



# IKI Newsletter Indonesia

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14<sup>TH</sup> EDITION



September 2021

## About the International Climate Initiative

Since 2008, the International Climate Initiative (IKI) of the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) has been financing climate and biodiversity projects in developing and newly industrialising countries, as well as in countries in transition. Based on a decision taken by the German parliament (Bundestag), a sum of at least 120 million euros is available for use by the initiative annually. For the first few years the IKI was financed through the auctioning of emission allowances, but it is now funded from the budget of the BMU. The IKI is a key element of Germany's climate financing and the funding commitments in the framework of the Convention on Biological Diversity. The Initiative places clear emphasis on climate change mitigation, adaption to the impacts of climate change and the protection of biological diversity. These efforts provide various co-benefits, particularly the improvement of living conditions in partner countries.

The IKI focuses on four areas: mitigating greenhouse gas emissions, adapting to the impacts of climate change, conserving natural carbon sinks with a focus on reducing emissions from deforestation and forest degradation (REDD+), as well as conserving biological diversity.

New projects are primarily selected through a two-stage procedure that takes place once a year. Priority is given to activities that support creating an international climate protection architecture, to transparency and to innovative and transferable solutions that have an impact beyond the individual project. The IKI cooperates closely with partner countries and supports consensus building for a comprehensive international climate agreement and the implementation of the Convention on Biological Diversity. Moreover, it is the goal of the IKI to create as many synergies as possible between climate protection and biodiversity conservation.

More information is available on the [IKI website](#).

## Policy Highlights

### *Climate Policy*

On 22 July 2021, the Government of Indonesia submitted its **Updated Nationally Determined Contribution (Updated NDC)** and **Long-Term Strategy for Low Carbon and Climate Resilience (LTS-LCCR)** to the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC).

On 23 September 2021, during the **National Dissemination on Updated NDC and LTS-LCCR**, Minister of Environment and Forestry, Siti Nurbaya, stated that Indonesia's Updated NDC shows the country's increased commitment particularly in programmes, strategies and actions in mitigation and adaptation, transparency framework and implementation support. While the LTS-LCCR 2050 provides direction for Indonesia's long-term sustainable vision to achieve the balance between GHG emission reductions and economic development.

The **Updated NDC** reiterates the existing GHG emission reduction targets of -29% (conditional) and up to -41% (unconditional) against the Business-as-Usual (BAU) scenario. Enhancements were made with regard to: (1) enhanced ambition on adaptation as elaborated in programmes, strategies and actions to achieve economic, social and livelihood as well as ecosystem and landscape resilience; (2) enhanced clarity on mitigation by adopting the Paris Agreement rule book; (3) national context that relates the existing condition and milestones along with national development for the 2020-2024 period, and indicative pathways towards a long-term vision; and (4) elaborated chapters on a transparency framework at the national level and means of implementation.

The **LTS-LCCR** defines three long-term scenarios: (1) the Current Policy Scenario (CPOS), which follows the unconditional NDC target; (2) the Transition Scenario (TRNS), bridging the transition between the other two scenarios; and (3) the Low Carbon Scenario Compatible with Paris Agreement target (LCCP), which is in line with the Paris Agreement. Under its most ambitious low carbon scenario, Indonesia "foresees to reach the peaking of national GHG emissions in 2030 with net sink in forestry and land uses (FOLU), and with further exploring opportunity to rapidly progress towards net-zero emissions in 2060 or sooner". The potential GDP loss due to the impacts of climate change is expected to reach between 0.66% and 3.45%.

### *Forestry, REDD+*

As regulated through Presidential Instruction No. 8/2018, the palm oil moratorium on new plantation permits on state forest land has just ended on 19 September 2021. A decision by the President on the continuation of the moratorium is still awaited. Indonesia might use the Job Creation Law and its derivative government regulations to continue the suspension. Government Regulation No. 23/2021, one of the Law's derivatives, limits new state-forest land release only for five purposes, which does not specifically include palm oil plantation.

Through Ministerial Regulation No. 76/2021, the government has lowered export levies on palm oil products to increase competitiveness in the global marketplace. Revising Regulation No. 57/2020, the new policy came into effect on 2 July 2021, applying progressive levies when crude palm oil (CPO) price is equal to or above USD 750 per metric ton, and a flat tariff of USD 55 per metric ton when the CPO price is below USD 750. The highest tariff rate was reduced from USD 255 to USD 175 per metric ton.

The West Papua Provincial Government and the Corruption Eradication Commission (KPK) have evaluated the permits of 24 oil palm companies since 2018. These evaluations recommended permit revocations for twelve concessions covering a total area of 267,857 hectares in five districts. Three-fifths of this area is forested.

Presidential Regulation No. 23/2021 has been issued to replace Presidential Regulation No. 9/2016 on One Map Acceleration. The [report on One Map implementation](#) from 2016-2020 is also available (Bahasa Indonesia). A total of 74 thematic maps for Kalimantan, 81 for Sumatra, 80 for Sulawesi, 73 for Bali-Nusa Tenggara, 74 for Java, 67 for Maluku and 66 for Papua have been corrected against the basic map through an “integration” process. During 2016-2020, the Secretariat of One Map Policy identified overlapping land use on 77.4 million hectares (around 40.6%) of Indonesian land.

The Strategic Coordination Team for Wetlands Management (SCT-WM) is currently working to develop a Peatland and Mangrove Ecosystems (PME) roadmap, which aims to help forestry sector policymakers achieve Indonesia’s NDC.

### *Renewable Energy*

During a meeting with President Joko Widodo on 11 May 2021, Mr. Luhut Binsar Pandjaitan, Coordinating Minister for Maritime Affairs and Investment, reiterated **the national government’s wish to transition to clean power plants by 2060 and cease construction of steam power plants by 2030**. In a press conference held on 4 June 2021, Mr. Rida Mulyana, Director General of Electricity under the Ministry of Energy and Mineral Resources, shared **national plans to revise the Electricity Supply Business Plan (RUPTL) for 2019-2028**. As it expects a higher percentage of electricity generation to come from renewable sources, the plan is referred to as the “Green RUPTL”.

### *Changes in personnel*

Mr. Wilistra Danny was appointed **Head of the LCDI Secretariat, under the Ministry of National Development Planning (BAPPENAS)**, replacing the late Mr. Andi Abikusno. Previously, he served as Assistant Deputy for Plantations and Horticulture, Coordinating Ministry for Economic Affairs.

The Ministry of Environment and Forestry (KLHK) has a new organizational structure based on Ministry of Environment and Forestry Regulation No. 15/2021 enacted on 1 July 2021. Some updates include **each Directorate under the Directorate General of Climate Change (DGCC) now having only two Sub Directorates** in the organizational structure. Another update is the establishment of a new agency in the KLHK organizational structure named the **Environmental and Forestry Instrument Standardization Agency (BSILHK)**, which is responsible for establishing science- and technology-based standards to balance economic, environmental and social aspects of development activities.

Mr. Dida Migfar was appointed **Head of Foreign Cooperation Bureau (Biro KLN), KLHK**, replacing caretaker Mr. Mahfudz. Previously, he served as Director of Coastal and Marine Pollution and Damage Control, KLHK.

Mr. Apik Karyana was appointed **Head of Planning Bureau, KLHK**, replacing Ms. Ayu Dewi Utari. Previously, he served as Secretary of Directorate General of Social Forestry and Environmental Partnerships (PSKL), KLHK.

Mr. Suharyono was appointed **Secretary of Directorate General of Natural Resources and Ecosystem Conservation (KSDAE), KLHK**. His predecessor Mr. Tandy Tjahjana has been appointed Director of Forest Tree Seed, KLHK.

Starting on 1 June 2021, Mr. Gerd Fleischer took over the position as **Principal Advisor of the new BMU Interface project ‘Climate and Biodiversity Hub Indonesia’**.

## **IKI Project Highlights (during challenging times)**

### **GIZ, Climate and Biodiversity Hub Indonesia**

The follow-up BMU interface project 'Climate and Biodiversity Hub Indonesia' was commissioned recently. The project aims to support advancement of a holistic approach towards climate and biodiversity policy planning and implementation, as well as mainstreaming with national development planning. This is accompanied by mobilizing additional resources from all sources also considering ways to strengthen the engagement of a wider range of financial and private institutions. The project will continue the function as the interface of the International Climate Initiative in Indonesia facilitating a political dialogue, networking and communication between project implementers and the Government of Indonesia. Partners are the Ministry of National Development Planning (BAPPENAS) and the Ministry of Environment and Forestry (KLHK).

### **GIZ, Sustainable and Climate-Friendly Palm Oil Production and Procurement (SCPOPP)**

Each of the seven villages in Kongbeng subdistrict has enacted regulations on the 2021-2041 spatial plan identifying "protection zones" (*zona lindung*) covering a total area of 10,600 hectares, of which 6,000 hectares are forested. These regulations and their attached spatial maps have been agreed by five oil palm concessions in the landscape and approved by the East Kutai District Government. Based on these spatial plan maps, one could conclude that land users in the landscape plan for zero-deforestation plantations.

### **Rare, Fishing for Climate Resilience**

On World Ocean Day, Rare launched [Coastal 500](#), the first global network of local coastal government and community leaders committed to advancing and championing sustainable and climate resilient small-scale fisheries. The network includes local leaders from eight countries who have pledged to support healthy and sustainable fishing communities. Coastal 500 will serve as a valuable platform for peer-to-peer learning and technical policy support, and will build political momentum for coastal leaders from all over the world as they address multiple challenges faced by coastal communities. The network complements local capacity building efforts that form part of the BMU/IKI-supported Fishing for Climate Resilience initiative.

### **Conservation International Indonesia, Mitigation and Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystems**

SMART Patrols implemented in Fakfak Regency, West Papua have improved the management of mangrove ecosystems.

Legalisation based on Gubernatorial Decree No. 188.44/515/KPTS/2020 was passed to establish the Peatland Forum Working Group.

### **ICLEI-Local Governments for Sustainability Indonesia, 100% Renewable Cities and Regions Roadmap Project (100% RE)**

Coordination with local governments at the onset of the COVID-19 pandemic became challenging given (1) local government unit (LGU) divisions in their attention to COVID-19 responses, (2) their inexperience in using online platforms, and (3) weak internet connections. Over the last eighteen months, local governments have adapted their engagement, continuously conducting virtual meetings and consultations. Although activities and coordination have been virtual, project output has not been compromised.

### **World Agroforestry (ICRAF) Indonesia, Peat-IMPACTS Indonesia**

South Sumatra province has started the process of preparing its provincial Peat Ecosystem Protection and Management Plan (RPPEG) through the establishment of a Provincial RPPEG team consisting of a drafting team, sector technical team and secretariat team. The RPPEG team will be formalised by gubernatorial decree and will work towards the issuance of a new Gubernatorial Regulation on Peatland Management in South Sumatra.

Data collection processes through the Young Peat Researcher Incubator programme have been fully completed in West Kalimantan province. The programme concluded with a series of seminars and a provincial workshop where 54 young researchers from the province presented their work under the Peat-IMPACTS Indonesia project.

Peat-IMPACTS Indonesia activities at the village level will now be initiated through the process of forming a team consisting of local resources for facilitating village-level capacity building.

As national institutions relevant to the Peat-IMPACTS Indonesia project, the Ministry of Environment and Forestry (KLHK) and the National Research and Innovation Agency (BRIN) have completed organizational restructuring processes in synergy with the latest policies. In future, Peat-IMPACTS Indonesia will be able to follow these new structures in cooperating to implement planned activities. Over the next few months, Peat-IMPACTS Indonesia will work closely with the Directorate of Peat Degradation Control, KLHK in assisting several provinces and districts with the preparation of their Peat Ecosystem Protection and Management Planning (RPPEG).

# INTERNATIONAL CLIMATE INITIATIVE (IKI) IN INDONESIA

53 Projects under Implementation

27 Implementing  
Organisations



26 Political Partners

Coordinating Ministry of Economic Affairs	National Park Authority of Bukit Barisan Selatan (BBS)
Ministry of National Development Planning (BAPPENAS)	Provincial Government of Lampung
Ministry of Environment and Forestry (KLHK)	Provincial Climate Change Council (DDPI) of East Kalimantan
Ministry of Energy and Mineral Resources (ESDM)	Provincial Estate Crops Office of East Kalimantan
Ministry of Transportation	Provincial Forestry Service of Jambi
Ministry of Finance	Provincial Marine and Fishery Service of Aceh
Ministry of Industry	Provincial Marine and Fishery Service of North Sulawesi
Ministry of Marine Affairs and Fisheries	Provincial Marine and Fishery Service of West Nusa Tenggara
Ministry of Agriculture	District Government of Pesisir Barat
Executive Office of the President of the Republic of Indonesia	District Government of Lampung Barat
National Authority for Marine Conservation Areas (MMAF)	District Government of Kapuas Hulu
Peatland and Mangrove Restoration Agency (BRGM)	District Government of Berau
Association of South East Asian Nations (ASEAN)	Local Development Planning Agency (BAPPEDA) of Berau

Adelphi  
Center for International Forestry Research (CIFOR)  
Climate Policy Initiative (CPI)  
Conservation International (CI)  
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH  
Deutsches Institut für Wirtschaftsforschung e.V. (DIW)  
Food and Agriculture Organization of the United Nations (FAO)  
GenderCC - Women for Climate Justice  
Humboldt-Viadrina Governance Platform GmbH  
ICLEI - Local Governments for Sustainability  
International Council on Clean Transportation (ICCT)  
Institut du Développement Durable et des Relations Internationales (IDDRI)  
Institute for Transportation & Development Policy (ITDP)  
International Institute for Applied Systems Analysis (IIASA)  
Kreditbank für Wiederaufbau (KfW)  
New Climate Institute  
The Nature Conservancy (TNC)  
Rare  
Renewables Academy AG (RENAC)  
Secretary of Convention on Migratory Species Office (CMS)  
United Nations Development Programme (UNDP)  
United Nations Environment Programme (UN Environment)  
Wetlands International (WI)  
World Agroforestry Centre (ICRAF)  
World Bank Group  
World Resources Institute (WRI)  
World Wide Fund for Nature (WWF)



# CLIMATE SITUATION IN INDONESIA

## ADAPTATION

### Climate change impacts



## MITIGATION

### Greenhouse Gas (GHG) Emissions



## FORESTRY/ REDD

**3rd** Country in the world with the largest extent of rainforest

**Nearly 11%** of Indonesia's total land area is covered by peatlands

**40%** of Indonesia's total carbon emissions are the result of peatland conversion

World Bank estimates that peat fires in 2015 resulted in an estimated economic cost of around **\$16 billion**

**Deforestation and land-use change have driven around 80% of Indonesia's Greenhouse Gas Emissions**

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## BIODIVERSITY

**1st** on the world's 17 Megadiverse Countries list

**2nd** on the world's 25 biodiversity hotspots list

**18** on the WWF 'Global 200' ecoregions list

**24** on BirdLife International's Endemic Bird Areas list

**566** national parks covering 36,069,368.04 hectares: 490 terrestrial protected areas and 76 marine protected areas

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# Updates from ongoing IKI projects in Indonesia







# Climate Policy

## A Roadmap to address Land Subsidence in Central Java

**By Wetlands International, Ecosystem-based adaptation at scale through Building with Nature - Towards resilient coasts in Indonesia**

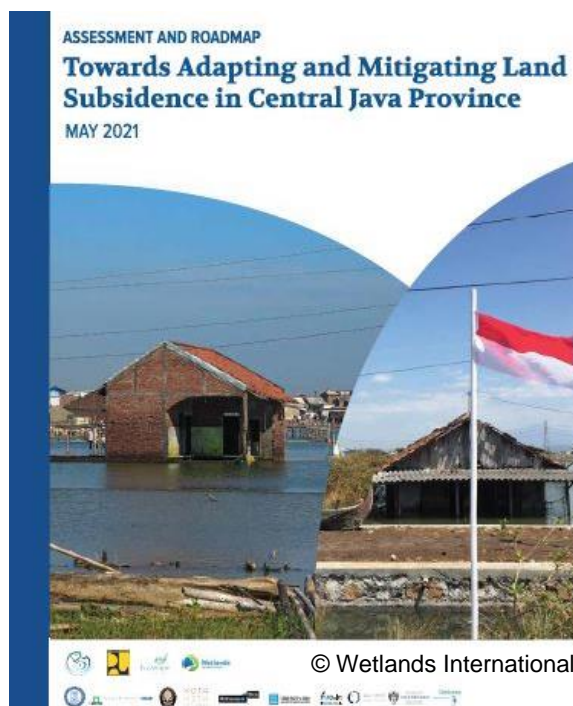
In response to rapid land subsidence in Central Java, the Building with Nature Indonesia consortium released a Roadmap titled Towards Adapting and Mitigating Land Subsidence in Central Java Province, developed through 'Water Dialogues' with the provincial government and local stakeholders. Land subsidence is causing Semarang, the largest city in Central Java, to sink by up to 13 cm a year. This subsidence is increasing risks of severe floods for communities and massive economic damage, not only for Semarang, but also for the entire coastal area of the adjacent district of Demak.

With rapid population growth and urbanization, coupled with the impacts of climate change, densification of the coastal area has not been complemented by proper water management in Semarang and other cities in coastal lowlands. Industrial and other commercial activities that use significant volumes of water have caused excessive groundwater extraction and increased surface load. External factors such as natural soil consolidation and tectonic movement have aggravated the situation, leading to an ever-increasing rate of land subsidence.

Significant and visible impacts of land subsidence include coastal erosion and flooding, locally known as 'rob', and damage to infrastructure. This also causes the degradation of healthy wetlands and limits the restoration of mangroves in the adjacent rural district of Demak. Altogether, this increases communities' vulnerability to extreme weather events, and affects their ability to sustain their livelihoods.

Measures for adapting to and mitigating land subsidence in Central Java had lacked coordination. Therefore, a more transformative roadmap was required to address land subsidence with the active participation of multiple stakeholders and decentralised

decision-making mechanisms. To mobilise inputs for the [Land Subsidence Roadmap](#), Wetlands International coordinated extensive 'Water Dialogues' with authorities in Central Java, the city governments of Semarang and Demak, practitioners, academics and local communities in the north coast of Semarang and Demak.



*Cover page of the roadmap to address land subsidence in Central Java*

As input for the development of this roadmap, technical expertise was delivered by Deltares, Witteveen+Bos, Kota Kita, Diponegoro University, and Institut Teknologi Bandung (ITB). Deltares conducted [an assessment of economic consequences](#) under different subsidence scenarios. The assessment shows that reducing the rate of subsidence by 50% could reduce damage by 26% in Semarang and by 13% in Demak, while reducing subsidence by 75% could reduce expected damage in Semarang and Demak by 80% and 37%, respectively.

Although investing in measures to reduce subsidence rates by 75% would be costly, the projected reductions in economic losses shows doing so would be well worth the investment, with USD 4.48 billion (IDR 63 trillion) and USD 1.02 billion (IDR 14 trillion) in damages avoided for Semarang and Demak respectively.



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The roadmap includes both short- and long-term solutions for implementation by the governments. Potential measures that should be taken in combination include responsible use of water resources, piped drinking water supply, reduced water demand and recycling of available water. It outlines actors and institutions involved as well as their roles in land subsidence adaptation and mitigation of land subsidence in Semarang and Demak, and a review of the current policy framework for addressing land subsidence in the study area. Lastly, in order to prompt the proposed strategies towards implementation, recommendations on national policy and institutional frameworks are expected to help local governments to operationalise the roadmap.

Development of this roadmap took into account measures applied and proposed by the [Building with Nature project in Demak](#) managed by Wetlands International, EcoShape and the Indonesian government, as well as from the [Water as Leverage project in Semarang](#) and [Integrated Coastal Zone Management \(ICZM\) of Central Java](#).

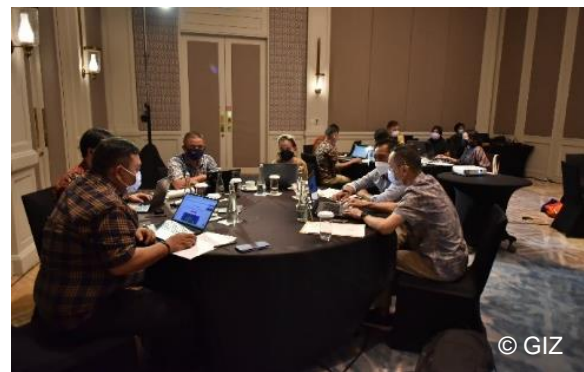
\*The roadmap is currently provided as input from the Building with Nature Indonesia consortium to the Central Java Provincial Government, which is currently awaiting guidance from the national level as the basis for legalizing and operationalizing the roadmap.

## Encouraging Regional Development Planning Towards Green and Low Carbon Economy

### By GIZ, Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV-MMI)

The Directorate of Environment, Ministry of National Development Planning (BAPPENAS) through the Low Carbon Development Indonesia (LCDI) Secretariat in cooperation with Bali Provincial Government with support from MRV-MMI, and development partners held National

Workshops on Low Carbon Development (LCD) for all provinces in Indonesia. Workshops were conducted in two sessions. The first session, held in May 2021, involved 301 participants representing governments from 24 provinces in western and central regions, while the second session, held in June 2021, involved 188 participants representing governments from 10 provinces in eastern region. The workshops were aimed at developing and integrating subnational-level low carbon development policies; facilitating provinces in monitoring and reporting on LCD implementation; and introducing the 'AKSARA' e-learning system.



*Participants inputting data into AKSARA, facilitated by the LCDI Secretariat team*

In his opening presentations, Director of Environment, BAPPENAS, Ir. Medrilzam, M.Prof.Econ, PhD, encouraged provincial governments to continue integrating LCD into their Regional Medium-Term Development Plans (RPJMD) to increase economic growth and improve social welfare, while reducing GHG emissions and minimizing the impacts of development on the environment. He expected LCD to be a strategic step in accelerating the attainment of a green and low-carbon economy.



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To ensure LCD implementation falls in line with government targets in the 2020-2024 National Medium-Term Development Plan (RPJMN), BAPPENAS has updated the LCD monitoring, evaluation and reporting application, AKSARA, to facilitate monitoring the LCD implementation and its indicators, including emission reductions and emission intensity.

During the workshops, participants reported on LCD actions into AKSARA. In the western and central region workshop, 59 new LCD actions were reported with potential emissions reductions of 748,910.4108 tCO<sub>2</sub>eq\*, while in the eastern region workshop, 30 LCD actions were recorded with potential emissions reductions of 1,158,156.112 tCO<sub>2</sub>eq\*. The data reported to AKSARA will be checked and validated by the LCDI Secretariat/BAPPENAS as part of the system's QA/QC.

## Sharing Experiences in Developing the Low Carbon Development Monitoring, Evaluation and Reporting System

### By GIZ, Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV-MMI)

Since the end of 2020, the Ministry of National Development Planning (BAPPENAS) has been supported by a team of international and Indonesian economic advisors embedded in the ministry to develop a low carbon economic stimulus programme to assist Indonesia's post-COVID-19 recovery. The IKI-funded projects of Strategic Environmental Dialogues (SED) and Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV-MMI) teamed up to support this initiative on behalf of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU). The initiative is part of NDC Partnership green recovery support putting climate action at the heart of COVID-19 recovery plans. On 16 August 2021, MRV-MMI held its project closure activity by conducting a "Sharing

Experiences in Developing Low Carbon Development Monitoring, Evaluation and Reporting System" event with BAPPENAS, inviting provincial governments from South Sulawesi and South Sumatra, an economic adviser team, ICRAF and other development partners.

The virtual event was attended by 67 people. In his opening address, Irfan Darliazi Yananto, Functional Planner representing the Director of Environment, BAPPENAS, said the project has produced various things essential to improving data measurement quality and transparency in the implementation of Low Carbon Development (LCD). He hoped that results from the project and lessons learned from the process could serve as a driving force for improved Low Carbon Development in Indonesia. During the event, Mr. Gerd Fleischer, Cluster Coordinator IKI BMU Indonesia, also expressed his gratitude to BAPPENAS and all parties collaborating in the implementation of the project.

Commissioned by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) from November 2018 to July 2021, the project contributed to improving the national MRV system in Indonesia by enhancing and redesigning existing online monitoring, evaluation and reporting tools, realigning several existing databases and inter-ministry data exchange, updating calculation methods for GHG reduction from different mitigation actions, and strengthening the capacities of national and sub-national stakeholders. A video providing MRV-MMI project information and results can be accessed [here](#).

The sharing session began with a presentation on the list of project achievements by the MRV-MMI principal advisor. This was followed by presentations on the details of the project results which consist of: features developed in the Low Carbon Development Planning and Monitoring Application (AKSARA); e-learning modules to facilitate users learn about LCD and AKSARA; a prototype participatory validation system for enabling target users to participate in validating



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reported low carbon development actions and further increase data quality in AKSARA; a green recovery roadmap to support low carbon development and green economy recovery efforts post COVID-19 pandemic; and sharing experiences of project support on LCD implementation in South Sulawesi province. To close the event, MRV/MMI presented a trophy and miniature AKSARA to BAPPENAS symbolizing the handing over of project results and continued cooperation with BAPPENAS on the next project.



*Presentation symbolizing submission of project results*

### Easier Capital Raising with Green and Sustainable Labelling

#### **By WWF-Indonesia, Taking Deforestation out of Banks Portfolios in Emerging Markets**

Indonesia has implemented several important initiatives for the advancement of the sustainable finance landscape in the nation. In 2020, the Ministry of Finance issued sovereign green 'sukuk' sharia compliant bonds amounting to USD 2.75 billion in the global market (2018-2020) and USD 490.1 million in the retail market (2019-2020) following the implementation of Climate Budget Tagging, which is essential for identifying and monitoring government expenditures for climate adaptation and mitigation projects.

It is important to utilise this momentum to support the growth of the green bond market and address the obstacles to issuing green and sustainable financing instruments. Accordingly, the United Nations Development Programme (UNDP) and Asian Development Bank (ADB) joined forces, with the cooperation of the Indonesian Sustainable Finance Initiative (IKBI),

to organise a webinar on 23 June 2021 targeting finance professionals involved in capital-raising transactions in Indonesia and other ASEAN countries. The webinar highlighted various best practices, lessons learned and challenges in issuing green and sustainable thematic bonds. Further, the event underlined the importance and benefits for all parties involved in deals of labelling transactions as Green, Blue or Sustainable Bonds. ADB and UNDP also encouraged the issuance of more green and sustainable thematic bonds to expedite progress towards more sustainable national-level financial systems. Lastly, the webinar also took the opportunity to describe available technical assistance that ADB, UNDP and the ASEAN Catalytic Green Finance Facility (ACGF) can offer for issuers, banks and financial service providers.

With distinguished speakers from ADB, UNDP, Climate Bonds Initiatives, Bank Rakyat Indonesia (the Chair of IKBI), ACGF, and the Ministry of Finance of the Republic of Indonesia, the event managed to attract more than 200 participants.



*"Easier Capital Raising with Green and Sustainable Labelling" Webinar*

### Sustainable Finance Capacity Building for the Indonesian Capital Market Community

#### **By WWF-Indonesia, Taking Deforestation out of Banks Portfolios in Emerging Markets**

With the second phase of the Financial Services Authority (OJK)'s Sustainable Finance Roadmap 2021–2025 in place, it was inevitable that various issues and trends would arise, and that applying sustainable finance would in itself lead to different implications for the financial sector and





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the financial regulatory landscape. Therefore, to support OJK's Sustainable Finance Roadmap, WWF-Indonesia together with the Ministry of National Development Planning (BAPPENAS), the Indonesian Capital Market Lecturers Association (IDPMI) and the Global Reporting Initiative (GRI) has been hosting a series of in-depth training sessions and international webinars as part of IDPMI's Sustainable Finance Training Roadmap. These events are aimed at providing capacity building on sustainable finance to the capital market community, which comprises various stakeholders and members of the academia.

**TRAINING AND INTERNATIONAL WEBINAR**

**IMPLICATIONS OF SUSTAINABLE FINANCE APPLICATION IN INDONESIA**

**1<sup>st</sup> SESSIONS**

**JUMAT 16 JULI 2021**

**14.00 - 16.00 WIB**

**SPEAKERS:**

**Topik 1:**  
Sustainable Finance and Policy Implications: Challenges, Scope, Practices, and Evaluations in Indonesia  
**Setyo Budiantoro**  
Manager Pjpt Pembangunan Ekonomi  
Sekretariat Tim Koordinasi Nasional Pelaksanaan SDGs  
Kementerian PPN/BAPPENAS

**Topik 2:**  
Sustainable Finance and Stakeholders: How Stakeholders Responds to Sustainable Finance Applications  
**Rizkiasari Yudawinata**  
Sustainable Finance Lead  
Timbunan WWF - Indonesia

**MODERATOR:**  
**Yupiter Gula**  
Selektoris Jendral IDPMI dan Dosen Tadris School of Management

**NARAHUBUNG:**  
Aprianti: 0813-1910-3506

*\*Eksklusif hanya untuk anggota IDPMI*

**DAFTAR MENJADI ANGGOTA IDPMI:**  
<https://linktr.ee/IDPMIIndonesia>

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## *Training session entitled 'Implications of Sustainable Finance Application in Indonesia'*

This series of events, which began in May 2021 and will continue until December 2021, consists of many in-depth training sessions and webinars covering various topics related to Sustainable Finance, including the ESG Integration Tool, Risk Measurement and Management Tool, as well as climate-related financial disclosures and science-based target setting for climate action. Speakers invited to these events include professionals in the field of finance, including representatives from OJK, UN-ESCAP, the Ministry of National Development Planning (BAPPENAS), WWF-Indonesia, the Carbon Disclosure Project (CDP),

Indonesia Stock Exchange (IDX), Bank Central Asia, Atma Jaya University, GRI and the World Resources Institute (WRI).

As the capital market community holds an influential position in shaping the Indonesian capital market regulatory framework, the expectation is that through this series of in-depth training sessions and webinars, the capital market community can drive the enhancement of a sustainable capital market in Indonesia.

## Examining Indonesia's Blue Economy Plan through the drafting of the 'Blue Financing Strategic Document'

### **By WWF-Indonesia, Taking Deforestation out of Banks Portfolios in Emerging Markets**

As the world's largest archipelagic state with a maritime area exceeding its terrestrial area, Indonesia possesses immense potential for developing its Blue Economy. The Government of Indonesia plans to publish its SDG Security Framework in 2021. In addition, as a part of the nation's support for a Blue Economy and Sustainable Development, the Government of Indonesia has deemed it necessary to formulate a 'Blue Financing Strategic Document'. This document is an essential element of the SDG Security Framework aimed at becoming a general guideline on blue finance. It could also serve as the basis for choosing blue projects and defining blue finance instruments relevant to the public sector, thus allowing access to capital markets.

In this regard, the Indonesian Coordinating Ministry for Maritime Affairs and Investment together with the United Nations Development Programme (UNDP) and the Archipelagic and Island States (AIS) Forum organised a virtual Focus Group Discussion (FGD), which took place on 27 August 2021. Several financial institutions and associations were invited to the FGD, including the Indonesian Sustainable Finance Initiative (IKBI), state-owned enterprises and civil society organisations including WWF-Indonesia.





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The discussion addressed issues pertaining to the Blue Financing Strategic Document and received input from participants as important stakeholders. Notably, Bank Rakyat Indonesia (BRI) as Chair of IKBI provided several responses during the FGD, citing IKBI's consistent support for financial institutions in implementing sustainable finance and contributing to SDGs, especially Goal 13: Climate Change and Goal 14: Life Below Water. BRI also underlined its appreciation of the Blue Financing Strategic Document draft, particularly as its clear classification of sectors and sub-sectors could assist financial institutions in mapping their sustainability portfolios. It hoped that the Blue Financing Strategic Document would enable government and regulators to implement specific sectoral policies, such as Guidelines on Blue Bond Issuance, or standards on assessing Blue Economy projects. Further, BRI hoped the government and regulators would constantly raise awareness among relevant stakeholders to ensure their support for a sustainable Blue Economy and provide incentives for financial institutions and business actors to support sustainable finance in the Blue Economy to accelerate its implementation.

## Drafting the Indonesian Green Taxonomy Framework

### By WWF-Indonesia, Taking Deforestation out of Banks Portfolios in Emerging Markets

As a part of its Sustainable Finance Roadmap, Indonesia's Financial Services Authority (OJK) is currently working with the International Finance Corporation (IFC) and several ministries on developing an Indonesian Green Taxonomy (THI) framework. The framework will act as a guideline for identifying and classifying green activities in economic sectors to support the Government of Indonesia's goal towards a low carbon and sustainable development, as well as contribute to the country's climate change mitigation agenda.



### *FGD on the "Indonesian Green Taxonomy (THI) Draft" by the OJK International Department*

The THI is being proposed to cover nine priority sectors: agriculture; maritime and fisheries; forestry; energy; industry; construction, infrastructure and water resources; transportation; tourism; and waste management. These sectors will be divided into two subsector categories: "green" or "green-leaning" (more commonly known as "brown"), based on applicable Indonesian legislation.

Accordingly, OJK organised a focus group discussion which took place through a virtual meeting on 7–11 June 2021 involving all relevant sectoral ministries, government bodies and associations, including the Indonesian Sustainable Finance Initiative (IKBI) for the financing sector, to secure input on the green taxonomy draft.

The development of the THI is expected to drive innovations and investments in economic activities that can provide positive impacts for the environment, while encouraging growth of the financial sector and green economy financing. The aim is for this green taxonomy to be utilised by national and local governments, investors, actors in the Indonesian financial sector and international organisations as the basis for carrying out sustainable economic activities.



# Sustainable Transport

## Webinar on Lessons Learned from the Implementation of Bus Rapid Transit Projects and Institutional Transformation for Urban Transport

**By GIZ, Sustainable Urban Transport Program Indonesia (SUTRI NAMA) and Indonesian Bus Rapid Transit Corridor Development Project (INDOBUS)**

As part of the Government of Indonesia's commitment to developing urban mass transit or public transport systems – which includes developing bus rapid transit (BRT) infrastructure and providing government subsidies for operations – major Indonesian cities are currently undergoing urban transformations and are in the process of developing BRT systems with segregated transit lanes. This also includes INDOBUS's pilot cities of Pekanbaru, Batam, Bandung, Semarang and Makassar, who have undergone studies to develop a BRT system that is customised to their city. Given current project developments, the focus of BRT preparations/implementation is now on institutional arrangements and the readiness of relevant stakeholders.

In order to support these cities, Indonesia's Ministry of Transportation and GIZ's SUTRI NAMA & INDOBUS project conducted a Webinar on Lessons Learned from the Implementation of Bus Rapid Transit Projects and Institutional Transformation for Urban Transport on Friday, 17 June 2021. The webinar provided participants from local governments who are currently or are in preparation for BRT projects in their regions with lessons learned and experiences from cities successfully implementing BRT systems, including the problems, challenges and opportunities that may arise during the process of institutional transformation in preparing and implementing BRT projects.

Moderated by Harya S. Dillon, Secretary General of the Indonesian Transportation Society (MTI), the webinar featured international speakers from China and Malaysia

as well as practitioners from Indonesia. Starting with China, Ms. Xiao Mei Duan, Technical Director of Far East BRT, shared Best Practices and Case Studies of Chinese BRT Projects, including her valuable first-hand experience in Guangzhou BRT, the second highest capacity BRT in the world. The second presenter was Mr. Rudyanto Azhar, Director of Iskandar Malaysia BRT, who presented lessons learned from the Iskandar Malaysia BRT (IMBRT) project in a federally-managed economic region on the Malaysia-Singapore border that is currently in the pilot testing phase for its upcoming BRT system. Lastly, Mr. Tory Damantoro, from TransJakarta's Risk Committee and Head of Indonesian Transportation Society's Jakarta region, gave a presentation on the Institutional aspects of BRT, lessons learned from TransJakarta.



*Webinar speakers, moderator and MC*

During the discussion session, participants, especially from sub-national government stakeholders, were interested in discussing various issues, particularly regarding inadequate road space for dedicated bus lanes and supporting facilities, BRT business models, public transport reform, and electric busses.

In the end, not only did participants gain an understanding of the processes involved in developing BRT systems, speakers also benefited from the insights they gained from discussions, including those on experiences in dealing with regulatory frameworks in their respective countries, the financial sustainability of each system, and engineering designs and systems features.



# Sustainable Transport

## Aligning Makassar's Sustainable Urban Transport Goals

### By GIZ, Sustainable Urban Transport Program Indonesia (SUTRI NAMA) and Indonesian Bus Rapid Transit Corridor Development Project (INDOBUS)

SUTRI NAMA & INDOBUS has been working with Makassar since its selection as a pilot city in 2019. SUTRI NAMA & INDOBUS conducted a preliminary assessment of the BRT corridor in 2020, and this year is moving forward in developing a bankable Feasibility Study (FS) for a BRT system in the 'Mamminasata' Makassar Metropolitan Area. Following the local election in Makassar in 2020, together with a representative of SECO, SUTRI NAMA & INDOBUS conducted a courtesy meeting with newly elected Mayor of Makassar, Mr. Mohammad Ramdhan 'Danny' Pomanto on 20 May 2021, to discuss SUTRI NAMA & INDOBUS progress and activities, and his administration's urban transport plans for Makassar city.



*The Mayor of Makassar discussing urban transport plans with representatives of SECO and GIZ*

The mayor welcomed the representatives of SECO and SUTRI NAMA & INDOBUS saying the programme would provide extraordinary opportunities. In his opinion, as the provincial capital, Makassar needs mass public transport starting with a BRT system. He expressed his wish to be actively involved in the planning process of the FS and encouraged close collaboration between the national and local governments.

Following its meeting with the mayor, the SECO and SUTRI NAMA & INDOBUS delegation visited acting Governor of South Sulawesi, Andi Sudirman Sulaiman. He believed the

programme could help improve access for communities in the four regions of the Makassar Metropolitan Area, including strategic tourism sites. In support of the programme, he committed to coordinating with all regional governments in Makassar city and Maros, Takalar and Gowa districts.



*The Acting Governor of South Sulawesi with his staff and representatives of SECO and GIZ*

In addition, the provincial government sought support from SUTRI NAMA & INDOBUS for capacity development for the Project Implementation Unit (PIU), which will be responsible for BRT development and implementation in the Makassar Metropolitan Area.

Finally, the Mayor of Makassar was eager to organise a Transportation Summit at the end of 2021 to discuss ongoing urban transport development in the city. The summit will be hosted by the city of Makassar and will involve stakeholders including officials from the city and provincial governments, as well as representatives of national ministries, GIZ, SECO and BMU. The acting governor and the provincial government support the planned summit and will assist in facilitating coordination with the city and district governments.



# Renewable Energy/Energy Efficiency

## 100% Renewable Energy - Toolkit Introductory Session Held for West Nusa Tenggara

### By ICLEI-Local Governments for Sustainability Indonesia, 100% Renewable Cities and Regions Roadmap Project (100% RE)

A Project Implementation Team (PIT) has been established to implement the 100% Renewable Cities and Regions Roadmap (100% RE) Project in West Nusa Tenggara province. The PIT, which consists of relevant stakeholders from various provincial departments and institutions, is designed to mediate discussions and coordinate implementation of the “Towards 100% Renewable Cities and Regions for Climate Change Mitigation” project. The team aims to expand stakeholder involvement and participation to enrich information and provide input for 100% RE roadmap development in West Nusa Tenggara as well as for renewable energy (RE) and energy efficiency (EE) project proposal implementation.

ICLEI is building capacity for PIT members. The 100% RE Toolkit was developed by the Global 100% RE Platform, a coalition of several global institutions (including ICLEI), to provide guidelines for policymakers, local authorities, community leaders and various parties to formulate strategies and set measurable targets in developing renewable energy projects.

ICLEI showcased the toolkit at a global event on 29 June 2021, attended by all PIT members. During his presentation, Rian van Staden, from the Global 100% RE Platform, emphasised that “local governments can incorporate local content to formulate strategies, implement actions, and monitor and evaluate their progress towards reaching 100% RE goals.” He stressed that local governments must have a deep understanding of their regions, particularly with regard to their natural and human resources. He also said local governments should collaborate with research institutions to simulate various scenarios using

modelling tools that will help achieve the ambition of transitioning to 100% RE.



*Rian van Staden presenting the 100% RE toolkit virtually to PIT members on 29 June 2021*

The activity was well received by PIT members. According to Niken Arumdati from the West Nusa Tenggara Provincial Energy and Mineral Resources office, “In the midst of public perceptions that an energy transition is only the governments’ responsibility, this toolkit can serve as a guide for the provincial government in increasing community participation to formulate energy transition strategies, especially at the grassroots level.”

Additionally, the 100% RE Toolkit includes a series of steps that can encourage stakeholder collaboration in providing data and insights, developing actions and strategies, and disseminating knowledge. The toolkit is designed to consider socio-economic, regulatory, environmental and public awareness conditions critically. It can prove beneficial in developing programmes towards renewable energy transition at the municipal, provincial and national levels. In Indonesia, it serves as a supporting instrument to guide the 100% RE transition in West Nusa Tenggara province.





# Renewable Energy/Energy Efficiency

## West Nusa Tenggara Energy Modelling for 100% RE Transition Development

### By ICLEI-Local Governments for Sustainability Indonesia, 100% Renewable Cities and Regions Roadmap Project (100% RE)

A successful transition to 100% renewable energy cannot rely on multilevel governance and cross-sectoral collaboration alone. The technical element is essential. In this regard, the project executed an energy modelling study to prepare West Nusa Tenggara province's renewable energy transition, in collaboration with the [Fraunhofer Institute for Solar Energy Systems ISE](#), regional governments in the province and local consultants who provided energy-related data. The modelling activity aimed to identify the optimum energy system for the province based on the highest RE share potential and energy supply security, as well as multi-sectoral interdependence, technological developments, costs and demands.

In her approach to developing the energy system model, Dr. Annette Steingrube incorporated: (1) energy supply and generation to provide an overview of the costs involved and the effectiveness of the technology into the future; (2) area, climate conditions and other aspects to determine the region's RE potential; and (3) an analysis of current energy demand to project energy requirements into the future.

Local experts and the West Nusa Tenggara Provincial Government collected data from September to December 2020. Fraunhofer ISE then processed the data from January to February 2021. A preliminary draft of modelling results was presented to stakeholders in a West Nusa Tenggara visioning workshop towards the 100% RE transition. Input and suggestions from the workshop became complementary materials and references for improving the modelling results. An online discussion of modelling results took place on 19 April 2021, during which Dr. Steingrube presented the final modelling results to PIT members. A full report

on the final renewable energy model was completed from May to July 2021.

### *Energy Modelling Results*

The energy modelling process incorporated three scenarios that consider demands, spatial, and fuel price aspects:

- The demand scenarios analysed Gross Domestic Product (GDP) and population data. Three final energy demands were proposed, resulting: end energy demand high of 48,800 GWh; end energy demand mean of 34,900 GWh; the efficiency of 2.1, which is higher than today; and Business-as-Usual (BAU) projection that is found to be three times lower than BAU energy demand projection in the West Nusa Tenggara Provincial Energy Plan.
- Two spatial scenarios (decoupled and coupled energy systems) were applied in the modelling process. The decoupled system projected the province's two main islands of Sumbawa and Lombok relying on their own energy potential, while the coupled system interlinked the islands' energy and electricity systems, thus allowing energy exchange (such as biogas trading).
- The low fuel price scenario assumed a crop residue biomass price of IDR 56.5 per kg in 2050, an increase of IDR 6.5/kg compared to 2021. Under the high price scenario, crop residue and waste-based biomass would cost IDR 3,910 per kg in 2050, half the price of natural gas.

### *Recommendations and Future Work*

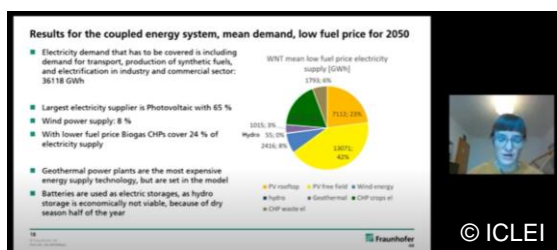
According to the energy modelling results, West Nusa Tenggara Province could meet a 100% RE target for all sectors by 2050. The 100% RE scenario is 17% cheaper than the BAU scenario, has only 20% of its CO<sub>2</sub> emissions, and can better connect remote areas and lower economic income households to electricity. In the discussion held by ICLEI, Fraunhofer ISE and PIT on 19 April 2021, it was agreed that the 100% RE Roadmap for West Nusa Tenggara



# Renewable Energy/Energy Efficiency

would be developed employing the mean demand, decoupled energy system and low fuel price scenarios.

This outcome of the energy modelling discussion will form the technical reference in developing the 100% RE Roadmap for West Nusa Tenggara. Public and multi-stakeholder consultations will be held during the roadmap development process to support the formulation of policies, strategies and stakeholder engagement plans, and their implementation will be monitored, measured, and verified.



*Dr. Annette Steingrube presenting the results of West Nusa Tenggara 100% RE energy modelling on 19 April 2021*

## Together with MEMR, ExploRE Promotes Biogas for Electricity

### By GIZ, Strategic Exploration of Economic Mitigation Potentials through Renewables (ExploRE)

In order to socialise the technical aspects of using biogas for electricity generation and foster the development of biogas powerplants in Indonesia, on 25 May 2021, the Directorate General of New, Renewable Energy and Energy Conservation (DGNREEC) under the Ministry of Energy and Mineral Resources (MEMR) and GIZ under the cooperation framework of the Strategic Exploration of Economic Mitigation Potential through Renewables (ExploRE) project held the first Bioshare Series event with the topic 'Biogas for Electricity'. The webinar marked the first of the Bioshare Webinar Series, which will continue with webinars on various bioenergy related topics.

Bioshare Webinar #1 was opened by the Director General of NREEC, Mr Dadan Kusdiana. During his remarks, he stated that unutilised agro-industrial waste from palm oil and tapioca produces huge volumes of greenhouse gas (GHG) emissions releasing methane (CH<sub>4</sub>) into the atmosphere. He hoped that with the international push for funding for renewable energy, this agro-industrial waste could be utilised effectively to help generate clean electricity from bioenergy. The Government of Indonesia is currently preparing a 'National Grand Energy Strategy' for achieving energy security and independence, and hopes to provide a subsidy component for biogas as it does for LPG. In terms of electricity, the Presidential Regulation on Renewable Energy is still being discussed by the Ministry of Finance, in parallel with that MEMR is discussing the Electricity Supply Business Plan (RUPTL) with state-owned electricity company PT PLN on the target of bioenergy development. He closed his opening speech by appreciating GIZ for providing support in the development of bioenergy in Indonesia through this series of webinars.



*Opening remarks from Mr. Dadan Kusdiana, Director General of NREEC, MEMR*

Bioshare Webinar #1 was divided into two sessions. The first session, which discussed technical aspects of biogas utilisation for generating electricity, was delivered by three speakers and discussed:

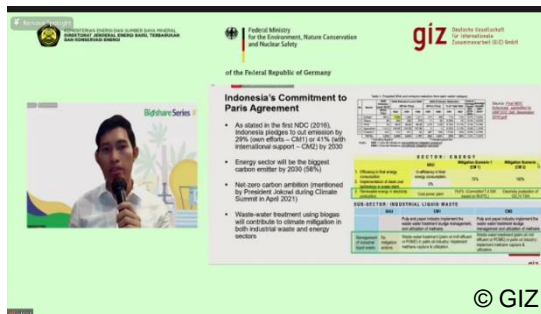
- biogas potential from agroindustry in Indonesia, delivered by GIZ ExploRE
- biogas from Palm Oil Mill Effluent (POME) as the biggest utilisation of biogas (technology,





# Renewable Energy/Energy Efficiency

- investment cost, utilisation), delivered by the Indonesian Biogas Association (ABGI)
- biogas for electricity purchasing scheme, policy and regulation, delivered by the RE Division of Indonesia's main electricity provider PT PLN



*Presentation on biogas potential from agroindustry in Indonesia by ExploRE*

The second session focused more on best practices of biogas utilisation for electricity generation, and was delivered by palm oil companies PT Nagata Bio Energi and PT SMART Tbk, followed by tapioca mill company PT Bangka Asindo Agri. This first webinar involved around 250 participants and has been watched by around 500 viewers on DGNREEC's YouTube channel.

The Bioshare Series will continue with topics including biogas for non-electricity sectors, biomethane utilisation, bioenergy project funding, and bioenergy implementation strategies. The expectation is that these events can provide inspiration and contribute to the future development of bioenergy in Indonesia.

## MEMR and ExploRE Promote Innovations in Biogas Utilization Through the Bioshare Webinar Series

### By GIZ, Strategic Exploration of Economic Mitigation Potentials through Renewables (ExploRE)

The Government of Indonesia is currently preparing a 'National Grand Energy Strategy' for achieving its energy mix target, which includes substituting primary energy sources

and optimising existing renewable energy technologies.

In her opening remarks for the Bioshare Series #2 Webinar on Utilization of Biogas for Non-Electricity Sectors in Indonesia held on 8 July 2021, Director of Bioenergy, Ms. Andriah Feby Misna from the Ministry of Energy and Mineral Resources stated, "For the development of renewable energy, bioenergy is very complex because it can be used for liquid, solid or gas fuels. With Bio CNG, for example, which is produced from biogas purification, we separate carbon dioxide (CO<sub>2</sub>) and carbon tetroxide (CO<sub>4</sub>) components and remove other impurities to produce methane gas with levels above 95%, so the characteristics of biomethane are similar to CNG".



*Opening remarks from Ms. Andriah Feby Misna, Director of Bioenergy, DGNREEC, which was live streamed through the DGNREEC YouTube channel*

The Bioshare Webinar Series is a sequence of awareness raising activities organised jointly by the Directorate General of New, Renewable Energy and Energy Conservation, MEMR, and GIZ Indonesia under the framework of the Strategic Exploration of Economic Mitigation Potential through Renewables (ExploRE) project. Bioshare Series #2 attracted more than 700 participants from diverse backgrounds, including government officials, academics and representatives of the private sector. The webinar was watched by around 700 viewers on DGNREEC's YouTube channel, which provided live streaming of the webinar.

As an agrarian nation, Indonesia has enormous agricultural, plantation and livestock resources. With large-scale production across the country, industries in these sectors have significant



# Renewable Energy/Energy Efficiency

potential for turning their waste into energy sources through biogas production. In addition to being an alternative energy source, biogas utilization can reduce environmental impacts, by reducing greenhouse gas emissions, treating factory wastewater, and preventing water, soil and air pollution.

Biogas utilization is one of the bioenergy-based renewable energy development targets stipulated under the National Energy General Plan (RUEN). However, realization remains well below the RUEN's target of 5.5 GW of electricity being generated from biogas power plants by 2025, with current capacity at around only 1.33% of that figure.

A sustainable biogas roadmap is being prepared to encourage biogas development. The document will include a development plan as well as a policy framework for funding support, so that sustainable biogas development can be realised. Director of Bioenergy, Ms. Andriah Feby Misna also revealed that the government is currently holding discussions with the Environmental Fund Management Agency (BPD LH) with a view to utilizing BPD LH funds to support sustainable biogas development.

In his presentation, Coordinator of Bioenergy Engineering and Environment, Mr. Efendi Manurung explained the current focus of biogas development is on technology transfer. He also said researchers and technology experts will be engaged and encouraged to create more innovations to boost biogas development in the country.



*Speakers and moderator of the webinar on biogas for non-electricity sectors*

## Exploring Bioenergy Financing Opportunities

**By GIZ, Strategic Exploration of Economic Mitigation Potentials through Renewables (ExploRE)**



*Poster for the Biashare Series #3 Webinar on Bioenergy Project Financing in Indonesia*

In her opening remarks for the Biashare Series #3 Webinar on Bioenergy Project Financing, Director of Bioenergy, Ms. Andriah Feby Misna from the Directorate General of New, Renewable Energy and Energy Conservation (DGNREEC) under the Ministry of Energy and Mineral Resources (MEMR) said, “We are fully aware of major challenges for renewable energy (development) in Indonesia, including uneconomical tariffs and renewable energy still being considered a high-risk investment. We hope a presidential regulation can bridge gaps and will be issued in the near future”.

The statement was delivered on Thursday, 5 August 2021 during the event organised through a partnership between GIZ Indonesia and DGNREEC, under the framework of the Strategic Exploration of Economic Mitigation Potential through Renewables (ExploRE) project.

During the virtual event, which involved nearly 500 participants, Ms. Andriah Feby Misna also stressed that despite current challenges, there is an urgent need for energy diversification through the advancement of bioenergy development. She went on to cite several examples of successful bioenergy investment.



# Renewable Energy/Energy Efficiency

Representatives of Growth Steel Group (GSG) and PT Bangka Biogas Synergy (BBS) also gave presentations during the webinar. Both companies have succeeded in developing bioenergy power plants through investment schemes from financial institutions. GSG is currently operating a biomass power plant, while PT BBS has a biogas power plant.



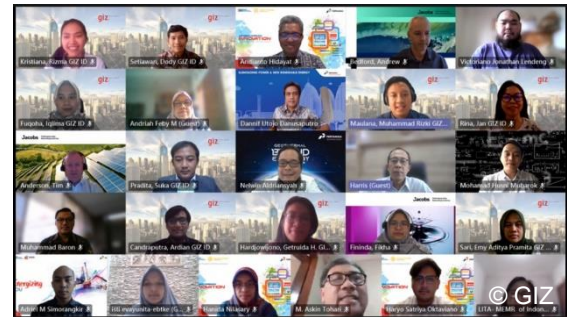
*Panelists of the Bioshare Series #3 Webinar on Bioenergy Project Financing*

Another panelist giving a presentation during the webinar was PT Bank Central Asia (BCA) Vice President of Corporate Banking, Ms. Yai Mustika. She stated that BCA manages an RE portfolio valued at IDR 4.81 trillion. Another financial institution, PT Sarana Multi Infrastruktur Indonesia (SMI) also allocates investments in sustainable development, and particularly RE exploration. PT SMI also provides consultancy services for bioenergy project developers to improve project bankability and elevate financing opportunities.

Through the webinar, ExploRE aimed to facilitate linkages between bioenergy project developers and financing options to further support RE development in Indonesia.

## Commencing a Study on Geothermal Green Hydrogen and its Utilisation in Domestic and International Markets

### By GIZ, Strategic Exploration of Economic Mitigation Potentials through Renewables (ExploRE)



*Participants in the kick-off meeting for the Study on Geothermal Green Hydrogen*

Despite the ongoing pandemic causing Indonesia to fall behind schedule in achieving its energy mix target, optimism remains high that the country's abundant renewable energy (RE) potential will enable it to achieve its target of 23% RE by 2025. This RE potential includes geothermal energy, which is categorised as an independent and stable renewable power generation system.

With approximately 40% of the world's geothermal reserves, Indonesia is expected to have the world's largest geothermal energy supply. However, this potential remains largely untapped. Currently, Indonesia is only using 4–5% of its geothermal capacity, primarily due to remoteness of source locations. Most of its geothermal reserves are on remote islands with lower electricity demand.

However, to overlook this enormous potential would be a huge loss. The emerging global hydrogen market continues to expand and require greater supplies. With its large geothermal reserves, from which green hydrogen can be produced, Indonesia has the ideal profile to become a major player in this emerging market.



## Renewable Energy/Energy Efficiency

In light of this, ExploRE is aiming to promote green hydrogen utilisations in Indonesia by collaborating with policymakers and the private sector. GIZ, MEMR and PT Pertamina have agreed to conduct a joint study to assess potential for its geothermal reserves to produce green hydrogen for domestic and international markets. This study comprises assessments of geothermal resources and potential green hydrogen markets as well as a detailed analysis of implementation.

Two outputs are expected to result from the study: a report containing a detailed analysis as the basis for preparing a green hydrogen business plan and implementation strategy; and a summary of the green hydrogen market assessment and lessons learned in producing green hydrogen from geothermal reserves. The latter will be used as input for ExploRE to conduct its main study on “Power-to-X for Decarbonizing Industries in Indonesia”.

Danusaputro, both voiced their optimism and enthusiasm for taking part in the advancement of hydrogen as the energy of the future and as a breakthrough industry in Indonesia.



*Director of Geothermal Energy, Mr. Harris, during his remarks*

To begin this cooperation, a kick-off meeting was held to mark the official commencement of the study. Taking place on Thursday, 2 September 2021, the meeting involved representatives from GIZ and state-owned energy company PT Pertamina, as well as Director of Bioenergy, Ms. Andriah Feby Misna, and Director of Geothermal Energy, Mr. Harris, from the Directorate General of New, Renewable Energy and Energy Conservation (DGNREEC) under the Ministry of Energy and Mineral Resources (MEMR).

PT Pertamina’s Vice President of Downstream Research and Technology Innovation, Mr. Andianto Hidayat, and President Director of Pertamina Power Indonesia, Mr. Dannif





### A Demonstration Plot for Embau

**By WWF, Green Economy in the Heart of Borneo – Integrating conservation, economic development and well-being of communities across the Heart of Borneo Corridor**

The transboundary project “Green Economy in the Heart of Borneo – Integrating conservation, economic development and well-being of communities across the Heart of Borneo Corridor” implemented by WWF in Indonesia and Malaysia aims at developing a green economy management concept that promotes environmentally-friendly resource use. In Indonesia, a green economy land use plan and an action plan have been drafted for the Embau Green Agropolitan Development Estate or *Kawasan Pengembangan Agropolitan Hijau Embau* (KAPAHE) in Kapuas Hulu district in West Kalimantan province and have been discussed with all relevant stakeholders. The drafts are currently being discussed in the district parliament. The green economy management concept focuses on increasing community knowledge and skills in developing activities oriented towards a green economy, sustainable natural resource management, strengthening community groups and building networks between stakeholders. KAPAHE is one of Indonesia’s National Strategic Estates or *Kawasan Strategis Nasional* (KSN), and project activities related to the management concept are aligned and harmonised accordingly.

WWF Indonesia Project Coordinator, Syahirsyah, said that people’s knowledge of sustainable commodity choices is still low in KAPAHE. In the fisheries sector, for example, they still use introduced species rather than local species, which have plenty of potential for development. Equally, knowledge of organic farming methods, water resources and biodiversity are also minimal. Residents still use land in areas prone to landslides, cultivate commodities in water catchment areas using chemical pesticides and fertilisers, and fragment forest areas. In addition, communities still prioritise using more land to increase

productivity over applying improved farming techniques. Another significant challenge is producers’ lack of access to markets.

The project has developed a green economy action plan for developing and implementing sustainable agricultural practices. These are characterised by increased productivity through intensification, diversification, superior commodities, increased use of local traditional knowledge, and zero waste management. A demonstration plot has been established in Kelakar village with preliminary training held on 19 August 2021. The Faculty of Agriculture at Tanjungpura University in Pontianak is supporting the project with knowledge transfer and receives valuable insights from the implementation of new approaches in the field. Currently, a Memorandum of Understanding is being developed between the university and the Kelakar Village Farmer Group to strengthen this partnership.



*Demonstration plot in Kelakar village, West Kalimantan*

### Plantation Land-Use Governance strengthened in Berau District

**By GIZ, Low-emissions oil palm development in Berau District, East Kalimantan (LEOPALD)**

Berau District Government continues to improve its institutional capacity for land use and plantation sector governance. Following District Regulation No. 3/2020 on Sustainable Plantation Development and the enactment of



## Forestry/REDD+

District Head Decree No. 287/2020 establishing 83,000 ha of indicative high conservation value (HCV) areas in plantations in the district, the Berau District Government is preparing to set a net-zero deforestation target for 2021-2026. The district head has also improved business licensing procedures and established a team for monitoring land-use change.

According to the final draft of its medium-term development plan for 2021-2026, the Berau District Government wants to maintain the current level of forest cover. One of its programmes for meeting this target involves working together with plantation concessions for HCV area management. The Berau District Estate Crops Office has used elements of the latest draft of its project-supported sustainable plantations plan to contribute to the district medium-term development plan.

Through Decree No. 213/2021 dated 11 May 2021, the Berau District Head has introduced suitability criteria into the standard operating procedure (SOP) for preliminary assessment of land-use related permit applications. The suitability criteria and SOP promote the risk-based approach in HCV area identification and management. The decree stipulates the use of the 2020 indicative HCV area map as a reference in assessing suitability. If a proposed concession area overlaps with the indicative map, the permit applicant must apply the site-level HCV assessment process. In the case of a site-level assessment confirming an HCV area inside the proposed permit boundary, the applicant must manage and protect that area. For data reference standardization, the decree endorses a web-based screening tool that allows applicants and the district government office responsible for the licensing process (DPMPTSP) to conduct a simple overlap analysis using an approved spatial data set. Nine approved spatial data sets are stored in the server: the district spatial plan; state forest zone designation; permits (location, business, and cultivation rights); land cover map; agroecosystem suitability; indicative HCV area;

and village land use plans. The project – a collaborative effort between GIZ and Yayasan Konservasi Alam Nusantara (YKAN) – supported the district government in developing the web-based screening tool and drafting the decree. In June 2021, the project provided training for DPMPTSP officers on using the web-based screening tool.

On 9 June 2021, the Berau District Head also issued Decree No. 256/2021 on monitoring local government performance relating to the environment, including forest cover ratio and greenhouse gas emissions. The decree establishes an inter-office monitoring team and endorses an SOP as guidance for team operations. According to the procedure, the monitoring team will use the land cover map from the Ministry of Environment and Forestry as its primary reference. The monitoring team will increase the accuracy of the map through remote sensing and field assessments.



*Sungai Lesan Protection Forest in Lesan Dayak village, Kelay subdistrict*

## SUPA/REPEAT, KLHK and DLHK Establish Pilot Sites in Aceh

### **By GIZ, Sustainable Use of Peatland and Haze Mitigation in ASEAN (SUPA)**

SUPA/REPEAT Component 1 Work Area 3 aims to generate pilot experiences from Indonesia and Malaysia. On 25 May 2021, GIZ and Indonesia's Ministry of Environment and Forestry (KLHK) signed the agreed minutes on technical cooperation for implementation of Work Area 3. As a result of a thorough





## Forestry/REDD+

discussion and a list of criteria, the Government of Indonesia decided that Nagan Raya and West Aceh districts in Aceh province would become pilot regions for SUPA/REPEAT Component 1 in Indonesia. The signing of this agreement marked the official implementation of Work Area 3: Generating Pilot Experiences in Indonesia.

Following the signing of the agreed minutes, SUPA/REPEAT Component 1 organised a series of events relating to Work Area 3: Generating Pilot Experiences in Aceh, Indonesia, which were held on 15-17 June 2021.

SUPA/REPEAT Component 1, KLHK and the Aceh Provincial Environment and Forestry Office (DLHK Aceh) held a virtual launch of the SUPA pilot in Aceh, Indonesia on 15 June 2021.

A workshop and focus group discussion was held on 16-17 June to develop the preliminary work plan for the SUPA pilot sites. The last meeting in this series of events was a preliminary meeting to prepare the 1<sup>st</sup> Project Steering Committee for SUPA Pilot Sites in Aceh, Indonesia. Another meeting to finalise work plans for the pilot sites was scheduled for 26 August 2021.

During the launch, Principal Advisor of SUPA/REPEAT Component 1, Berthold Haasler, said “With the implementation of pilot activities in Indonesia, under the umbrella of an ASEAN programme, we show that targets defined at regional level can be implemented for the benefit of all stakeholders at local level and that regional programmes with national components offer new and additional opportunities. The results we achieve on the ground will not only benefit partners at the local level but will also create good examples and best practices that can be adopted by others — not limited to Indonesia but to the entire ASEAN region”.

The SUPA/REPEAT pilot sites in Aceh, Indonesia will cover 3 Peatland Hydrological Units (PHU) across two districts (Nagan Raya and Aceh Barat) and will work directly with at least 10

villages in implementing sustainable peatland management practices.

Watch the SUPA Pilot Site launch [here](#) (in Bahasa Indonesia).



*Virtual launch of SUPA Pilot Sites in Aceh, Indonesia, 15 June 2021*

### Basic Income for Nature and Climate - The First Proposal for Conserving Nature and Combating Climate Change Using the Basic Income Approach

#### **By GIZ, International forest-related climate finance**

International forest policy approaches like payments for emission reductions in the forest and land-use sector called REDD+ are difficult to implement in a “high forest cover, low historic deforestation” (HFLD) context, such as in Indonesian New Guinea, known as ‘Tanah Papua’ (Land of Papua). The forests of Tanah Papua store tremendous amounts of carbon, are biologically megadiverse and are essential for local livelihoods.

Given the global importance of biodiversity conservation, climate change mitigation and cultural heritage, this region deserves special attention and tailor-made financial mechanisms to incentivise sustainable use of forest resources while providing options for alternative development pathways.

Within the context of the “International forest-related climate finance” project by the German Federal Ministry for the Environment, Nature



Conservation and Nuclear Safety (BMU) and implemented by GIZ together with the University of Indonesia's "Basic Income Lab", an innovative research project was set up in order to investigate the potential for a basic income scheme for nature and climate. The scheme is based on mobilizing financial resources generated by putting a value on existing forest carbon stocks via a so-called "Forest Carbon Dividend". While other comparable studies are mostly theoretical and remain unclear on how such schemes could be operationalised, researchers from the University of Indonesia have come forward with a first-of-its-kind concrete proposal for a basic income for nature and climate. The publication ["Basic Income for Nature and Climate: On the first Basic Income proposal to conserve nature and combat climate change on the largest tropical island on Earth"](#) by Sonny Mumbunan, Ni Made Rahayu Maitri, Dinna Tazkiana, Ari Prasojo, Femme Sihite and Dhita Mutiara Nabella provides the conceptional basis for the proposal and summarises lessons learned from Tanah Papua and similar schemes to initiate a national and international discussion on this new and highly innovative approach. Future research and work on the topic will be carried out within the Freiburg Institute for Basic Income Studies (FRIBIS) a competence network of the Albert-Ludwigs-Universität Freiburg for interdisciplinary research on basic income approaches, their conditions and their impacts on different aspects of social and personal life.



Forest landscape in Tamberau district, West Papua

### Becoming Peatland Heroes: The Perspectives of 55 Young Researchers in West Kalimantan in Building Synergy for Sustainable Peatland Management

**By World Agroforestry (ICRAF) Indonesia, Peat-IMPACTS Indonesia**

Enthusiasm and interest were clearly apparent when ICRAF, through Peat-IMPACTS Indonesia, initiated the Young Peat Researcher Incubator or *Inkubator Peneliti Muda Gambut* (IPMG) programme in West Kalimantan province.

The IPMG-West Kalimantan Chapter involved 31 female and 24 male graduates from various universities in West Kalimantan who participated in the programme, which ran from February to July 2021.

Good collaboration was established with the West Kalimantan Provincial Government and Kubu Raya District Government, where IPMG activities took place. Lecturers from universities in West Kalimantan shared their enthusiasm by promoting and selecting the best candidates to join the programme.

Head of the West Kalimantan Provincial Public Housing and Settlements Office, Ir. H. Adi Yani, MH, expressed his hope that, "the Young Peat Researcher Incubator programme can stimulate the youth in West Kalimantan through research activities relating to peat. We hope that a sustainable peatland management system can be established through a proper knowledge management system".

Before going to the field, young researchers were prepared through a series of training sessions covering many competencies on the 'Approach to Livelihoods and Landscape Improvement and Resilience' (ALLIR). The expectation was that the IPMG programme would collect data through engagement with peat farmers and communities to uncover intervention options for sustainable peatland management in West Kalimantan. Field activities lasted for approximately four months



## Forestry/REDD+

in 31 villages in the Kapuas–Ambawang River and Terentang–Kapuas River Peat Hydrological Units (PHUs).

Once field activities had been completed, the 55 young researchers conducted a series of knowledge dissemination sessions for sharing information and experiences. A provincial seminar was held on their experiences in peatland research, with topics including land use in peat ecosystems, gender equality, strategic commodities, best agricultural practices, community livelihoods and farming patterns from an economic perspective. The expectation was for the seminar to provide fresh information and considerations for policymakers in West Kalimantan.

A media gathering was held with more than 20 journalists to attract media attention to social, economic and environmental issues relating to peatlands in West Kalimantan. This was followed by a campus tour to the top three universities in West Kalimantan to share experiences and knowledge with the academic community.

The last most important event was a provincial public dialogue with important leaders and policymakers from the national, provincial and district levels on livelihood problems in peatlands and possible solutions. All of these events were based on the valuable experiences of the 55 young researchers through Peat-IMPACTS Indonesia.



*A focus group discussion with a women's farmer group in Korek village, Kubu Raya district*

During the public dialogue, ICRAF Indonesia Country Director, Dr. Sonya Dewi, relayed an important message on the importance of partnerships between the government and the private sector. As livelihood issues differ from one village to another, despite being in the same province, context-specific livelihood options need to be developed to solve the challenge of managing peatlands sustainably. Sonya Dewi also praised the IPMG programme as an example of how landscape management can involve the young generation as part of the solution.



*Discussion with farmer group members in Sungai Terus village, Kubu Raya district, on improving access to Five Livelihood Capitals topic, which developed rice cultivation with a direct seed planting system (tabela)*

## Follow-Up Meeting to Discuss the Development of Peatland Management Plan in North Sumatra

**By Conservation International Indonesia, Mitigation and Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystems**

Following the establishment of Peatland Forum Working Group (PFWG) in North Sumatra through Gubernatorial Decree No. 188.44/515/KPTS/2020, the North Sumatra Development Planning Agency (BAPPEDA) invited Conservation International Indonesia (CII) to participate in a follow-up meeting. The meeting was held on 28 June 2021 to discuss the next steps the working group should take.

During the meeting, it was decided that there would be a decree revision stipulated a change in name from the North Sumatra PFWG to the



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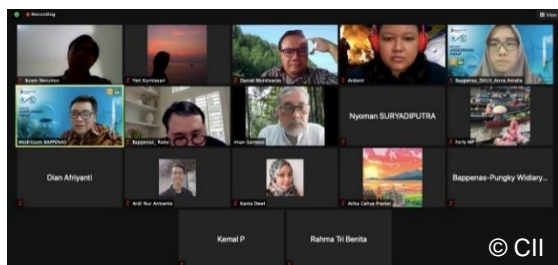
North Sumatra Peatland Forum, which would be more inclusive to non-governmental stakeholders including local community groups, academic institutions, private sector actors and non-governmental organizations. The new forum would be responsible for the development of a North Sumatra Peatland Management Plan and the project would provide support accordingly.

regulations; adding a sustainable funding strategy to ensure long-term continuity for PME management; and including existing initiatives, such as the development of the World Mangrove Center (WMC) and International Tropical Peatland Center (ITPC), in the roadmap.

### Coordination Meeting with SCT-WM

#### **By Conservation International Indonesia, Mitigation and Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystems**

Conservation International Indonesia (CII) participated in a coordination meeting held by the Strategic Coordination Team for Wetlands Management (SCT-WM) on 1 July 2021. The meeting was in follow up to the peatland and mangrove data synchronization meeting series held on 27 and 29 April 2021.



#### *Virtual coordination meeting with SCT-WM*

During the coordination meeting, SCT-WM presented the Peatland and Mangrove Ecosystem (PME) data matrix developed during the data synchronization workshop series. The data matrix, which included existing regulations, current programmes from different ministries, existing agencies, and current challenges relating to PME management, was used to discuss the draft of the National PME Roadmap currently being developed by SCT-WM. This resulted in input including: the inclusion of regional governments in the national roadmap to ensure integration of national and regional





# Biodiversity

## Social Benefits of Establishing Marine Sanctuaries and Co-managed Fishing Grounds: The Experience of Government Leaders

### By Rare, Fishing for Climate Resilience

Social cohesion is often an overlooked aspect in strengthening people's resilience to climate change. Adaptation measures usually focus on capital-intensive and human-made infrastructure such as seawalls and desalination plants that disturb marine ecosystems and disrupt the lives of coastal communities. Meanwhile, lower priority is given to strategies such as community empowerment, nature-based solutions and building institutional capacity that are less costly and more attuned to the needs and conditions of local people and the natural environment.

Under the Fishing for Climate Resilience project, which is supported by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) through the International Climate Initiative (IKI), Rare has been working with local government and community partners in promoting these soft adaptation measures. In the last quarter of 2020, Rare and partners established [networks of marine reserves](#) of approximately 19,000 hectares in Southeast Sulawesi province to serve as spawning grounds for fish. To balance conservation and people's livelihoods, coastal communities also designated areas where local fishers would receive exclusive rights to fish in a sustainable manner. In the second quarter of 2021, they completed management plans containing strategies and activities to protect coastal communities against coral bleaching and sea level rise as well as to promote good governance and community cohesion.

Throughout these processes, Rare and partners ensured that principles of inclusivity, impartiality and transparency were followed. Thus, all stakeholders were able to voice out and negotiate their interests on the sanctuaries

and fishing grounds, mitigating potential future conflicts around resource use and management. Rare provided important fisheries and climate data, which the partners combined with local knowledge to design climate-proof marine sanctuaries. For local government partners who took part in the activities, more than the technical knowledge they gained, it was the community cohesion and trust that emerged from the activities that made a personal impact.

"I never realised that by interacting a lot with the local community, I would not only gain valuable information about their situation but also their trust in the government. This is a turning point for me," said Yusuf, Head of the Fish Auction Site Management Section at the Buton District Fisheries Office. Yusuf was surprised that by just listening to the fishers' stories and concerns, helping them understand complex technical data and resolving potential conflicts, he was able to earn the community's trust in him and the government. He also shared how they earned the trust of communities in the village of Wabula where customary laws are followed. These laws, he said, already consist of various regulations on the use and management of marine resources. When they discussed and aligned the concept of reserves and managed access areas with local knowledge, the community saw how scientific information can help them improve the management of their resources, which became a major factor in their decision to support the initiative.

For Habri Jaya, Head of Fisheries Infrastructure in South Konawe District Fisheries Office, the inclusivity of the design process and the collaboration of different stakeholders enabled them to determine appropriate and inclusive strategies for the network of reserves and managed access fishing grounds. Adopting a multi-stakeholder approach ensures the success of the project. "Without the community's input, the design would just be another useless document piled up on the



## Biodiversity

office shelves with no one being encouraged to implement it,” he remarked.



*Habri Jaya presents fisheries data to local communities to help them identify no take zones.*

Community trust and social cohesion are crucial factors for implementing and sustaining climate resilient and sustainable fisheries which benefit both coastal ecosystems and communities. Depending on the local situation, ‘soft’ approaches complement hard infrastructure and can strengthen social cohesion, the sense of belonging and trust between communities and governments. These approaches enable them to address climate impacts and recover from unforeseen crises such as the pandemic in a more holistic manner.

### Rare Launches Coastal 500

#### By Rare, Fishing for Climate Resilience

Local government and community leaders around the world are on the frontline of solving complex problems facing our ocean and coastal fisheries. Climate change, coastal pollution and overfishing continue to threaten marine ecosystems. The small-scale fishing sector continues to be underrecognised for its contribution to economic growth and food security despite being the lifeline for millions of people during the pandemic.

To meet these challenges, along with global calls for “green/blue recovery”, local government and community leaders pledged to prioritise coastal fisheries and local solutions that balance the protection of resources and the needs of people that depend on them.

Supporting this action, Rare, in celebration of World Ocean Day, launched [Coastal 500](#), a network of local government and community leaders from eight countries who are committed to supporting healthy and sustainable fishing communities. Network members have pledged to build these communities by promoting responsible fishing behaviours, endorsing no-take marine reserves and investing in community-based fisheries management, among other initiatives. Coastal 500 will serve as a valuable platform for peer-to-peer learning, technical and network support, and developing advocacy campaigns for coastal leaders from all over the world as they address multiple challenges faced by coastal communities. It will also help ensure that small-scale fisheries and the network of microenterprises they support are fully recognised as the foundation of the rural economy and food security. This initiative complements local capacity building efforts that form part of the BMU/IKI-supported Fishing for Climate Resilience initiative.



*Local leaders from eight countries join the launch of Coastal 500*

The network is off to a good start with one hundred coastal mayors, representing 1.2 million coastal community members, pledging to explicitly link COVID recovery plans and available financing to the protection of natural, coastal resources and ensuring effective community co-management of local fisheries.

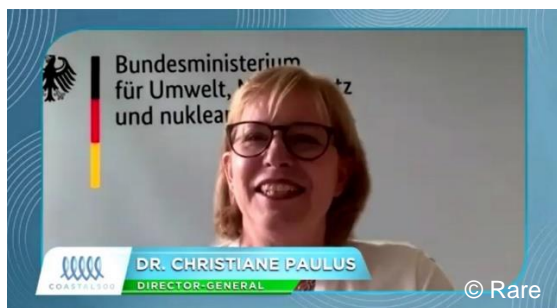




## Biodiversity

Rare aims to have 500 coastal leaders join the network by 2022, when the world celebrates the International Year of Artisanal Fisheries and Aquaculture.


Dr. Christiane Paulus, Director General for Nature Conservation and Sustainable Use of Natural Resources at the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), representatives of the Global Covenant of Mayors for Climate & Energy, Bloomberg Philanthropies, the ICCA Consortium, and community leaders participated in the online event that inaugurated the network.



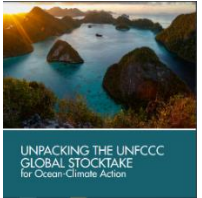
*Dr. Christiane Paulus, Director General of BMU, talks during the event about the role of local governments in conservation and sustainable use of marine resources.*

# Knowledge Products

**By Wetlands International, Ecosystem-based adaptation at scale through Building with Nature - Towards resilient coasts in Indonesia**


<p>Technical guidelines for restoring eroding tropical coastlines</p>	<p>Wetlands International and its global and Indonesian partners present a series of five Technical Guidelines on Building with Nature to restore eroding tropical muddy coasts. The guidelines share knowledge and lessons in a practical way to support the sound replication of technical and socio-economic interventions that, in combination, were applied to recover 20 kilometres of eroded coastline in Central Java, Indonesia. This project used Nature-based Solutions by applying the Building with Nature approach as an alternative to traditional coastal engineering solutions.</p> <p>Available guidelines:</p> <ul style="list-style-type: none"> <li>– Technical Guidelines #1 'Building with Nature approach'</li> <li>– Technical Guidelines #2 'Systems Understanding' for Nature-inclusive Coastal Infrastructure design</li> <li>– Technical Guidelines #3 'Permeable Structures'</li> <li>– Technical Guidelines #4 'Associated Mangrove Aquaculture Farms'</li> <li>– Technical Guidelines #5 'Building Sustainable Aquaculture through Coastal Field Schools'</li> </ul> <p><a href="https://www.wetlands.org/news/technical-guidelines-released-for-restoring-eroding-tropical-coastlines/">https://www.wetlands.org/news/technical-guidelines-released-for-restoring-eroding-tropical-coastlines/</a></p>	
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**By Rare, Fishing for Climate Resilience**

<p>Unpacking the UNFCCC Global Stocktake for Ocean-Climate Action</p>	<p>Unpacking the UNFCCC Global Stocktake for Ocean-Climate Action provides a broader understanding of the crucial link between ocean and climate, focusing on marine Nature-based Solutions (NbS) as part of the Global Stocktake (GST). The paper provides an overview of the GST and maps the ocean mitigation and adaptation actions against the corresponding report or sources of input to the GST it would be included in. It also provides a comprehensive list of possible actions that stakeholder groups can undertake to contribute to the GST.</p> <p><a href="https://www.iucn.org/sites/dev/files/content/documents/2021/the_ocean_and_the_unfccc_gst.pdf">https://www.iucn.org/sites/dev/files/content/documents/2021/the_ocean_and_the_unfccc_gst.pdf</a></p>	
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# Knowledge Products

## By GIZ, Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV-MMI)

<p>Engraving AKSARA, Knitting Hope: Development of Indonesia's Climate Mitigation Monitoring, Evaluation and Reporting System</p>	<p>This report describes MRV-MMI activities and results to support the Government of Indonesia in progressing the implementation of its NDC in accordance with the Enhanced Transparency Framework (ETF) and promoting effective climate mitigation policies as part of national development policy. The report also provides recommendations for ensuring the sustainability of project achievements beyond the project lifetime.</p> <p>Contact: Maria Evnike (<a href="mailto:maria.evnike@giz.de">maria.evnike@giz.de</a>)</p>	
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## By GIZ, Strategic Exploration of Economic Mitigation Potentials through Renewables (Explore)

<p>Indonesia's PV Local Content Regulations</p>	<p>This study describes local content requirements (LCRs) and how they are implemented to boost the renewable energy market and stimulate the local industry in Indonesia. Furthermore, it provides policy recommendations for regulations on LCRs that fit the current status of the RE market, while being oriented towards local RE industry development.</p> <p>Contact: Getruida Hardjowijono (<a href="mailto:getruida.hardjowijono@giz.de">getruida.hardjowijono@giz.de</a>)</p>	
<p>Innovative Financing for Renewable Energy Projects</p>	<p>This study focuses on identifying the potential of Financial Technologies (FinTechs) and innovative financing to support RE development and identifies what problems in RE projects can be overcome or resolved with FinTechs and innovative financing.</p> <p>Contact: Getruida Hardjowijono (<a href="mailto:getruida.hardjowijono@giz.de">getruida.hardjowijono@giz.de</a>)</p>	



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