets » GET.transform (get-transform.eu)

Fostering inclusive education through solar electricity



Student at Wigua Primary School walks with the Headteacher, Lawrence Olet © Eric Wakabi/GIZ Uganda

In Northern Uganda, Wigua Primary School for students with disabilities is experiencing a transformation, thanks to the installation of solar electricity. Wigua is one of the 35 institutions that have benefitted from this intervention under the Promotion of Renewable Energy and Energy Efficiency Programme (PREEEP).

At the forefront stands Lawrence Olet, the school's Headteacher. Lawrence, who himself has a walking disability, leads by example, showing the power of determination.



©Eric Wakabi/GIZ Uganda

Lawrence, reflecting on the impact of the intervention, shares, " The solar system has changed everything. Everywhere is now well-lit, hence a more conducive learning and communicating environment."

Acknowledging the prevailing stigma surrounding disabilities, he emphasizes the importance of equal opportunities for all, saying that disability is not inability, and every child should have access to quality education.

Expressing gratitude, he continues, " This solar system has brought hope and possibility. For us, light means more than brightness; it symbolizes progress."

#### Contact person Eric Wakabi

#### **Project description**

The PREEEP programme works to improve policy conditions for access to clean energy, predominantly in Northern Uganda. The programme works closely with the Ugandan Ministry of Energy and Mineral Development on activities like policy advisory, market development, skills development, and decentralization.

» Promoting renewable energy and improving energy efficiency in Uganda - giz.de



# Boosting electricity trading in West Africa

West Africa Power Pool launches Information and Coordination Centre (ICC)



Pictures of the inauguration event © WAPP

On 17 November 2023, the West African Power Pool (WAPP) inaugurated its Information and Coordination Centre (ICC). The inauguration marks a significant milestone in realizing the vision of an integrated, prosperous, and energy-self-sufficient West Africa.

The ICC, located in Calavi, Benin, will enable planning among all companies involved in electricity distribution in West Africa and facilitate real-time monitoring of the regional interconnected network. Supported by a €30 million grant from the European Union, the ICC will act as a central hub for collecting essential information on electricity exchanges and purchases and will play an important role in implementing the Regional Electricity Market, promoting competition and ensuring the best possible rates for electricity prices. As the ICC becomes fully operational, West Africa can be considered as a pioneer region in this process in relation to similar systems in other parts of Africa.

# Contact persons Sonja Zahed

# **Project description**

» Promoting a climate-friendly electricity market in West Africa - giz.de

# **Further information**

» Inauguration du Centre d'Information et de Coordination du Système d'Echanges d'Energie Electrique Ouest Africain | EEAS (europa.eu)

# Making Namibia's Power-to-X potential a reality

Residual bush biomass as a carbon carrier gives Namibia a strategic advantage for synfuel production



Stakeholders giving feedback and engaging with the skills needs assessment for the Namibian Power-to-X economy.© GIZ

The Namibian government has ambitious plans to industrialise its economy with green hydrogen and Power-to-X. A significant amount of carbon will be required to build a robust green fuel industry and to produce 10-12 million tonnes of hydrogen equivalent per year by 2050.



Study: Development of a sustainable carbon carrier for PtX use: from Namibia to a global market - PtX Hub (ptx-hub.org) © 2023 PtX Hub

A recent study by the International Power-to-X Hub comprehensively assesses the potential for using Namibia's residual biomass, particularly from bush encroachment, to produce high-value PtX products such as synthetic fuels. James Mnyupe, Economic Advisor to the President of the Government of Namibia, highlighted the importance of this timely analysis to inform policy making in the webinar launching the study.

Earlier this year, a PtX Hub Skills Needs Assessment for Namibia, the first study of its kind in the African context, identified the skills needed for Namibians to benefit from their emerging Power-to-X production and recommended an action plan. Key universities in Namibia are now developing new curricula informed by the study's findings.

Contact persons Carla Reihle (PtX Hub Namibia) and Maren Schöttler (PtX Hub Communications)

#### **Project description**

The International PtX Hub is a center 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 (ptx-hub.org)

#### **Further information**

- » Study: Skills needs and gap analysis in Namibia's PtX sector PtX Hub (ptx-hub.org)
- » Country page on Namibia on the PtX Hub's website

# ••• AMERICAS •••

# INERATEC and GIZ collaborate to push E-fuel production in Chile

H2Uppp Programme is funded by the German Federal Ministry for Economic Affairs and Climate Action (BMWK)



Samantha Michaux from INERATEC © GIZ

INERATEC, a Power-to-X market leader from Germany, has formed a public-private collaboration with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH to promote the production of e-fuels in Chile. Under the International Hydrogen Ramp-Up (H2Uppp) programme, funded by the German Federal Ministry for Economic Affairs and Climate Action (BMWK), the partners intend to demonstrate a technically feasible and commercially viable solution for the application of Power-to-Liquid (PtL) plant using modular synthesis units.

Synthetic fuels can be used to replace fossil-based fuels in ships, airplanes as well as trucks and cars. A local production goes hand-in-hand with Chile's hydrogen strategy and supports the expansion of renewable energy production. The production of e-fuels from green hydrogen could help to increase the competitiveness of Chilean industry by reducing its dependence on imported fossil fuels and to mitigate the risks associated with fluctuations in global oil prices and supply disruptions.

# **Contact person Cristian Fuentes**

## **Project description**

The H2-Uppp programme accompanies and supports efforts to ramp up the market for green hydrogen (H2) and power to X (PtX).

## **Further information**

- » Please download the H2-Uppp Programme Factsheet
- » INERATEC website

# With the presence of the Presidents of Chile and the European Union, the Renewable Hydrogen Development Project was launched in Chile

The project will be implemented in Chile by GIZ, with counterparts from the Chilean Ministry of Energy and CORFO



President Ursula von der Leyen and President Gabriel Boric © Rodrigo Vásquez, GIZ

In the framework of the meeting between the President of the European Commission, Ursula von der Leyen, and the President of the Republic of Chile, Gabriel Boric, the official start of the project "Team Europe for the Development of Renewable Hydrogen in Chile", which is co-financed by the European Union and the German Federal Ministry of Economics and Climate Protection (BMWK), was signed on 14 June.

The project will be implemented in Chile by the German cooperation agency GIZ, with counterparts from the Chilean Ministry of Energy and CORFO.



See more photographs in the official web site of the Chilean Presidency © Rodrigo Vásquez, GIZ

The initiative will strengthen the enabling environment for the renewable hydrogen economy; capacity building and knowledge transfer; technology development; infrastructure and sustainability impact assessments; as well as project development and business cooperation and financing.

This initiative is the main strategic vehicle to implement the Team Europe Initiative for Renewable Hydrogen Development in Chile and the spearhead in the region, being a joint effort of the EU and its Member States to foster cooperation with Chile in the development of its renewable hydrogen economy.

# The fifth version of the Green Hydrogen Summit Chile LAC, coorganised by GIZ, was held with more than 1,500 attendees

The summit provided a comprehensive view on the state, perspectives, and challenges of the green hydrogen industry



Authorities inaugurate the fifth version of the Hydrogen Summit © Programa 4e, GIZ

The fifth version of the Green Hydrogen Summit Chile LAC 2023 was held in Santiago de Chile on 24 and 25 October. The event attracted more than 1,500 people, demonstrating the growing interest and commitment of the region in the promotion and development of green hydrogen as a key energy source in the fight against climate change.

Irmgard Maria Fellner, Ambassador of the Federal Republic of Germany, emphasised that "Chile is an important and reliable partner for Germany in the implementation of the energy transition".



Link to Video resume of the Summit on YouTube

# Contact person Cristian Fuentes

## **Project description**

The German-Chilean Energy Partnership became operational in April 2019. It is being implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Affairs and Climate Action (BMWK) and the Chilean Ministry for Energy (ME).

Meanwhile, the Minister of Energy, Diego Pardow, said that "holding this type of event demonstrates the importance we have given in Chile to the development of the new green hydrogen industry".

This event is a platform to generate collaboration agreements and the creation of strategic alliances between companies, governments, and organisations, with a fair of 30 stands and various matchmaking sessions.





# Decarbonization of the industry and Just and Inclusive Energy Transition at the heart of the German-Brazilian Energy Partnership

The bilateral commitment to building co-operation with a focus on the energy transition stands out



Steering Committee of the German-Brazilian Energy Partnership © GIZ

At the occasion of a high-level meeting between the Brazilian Ministry of Mines and Energy (MME) and the German Federal Ministry for Economic Affairs and Climate Action (BMWK), two new working groups (WGs) on "Just and inclusive energy transition" and "Clean energy and decarbonisation of the industry" were announced.

The WGs will be used for in-depth cooperation on specific topics at an operational level in support of the political dialogue between the two countries.

Possible social and environmental impacts of the energy transition remain a concern that both nations are interested in reducing by communicating the energy transition and seeking mechanisms to make clean energy affordable whilst reducing dependencies.

The Steering Committee, organized by the German-Brazilian Energy Partnership, aims to learn about developments in energy policy, exchange relevant experiences and agree on concrete plans and priorities for cooperation in the coming years.

# **Contact person Kristina Kramer**

## **Project description**

The German-Brazilian Energy Partnership provides a forum for high-level political dialogue and brings together representatives from different sectors in support of the energy transition towards a

wider use of renewable energies and energy efficiency.

» German-Brazilian Energy Partnership

# Rural electrification in the community of Sabana Real

Rural electrification in Sabana Real benefits more than 225 inhabitants; RD\$40 million investment



Sabana Real Solar Power Plant Proyecto Transición Energética © GIZ

On 26 October 2023, GIZ, in collaboration with the Ministry of Energy and Mines (MEMRD), the Ministry of Economy, Planning and Development (MEPYD), EDESUR Dominicana, the Dominican Telecommunications Institute (INDOTEL), the Cooperativa Agropecuaria y de Servicios Múltiples La Bella Sabana Real and the European Union's TAPSEC programme, inaugurated an isolated microgrid providing electricity and internet to the community of Sabana Real in the Independencia Province, Dominican Republic.

The photovoltaic microgrid has a generation capacity of 55.2 kWp and 245.7 kWh of energy storage with lithium batteries. The energy generated is distributed to 81 homes, 11 businesses, two churches, the community school, the La Bella cooperative, the military post and the park rangers' house, benefiting 225 inhabitants. Internet access is also provided through a WiFi network powered by satellite connectivity.

# Contact person Yderlisa Castillo

## **Project description**

» Promotion of Renewable Energy to implement the Climate Targets of the Dominican Republic

## Further information

» Inicio - Proyecto Transición Energética (transicionenergetica.do)

# Proyecto Transición Energética Closing Congress: Achieving Renewable Energy Milestones in the Dominican Republic

Proyecto Transición Energética: Celebrating Seven Years of Renewable Energy Advocacy in the Dominican Republic



Proyecto Transición Energética Closing Congress © Proyecto Transición Energética, GIZ

The Energy Transition Project, commissioned by the German Federal Ministry for Economic Affairs and Climate Protection, marked the successful conclusion of seven years of efforts to promote renewable energy in the Dominican Republic. Implemented by the German Development Cooperation and the Ministry of Energy and Mines, along with 15 partners in the energy and climate sector, the project aimed at achieving climate objectives. The "Energy Transition Project Closing Congress" in Santo Domingo on November 30, 2023, celebrated this achievement.

During 2017-2023, the project focused on strengthening the electrical system, incorporating renewable energy, market management, and supporting energy policy. The event highlighted key results, lessons learned, and discussed the legacy for a more sustainable energy sector. Notable attendees included the Ambassador of Germany and the Minister of Energy and Mines. Panel discussions covered energy policy, renewable energy integration, and regulation, emphasizing a fair and inclusive energy transition.

# Contact person Yderlisa Castillo

# **Project description**

Promotion of Renewable Energy to implement the Climate Targets of the Dominican Republic » Project data

# **Further information**

» Inicio - Proyecto Transición Energética (transicionenergetica.do)

# Triangular Cooperation Culmination: Strengthening Ties Between Germany, the Dominican Republic, and Chile, Costa Rica, and Cuba

Dominican Republic



Electric Train of Jardin Botánico Nacional © GIZ

On November 28, 2023, from 10:00 a.m. to 12:00 p.m., the Closing Ceremony for the Triangular Cooperations took place in Santo Domingo. The event marked the successful collaboration between Germany and the Dominican Republic with:

- Chile, to exchange experiences and strengthen energy planning aligned with international standards and the ambition for carbon neutrality
- Costa Rica, for the enhancement of institutional capacities to promote electric mobility in the Dominican Republic
- Cuba, for the development and implementation of resilient, agile, sustainable, and replicable solutions to support green recovery in the Dominican Republic post-COVID-19, through the utilization of solar energy

This ceremony not only celebrated accomplishments, but also paved the way for continued collaboration in the pursuit of sustainable development and green initiatives in the Dominican Republic.

# Contact person Yderlisa Castillo

Project description » Project data

Further information » Inicio - Proyecto Transición Energética (transicionenergetica.do)



# Inauguration of Eco-Friendly Electric Train: A Triangular Cooperation Success for Sustainable Mobility in Santo Domingo

Costa Rica, Germany, and the Dominican Republic collaborate to replace polluting diesel trains with a rail less electric alternative



Grupal Photo © GIZ

On November 15, 2023, the Triangular Cooperation between Costa Rica, Germany, and the Dominican Republic facilitated the "Strengthening Institutional Capacities for the Promotion of Electric Mobility" project. Funded by Germany's BMZ through the GIZ, the pilot initiative involved acquiring a rail less electric train for the National Botanical Garden of Santo Domingo.

The goal is to replace diesel trains with an eco-friendly alternative for guided tours. Project success owes much to the dedication of partners like MEPyD, ICE, and INFOTEP. EDESUR Dominicana handled the electric train charger installation.

Gratitude is extended to all partners for their collaborative efforts. The inauguration ceremony, attended by representatives such as the German Ambassador and the Costa Rican Ambassador, marked a significant step towards sustainable mobility promotion.

## Contact person Yderlisa Castillo

Project description » Project data

Feedback Energy Newsletter » Inicio - Proyecto Transición Energética (transicionenergetica.do)

0

# Bolivia makes progress in the energy transition

Electricity Sector Expansion Plan



La Paz city at night © PEERR/GIZ

Uncertainty about the future makes demand forecasting a key element in the development of strategies that govern energy planning. In this sense, the Renewable Energy Project (PEERR II) assists the government in the preparation of the "Expansion Plan for the Bolivian Electricity Sector", with short, medium and long-term objectives.

This plan makes it possible to identify the future measures and needs that must be considered in the projection of the electricity sector and its expansion, reflected in different studies such as:

- 1. The projection of Power and Energy Demand
- 2. Sub transmission Expansion Plan
- 3. Transmission Master Plan
- 4. Generation Master Plan

Likewise, it addresses the dynamic behaviour of growing demand for energy and power, and therefore provides the necessary flexibility of the National Interconnected System, in the face of the high penetration of generation projects with clean and variable energy, and thus move towards a more responsible and environmentally friendly transition that allows consolidating the change of the energy matrix in Bolivia.

## Contact person Michael Mechlinski

#### **Project description**

The Renewable Energy Program has been working in Bolivia since 2016 and aims to improve the technical, economic, legal, and institutional conditions for the integration of renewable energies into the electricity system, and for the development of energy efficiency. »Mayor uso de energías renovables (giz.de)

## **Further information**

» Renewable Energies in Bolivia - energypedia



# Research enhances analysis in Brazil's Energy Efficiency Programme

Almost two years of analysis led to a wide and consolidated understanding of the Programme impacts and recommendations for improvement



Presentation of the study in event at the National Electric Energy Agency (ANEEL) © Cleia Viana Santos

The Brazilian Energy Efficiency Programme (PEE) is regulated and monitored by the National Electric Energy Agency (ANEEL) and implemented by electricity suppliers throughout the country. The Programme promotes the efficient use of electric energy in all economic sectors by improving the energy efficiency market, new technologies and business models, and by developing the rational use of electric energy. This is the first time the results of the Programme have been analyzed since its inception 20 years ago.

The study examined many projects developed in the country, and it represents an innovative and essential analysis to enhance transparency about investments dedicated to energy efficiency measures and its social, economic and environmental impacts. Also, one of the highlighted results are related to its impact in low-income households, shedding light on how energy efficiency measures impact the energy consumption for this segment, representing a significant milestone to improve the Brazilian regulatory framework.

The initiative combines the efforts of ANEEL and the Evaluation and Results Learning Centre for Lusophone Africa and Brazil (FGV EESP CLEAR) and was implemented as part of the Energy Systems of the Future project, in cooperation with the Brazilian Ministry of Mines and Energy (MME), with funding from the German Federal Ministry for Economic Cooperation and Development (BMZ).

#### Contact persons Erica Santos and Daniel Almarza

# **Project description**

The Energy Systems of the Future in Brazil is a project that improves conditions to integrate renewable energy and energy efficiency in the Brazilian energy system. » Future-proofing Brazil's energy systems - giz.de

#### **Further information**

About the study (available only in Portuguese): » Terminal - SophiA Biblioteca Web (aneel.gov.br)



# • • • ASIA • • •

# Establishing the Basis for Viet Nam's JETP Resource Mobilization Plan

GIZ leads technical concept note development on photovoltaic, offshore wind, green hydrogen and electric mobility



Offshore Wind Farm in Can Tho Province, Viet Nam © GIZ

In 2022, G7+ countries and the Government of Viet Nam signed a Just Energy Transition Partnership (JETP), with the aim of advancing energy transition efforts. Viet Nam's 8th power sector development plan already aligns with JETP's objective to limit coal power capacity to 30GW by 2030. However, achieving other JETP targets, such as a 47% renewable energy share and capping power sector emissions at 170 MtCO2 by 2030, require further policy action and financial support. To define JETP priority projects and accelerate the energy transition, a Resource Mobilization Plan (RMP) is under the coordination of the newly established JETP Secretariat, set for launch at COP28.

As a foundational step for the RMP, GIZ's energy cluster has taken the lead in developing technical concept notes that identify existing gaps, offer strategic policy recommendations, and present potential technical and financial cooperation measures in key sectors, including photovoltaic, offshore wind, green hydrogen, and electric mobility.

## Contact person Philipp Munzinger

## **Project description**

The GIZ Energy Support Programme aims to contribute to Viet Nam's emissions reduction strategy and green growth strategy by improving the existing regulatory framework for Renewable Energy and Energy Efficiency.

» ESP (gizenergy.org.vn)

# Holkar Cricket Stadium embraces solar power with rooftop PV system launch

The installation of an advanced 200 kWp solar PV system on its roof demonstrates the potential of innovative solar areas

To achieve India's renewable energy targets, it is pivotal to consider innovative areas for photovoltaics (PV).

An example is the Holkar Cricket Stadium in Indore, which, thanks to collaborative efforts between the Madhya Pradesh Cricket Association and GIZ India, now proudly hosts a 200 kWp solar PV system on its roof. The inauguration of the system took place on September 24, 2023, just before an International Cricket match between India and Australia.

"This solar PV project demonstrates the tangible financial and environmental benefits of integrating renewable energy into public infrastructure and underscores our dedication to advancing innovative solar areas in India," states Henrik Personn, head of GIZ India's solar projects. The stadium is projected to generate 277.4 MWh annually, which can be used for its self-consumption or fed into the grid. Thereby, it directly contributes to India's renewable energy targets and prevents approximately 259 tonnes of CO2 emissions each year.

# Contact person Kuldeep Sharma

# **Project description**

India's renewable energy targets require a substantial increase in installed solar PV capacity. However, limited land availability makes it necessary to explore new innovative solar areas across the country.

» ESP (gizenergy.org.vn)



Exploring potential development of agro-industrial waste for hydrogen production



Control unit engineer at Permata Hijau Group plant gives explanation to representatives of the Indonesian ministries © GIZ Indonesia, 2023

Indonesia's largest consumer of hydrogen comes from the industrial sector. In 2020, the sector was recorded to consume 87.1 million tons of hydrogen produced from natural gas, mostly without any

carbon capture, utilisation, and storage (CCUS) technology. On condition that this type of hydrogen continues to be the main supply for hydrogen demand, Indonesia's carbon emissions would be skyrocketing.

On September 14, GIZ facilitated a stakeholder visit to the only biogas-based hydrogen plant in Indonesia, owned by Permata Hijau Group in North Sumatra. This oleochemical plant produces hydrogen from palm oil waste abundantly available in the area. Involving government officials from the Ministry of Energy and Mineral Resources and Ministry of National Development Planning, and representatives from SOEs, the visit opened a dialogue and potential collaboration for further development of green hydrogen. A transition from fossil-sourced hydrogen to renewable-based green hydrogen would bring a significant benefit in reducing carbon emission.

# Contact person Rizma Kristiana

## **Project description**

Strategic Exploration of Economic Mitigation Potential through Renewables (ExploRE) is a project jointly implemented by GIZ and the Indonesian Ministry of Energy and Mineral Resources. » Strategic Exploration of Economic Mitigation Potentials through Renewables (ExploRE) - giz.de

# Research Presentation at Solar World Congress 2023



1.4 MW Agrivoltaic plant in Parbhani, India © IGEF-SO, GIZ India

The Solar World Congress 2023, organized by the International Solar Energy Society in New Delhi from October 30 to November 4, continues its biennial tradition since the 1970s, fostering global networking and idea exchange. GIZ India contributed significantly, with two research papers chosen for oral presentation.

The first paper, supported by the Promotion of Solar Water Pump project, explores enhancing solar water pumping systems by integrating a Universal Solar Pump Controller. This innovation allows the system not only to power the pumps but also run additional loads, expanding its utility. The second paper, supported by Indo German Energy Forum delves into an analytical study defining optimal design parameters for agrivoltaic power plants in India's Geo-Climatic Conditions. Notably, the study introduces a method and matrix to gauge sunlight availability in various zones within a solar field segment, considering different structural configurations and crop suitability.

# Contact person Prasun Kumar Das

## **Project description**

The PSWP project has facilitated an acceleration in the deployment and adoption of solar water pumps for productive use in a sustainable manner in India.

The Indo-German Energy Forum has established itself as a bilateral platform for exchanging on experiences, opportunities and challenges in global energy system transformation. » Indo-German Energy Forum

# ••• EUROPE •••

# Innovating at the water-energy nexus in Cyprus

Cyprus



Meeting with Water Development Department of Cyprus © Dimitris Mantelis, GIZ

Electricity generation in Cyprus is mostly based on expensive and polluting diesel power plants. Renewable energy still has a low share of only around 15%. Two main factors prevent Cyprus from reaching higher shares of renewables – the lack of available land on the island as well as the limited flexibility of its electricity system.

In September 2023, GIZ started with the implementation of the HYDRO-RES project, with financing from the German Ministry for Economic Affairs and Climate Action and the European Commission. The project will analyze the feasibility of installing floating photovoltaic systems on water dams in Cyprus. It will also assess the possibilities for using these dams as pumped hydro-power storage. Finally, the project will develop a roadmap for the use of offshore renewables in the maritime areas around Cyprus. In this way, the HYDRO-RES project will promote the use of innovative technologies at the water-energy nexus in Cyprus.

## **Project description**

The HYDRO-RES project aims at improving the framework conditions for the use of floating photovoltaics, energy storage and offshore renewables in Cyprus.

» Promoting renewable energy and energy storage in Cyprus - giz.de



# Ukrainian Climate Office – Centre of Excellence for climate topics discusses the shades of green

Becoming a leading hub for education, policy advocacy, and innovation, dedicated to climate change mitigation, adaptation, and sustainable development





As a forthcoming independent center of excellence on climate issues, the recently inaugurated Ukrainian Climate Office (UCO) actively supports Ukraine's climate policy endeavors amid the ongoing war. It assumes a pivotal role in tackling cross-sectoral climate challenges and promoting sustainability. Through an event titled "Shades of Green – Investing in Ukraine's Recovery," jointly organized with WWF CEE and Ukraine, the UCO has initiated a discussion on whether there exists a shared understanding across various levels - central, regional, local, and among NGOs and businesses. A briefing paper will follow.



@GIZ/Gate Agency

Functioning within the EU/IKI-co-funded project, Capacities for Climate Action, the UCO is supporting the Ukrainian pavilion at the CoP for the second time. The pavilion hosts side events addressing topics such as just transition, decentralized energy supply, and environmental issues. Additionally, the UCO conducts training sessions for the Ukrainian delegation on CoP28 objectives, covering areas such as climate finance, mitigation, and adaptation.

# Contact person Julia Jesson

#### **Project description**

As part of the activities in Ukraine, CDCPIII is implementing the EU co-financed programme "Capacities

for Climate Action" (C4CA). C4CA supports climate change mitigation and adaptation in Ukraine through the establishment and operation of a climate centre of excellence.





# Shaping the Future of Blue Energy in Central and Eastern Europe

Unlocking the offshore energy potential in the region of the Black-Adriatic-Baltic Sea



WindEnergy © GIZ Thomas Imophotothek.net

As a linchpin in the EU's energy strategy, offshore energy presents a unique opportunity for the economic prosperity of coastal communities, offering not only a clean energy alternative but also tapping into stronger and more reliable power flows.

To strengthen the capacity and readiness for multi-level governance of sustainable energy deployment in Bulgaria, Croatia, Poland, and Romania in the region of the Black-Adriatic-Baltic Sea, the European Climate Initiative (EUKI), funds the 'BLUECEE' project with nearly 500.000 euros!



© GIZ Thomas Imophotothek.net

EUKI is a project financing instrument by the German Federal Ministry for Economic Affairs and Climate Action (BMWK). The EUKI competition for project ideas is implemented by GIZ.

Moreover, BLUECEE is a beacon for talent. The Blue Energy Fellowship Programme, in partnership with universities in Central and Eastern Europe, beckons the next generation. By immersing them in the coalition's work, it not only nurtures fresh minds but also ensures the industry's continuity.

## Contact person Oliver Hölcke

## **Project description**

The European Climate Initiative (EUKI) supports the realisation of ideas to accelerate climate action in Europe. Funding will be awarded following an annual Europe-wide call for project ideas. For more

information, go visit EUKI's website.

» EUKI

# **Further information**

Follow the EUKI on Facebook and LinkedIn to learn more about climate action projects in Europe and the EUKI Community – a growing network with more than 400 implementing organisations and 200 projects.





# Energy minister inaugurates 5th German-Algerian Energy Day

Algeria and Germany join forces for green hydrogen



Opening of the 5th German Algerian Energy Day by Mr. Stefan Wenzel, Parliamentary State Secretary, Federal Ministry of Economic Affairs and Climate Protection (BMWK) © GIZ

On October 23, the Algerian minister of Energy and Mines, Mohamed Arkab, inaugurated the Fifth German-Algerian Energy Day together with Stefan Wenzel, German vice-minister at the federal Ministry for Economic Affairs and Climate Protection.

At the event, which took place at the Energy ministry in Algiers and benefitted from a large media coverage, Minister Arkab emphasized the commitment of his ministry to the built-up of a green hydrogen industry in Algeria.



Opening of the 5th German Algerian Energy Day by Mr. Stefan Wenzel,

The government decided upon a strategy that aims at covering 10 percent of the European market for green hydrogen between 2030 and 2040. State secretary Wenzel added that the "SoutH2Corridor", i.e. the refitting of the gas pipeline via Italy to Germany to make it hydrogen ready, is high on the agenda of the German government. Together with Italy and Austria, Germany applied at EU level to have the south corridor being acknowledged as an IPCEI Parliamentary State Secretary, Federal Ministry of Economic Affairs and Climate Protection (BMWK) © GIZ (important project of common European interest).

## **Contact persons Frank Renken**

#### **Project description**

» Partenariat énergétique algéro-allemand - giz.de



# Solar energy gets a boost in Algeria

2000MW tender opened

LOTS	SCI Reterney men				
Lot nº 06	Guntur Sun Roud of L	Montant offer partie	Montant offre partie	Monitani athe	
	GROUPPMENT (WE LINDOW 200 MWC	Sections Intelling	devises (Dollare)	partie Divora	
			ET ALL LOD OF		
	KALYON INGAAT RAMANING TRANSFRUCTION		63 787 447 74	7 158 552 291 76	
	SARDI SDA		124 704 704 80	# 152 642 358 RD	a second s
Lot nº 07	Courses AN Charles and and		HICKNEY I DATE	10 636 182 284 95	
	CROST DEVICE AT COMPANY OF A COMPANY			10 0/1 445 130.91	
			27 671 718 78	2 454 545 454 45	
	EDPA PRANUA		36 601 524.38	3 348 111 117 117 11	
	CHINA DETERMINATION NSAAT (ZERGOUN)	3 830 629.33		10 814 888 758 42	
	CHINA PETROLEOM ENGINALEHING & CONSTRUCTION CORP		122 176 900 00	9 215 234 000 00	
	SAVE1 SPA			32 398 791 969 .61	
	POWER CHINA HUADONG ENGINEERING CORPORATION LIMITED		67 993 439 17		
	AMIMER ENERGIE			43 388 800 121 95	the second se
			35 635 827 .24	6 537 223 507 48	
Lot nº QE	K'Sar Chellala (W Tiarel) 80 MWc				
	GROUPEMENT OWE-HXCC-YREC				
	EURL HAMOI				A DESCRIPTION OF TAXABLE PARTY.
	SEPCO IN ELECTRIC POWER CONSTRUCTION Collie				
	SUMED COMPLET EQUIPEMENT & ENGINEERING COULD				
	AMMER ENERGIE				
	GROUPEMENT BUTECILC - MCT				
Lot nº 05	Douar El Maa (W.El Oued) 200 MWc				
LOL N VS	OROUPENENT ONE HXCC YREC				
	Y 41 YON INSAAT SANAYI VE TICARET ANONIM SIRKETI				
	TADDE CD2				
	SPRUS OF A LADONG ENGINEERING CORPORATION LIMITED				
	POWER CHINA HORE FOR MARK				COLUMN TWO IS NOT
	POWER CHINA HUADONG ENGINEERING CORPORATION UM TEO Talefit FI Artis (W FI Cased) 85 MW			-	

Opening of bids at the CIC Alger © Khaled Hadjidji - GIZ Algerie

September 25th, the Algerian renewable energy program took another major step forward with the opening of financial offers for a 2,000 MW call for tenders covering 15 solar power plants. The ceremony took place at the Abdelatif Rahal International Conference Center in Algiers. During the month of October Algerian state-run energy provider Sonelgaz who is in charge of the tender displayed the contracts awarded to bidders.



© Khaled Hadjidji - GIZ Algerie

Chinese companies dominate the project by carrying out 9 solar power plants, representing approximately 70% of the project, Algerian companies are also participating in the project, alone or forming groups with foreign partners. They are responsible for the construction of five solar power plants with capacities ranging from 80 to 150 MW, strengthening national participation in this renewable energy project.

## Contact person Frank Renken

Project description » Partenariat énergétique algéro-allemand - giz.de

# Launch of GeCCo at COP28

Energising Development (EnDev) celebrates launch of the Global Electric Cooking Coalition (GeCCo) at COP28 in Dubai



GeCCo is dedicated to promoting the higher-tier cooking transition globally © GIZ

EnDev, as an anchor partner of the Global Electric Cooking Coalition (GeCCo), is pleased to announce the successful launch of GeCCo at COP28 in Dubai. The unveiling during the session "Electrifying Cooking: A Just Journey towards Net-zero," on December 5th, in the Blue Zone, Al Waha, Dubai, marks a significant milestone in global efforts towards climate-friendly cooking technologies. GeCCo, featuring electric cooking (eCooking) advocates and anchor partners including EnDev, The Global Energy Alliance for People and Planet (GEAPP), Modern Energy Cooking Services (MECS) programme, and Sustainable Energy for All (SEforALL), is committed to advancing the global transition to eCooking.

The launch highlighted a distinguished line-up of speakers endorsing GeCCo's commitment to clean, affordable, and reliable electric cooking. Engaging with GeCCo offers countries the opportunity to participate in the energy transition pathway, unlocking co-benefits such as saving lives, improving livelihoods, empowering women, girls, and youth, and protecting the environment.

# Contact persons Verena Brinkmann

## **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.

» Enabling access to climate-friendly energy supply

# **Further information**

- » GeCCo Electric cooking: from niche technology to mainstream living
- » Transforming the Way of Cooking EnDev
- » Global eCooking Accelerator EnDev

# The Climate Club is officially launched!

Industry decarbonization is the initial focus

Chancellor Olaf Scholz and more than 30 members celebrated the launch during the high-level segment of the COP 28. This is an important milestone and point of transition from the Climate Club's construction phase to the implementation phase.



The mission and vision is articulated in a Leader's Statement, highlighting the initial focus on the decarbonization of steel and cement. Activities include an exchange on definitions and standards, a strategic dialogue on the reasons for carbon leakage and the establishment of a Global Matchmaking Platform to support developing countries' industrial transition.

GIZ Globe was closely involved in the construction phase and will continue to provide strategic support for the implementation of the ambitious work programme.

Climate Club Logo © Climate Club

The BMWK advisory project "Powering Climate Protection" (PCP) is the primary point of contact at GIZ, through which also secondments of GIZ experts to the OECD and the IEA for the Climate Club's interim secretariat were realized.

Activities include an exchange on definitions and standards, a strategic dialogue on the reasons for carbon leakage and the establishment of a Global Matchmaking Platform to support developing countries' industrial transition.

Contact persons Mirko Abresch and Florian Remann

#### **Project description**

The Climate Club supports the implementation of the Paris Agreement with initial focus on the industry sector.

» The Climate Club, industry decarbonisation - The Climate Club (climate-club.org)

» Advancing the global energy transition for climate protection - giz.de



Net Zero World Initiative and GIZ join forces to decarbonize global energy systems

Global



Net Zero World Initiative and GIZ join forces – Launch of strategic collaboration to accelerate the decarbonization of the global energy system © Net Zero World Initiative

The Net Zero World Initiative – which leverages expertise across U.S. government agencies and U.S. Department of Energy (DOE) national laboratories in partnership with philanthropies - and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH have embarked on a strategic collaboration to amplify their shared commitment to accelerate the decarbonization of global energy systems through clean energy solutions.

Together, the Net Zero World Initiative and GIZ will be advancing net zero emissions strategies for the wider energy sector in partner countries in support of the global energy transition, including in power, industry, transport, and buildings. Strategy development requires both energy and investment planning to unlock innovation and seize opportunities. Partner countries where both the Net Zero World Initiative and GIZ are actively supporting the energy transition have been identified, starting with potential collaboration in Indonesia, Nigeria, Thailand, and South Africa.

# Contact person Steffen Behrle

## **Further information**

» Net Zero World Initiative | International Activities | NREL

# Green hydrogen potential in the Commercial and Industrial (C&I) sector in Kenya, Ghana, Jordan & Vietnam

First sector analyses published by the Project Development Programme for Green Hydrogen Projects (PDP-H2)



PDP-H2's new sector analyses on green hydrogen for the C&I sector for Kenya, Ghana, Jordan & Vietnam @ GIZ

## Why start a hydrogen business in Kenya, Ghana, Jordan & Vietnam? The new H2-PDP sector

analyses try to outline this question from the perspective of German and European business for these hydrogen markets. They provide simplified cost estimations for producing green hydrogen using photovoltaics and orientations for starting a new business in these countries. The four analyses are intended for German and European companies looking to partner with local companies that use hydrogen as the main feedstock for their industrial processes.

# **Contact person Domenica Edriss**

# **Project description**

As part of the German Energy Solutions Initiative of the German Federal Ministry of Economics and Climate Action, the Project Development Programme for Green Hydrogen Projects (PDP-H2) identifies local companies for a swift transition from grey to green hydrogen, providing guidance on plant design and business models. It accelerates this shift by facilitating access to funding instruments and connecting with technology partners. This approach drives energy transition in partner countries while offering German and European companies entry into developing markets.

# **Further information**

- » Changing from grey to green hydrogen production giz.de
- » www.german-energy-solutions.de/pep

Sector Analyses:

- » Kenya: giz2023-en-h2pep-sector-analysis-kenya.pdf
- » Ghana: giz2023-en-h2pep-sector-analysis-ghana.pdf
- » Jordan: giz2023-en-h2pep-sector-analysis-jordan.pdf
- » Vietnam: giz2023-en-h2pep-sector-analysis-vietnam.pdf

News on green hydrogen's potential for Germany's partner countries

Brazil, Namibia, South Africa

How large is the demand of green hydrogen and its derivatives in the coming decades? What influence could they have on the SDG performances of Germany's partner countries? The answers to these and many more questions can be found in several studies and tools that the Green Hydrogen Business Alliance has published this autumn.

Additional to an online dashboard displaying the off-take potential for green hydrogen and its derivatives in the partner countries Brazil, Namibia, and South-Africa, the Business Alliance analysed the price development of green ammonia and its derivatives ammonium nitrate and urea that can be used as fertilisers for example. Further studies looked at potential production and transportation costs as well as the influence of green hydrogen value chains on the SDG performance of partner countries.

All studies and tools can be found on the Business Alliance's new website green-hydrogen-businessalliance.de and are free to download.

# Contact persons Jan-Niklas Beck

## **Project description**

The Green Hydrogen Business Alliance aims at contributing to a socio-ecological transformation in cooperation with the private sector. It was established in 2019 on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ) and is implemented by GIZ.

# **Further information**

» Green Hydrogen Business Alliance – The Green Hydrogen Business Alliance supports the market ramp-up of green hydrogen in the interest of development cooperation (green-hydrogen-business-alliance.de)



# PUBLICATIONS

# IRENA: World Energy Transitions Outlook 2023[/LINK]: 1.5°C Pathway, Volume 2 (November 2023)

IRENA'S WETO 2023 Vol.2 discusses the socio-economic impacts of IRENA'S 1.5°C scenario compared to the Planned Energy Scenario (PES). This new volume is based on IRENA'S macroeconometric modelling work and provides policy makers with insights into the potential impacts on economic activity, employment and well-being under the 1.5°C pathway compared to the current policy framework.

» World Energy Transitions Outlook 2023: 1.5°C Pathway, Volume 2 (irena.org)

## IEA: IEA: World Energy Outlook 2023 (October 2023)

The IEA's WEO 2023, published in October, shows the development of the global energy system against the backdrop of geopolitical instability in 2023. It also discusses the long-term effects of the 2022 energy crisis and forecasts future greenhouse gas (GHG) emissions under the following scenarios:

- 1. Stated Policies Scenario (STEPS): based entirely on actions actually taken.
- 2. Announced Pledges Scenario (APS): assumes full implementation of national announced emission reduction commitments.
- Net Zero Emissions Scenario by 2050 (NZE): includes measures to achieve the Paris climate targets and stabilise global warming at 1.5°C and to achieve SDG7.

» World Energy Outlook 2023 - Analysis - IEA

# **GIZ JOB OFFERS**

Here you can either upload an unsolicited application or apply directly for our published vacancies. Plus, you can register for our job subscription that will automatically inform you about new vacancies according to your search criteria.

Please visit » Job and careers

There are currently no public jobs advertised in the energy sector.

# 0

# **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

Remarks on the updated German National Hydrogen Strategy by the Hydrogen Council in » English and » German

## Contact

Disclaimer Recommend this newsletter www.giz.de



# Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices Bonn and Eschborn, Germany

Friedrich-Ebert-Allee 32 + 36 53113 Bonn, Germany T +49 228 44 60-0 F +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1 - 5 65760 Eschborn, Germany T +49 61 96 79-0 F +49 61 96 79-11 15

E info@giz.de I www.giz.de

Registered at Local court (Amtsgericht) Bonn, Germany: HRB 18384 Local court (Amtsgericht) Frankfurt am Main, Germany: HRB 12394 VAT no. DE 113891176 Tax no. 040 250 56973

Chairperson of the Supervisory Board Jochen Flasbarth, State Secretary

Management Board

Thorsten Schäfer-Gümbel (Chair) Ingrid-Gabriela Hoven (Vice-Chair) Anna Sophie Herken

In charge of this newsletter:

André Eckermann, (energy@giz.de) Dr Mike Enskat, (energy@giz.de)

# Editor(s):

Jadranka Saravanja, jadranka.saravanja@giz.de Ortrun Hensel, ortrun.hensel@giz.de Johann Schaller, johann.schaller@giz.de

#### **Photo Credits:**

Where not otherwise stated: © GIZ

GIZ Energy website www.giz.de/expertise/html/60156.html

To subscribe to this newsletter (free of charge) please visit www.giz.de/en/mediacenter/newsletters.html

If you no longer wish to receive this newsletter, please click here.