



IKI Newsletter Indonesia

12TH EDITION



February 2021

About the International Climate Initiative

Since 2008, the International Climate Initiative (IKI) of the Federal Ministry for the Environment, Nature Conservation, Building 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, adaptation to the impacts of climate change and the protection of biological diversity. These efforts provide various cobenefits, 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

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The Government of Indonesia revised the state budget for 2021 to include the National Economy Recovery Program (PEN), with a current budget of IDR 403.9 trillion (around USD 28.73 billion). Indonesia's state budget 2021 now also targets green development programs, such as the expansion of rooftop solar energy, improved waste management units and mangrove rehabilitation.

The government, led by the Coordinating Ministry of Marine Affairs and Investment, is also preparing a presidential regulation to support the implementation of Indonesia's Nationally Determined Contribution (NDC), including climate financing and carbon trading. The so-called *Draft Regulation on the Implementation of Carbon Economic Value for Achieving NDC Targets and Controlling Carbon Emissions in the Framework of National Development* is now with the Ministry of State Secretary to be signed by the President.

Renewable Energy

On 7 January 2021, Minister Arifin Tasrif reported the 2020 achievements on the Ministry of Energy and Mineral Resources (ESDM). The ministry was provided with a budget of IDR 6.2 trillion (around USD 441.9 billion); the highest disbursement percentage in eleven years. 93.5% of the budget was disbursed. ESDM also recorded significant investments in the energy sector, namely USD 24.4 billion. Despite the global pandemic, ESDM gained a non-tax state revenue of 120% from the 2020 target.

The Directorate General of New, Renewable Energy and Energy Conservation reported its 2020 results at a press conference on 14 January 2021. **Indonesia has increased its renewable energy plant capacity by 176 MW compared to 2019.** Amid the challenging global pandemic, this subsector recorded significant investments of USD 1.36 billion and generated a non-tax state revenue of IDR 2 trillion (around USD 14.8 billion) from the geothermal sector. **Regarding the renewable energy mix, Indonesia managed to achieve 11.51% from the 2020 target of 13.4%. The most outstanding achievement is that the new and renewable energy subsector has reduced 64.4 million tons of CO₂ emissions, exceeding the actual 2020 target of 58.0 million tons.**

On 14 December 2020, ESDM held an **inauguration of 145 functional officers due to the equalisation of positions from administrative officers within the Secretariat General.** The inauguration followed President Joko Widodo's call to simplify bureaucracy in government. The simplification was a response of the government to appreciate the expertise and increasing professionalism of civil servants in facing the current global challenges.

Forestry, REDD+

The Ministry of Agriculture has issued **Ministerial Regulation No. 38/2020 on the Indonesian Sustainable Palm Oil (ISPO) certification**, as a derivative to the Presidential Regulation No. 44/2020 on the ISPO Certification System. The new standard for large growers covers new requirements to reduce forest and peat conversion, including mandatory requirements on identifying, managing and reporting high conservation value areas. Unlike the old regulation, **ISPO is now compulsory for smallholders who have to comply with the standard for more than five years.** Unfortunately, smallholders have no specific obligation to avoid deforestation and peat conversion when developing new farmland.

In October 2020, with **Ministerial Decree No. 89/M.PPN/HK/10/2020**, the Ministry of National Development Planning (BAPPENAS) **established a Strategic Coordination Team for wetland management.** It was established out of the former Peatland and Mangrove Ecosystems Advisory Committee. This strategic coordination team aims to support the government in achieving the Sustainable Development Goals (SDGs) and targets for low-carbon development. This team will be responsible for wetland planning, data and information collection, synchronising policies at national and sub-national levels and monitoring progress.

Changes in personnel

On 6 November 2020, the Minister of Energy and Mineral Resources (ESDM), Arifin Tasrif appointed two new Director Generals. **Dadan Kusdiana** replaced FX Sutijastoto as the **new Director-General of New, Renewable Energy and Energy Conservation**; Kusdiana was previously the Head of Research and Development Agency of ESDM. Furthermore, **Prof. Tutuka Ariadji** was appointed as the **new Director-General of Oil and Gas.** Ariadji comes from the academia background and previously was a Chairman of a Professor Forum at the Bandung Institute of Technology.

IKI Project Highlights (during challenging times)

WWF Indonesia, Green growth in the Heart of Borneo

WWF Indonesia conducted its workshops, public consultations and focus group discussions as hybrid events, allowing participants to join face-to-face following a health protocol and participants to attend the meeting via Zoom or other online platforms. Although the global pandemic has made cross-border travel impossible, WWF Malaysia continues to liaise with its Indonesian partners through a **joint publication of books such as 'The Colours of Borneo: an Illustrated Book about Culture and Environment' and 'Tales of Legend and Lore from Middle Borneo'**. The coordination meetings that usually takes place twice a year and alternates between Indonesia and Malaysia had been conducted virtually in November 2020. The experience shows that it is possible to conduct effective virtual meetings, but it cannot replace face-to-face meetings, especially in a transboundary project.

WWF, Establish Sustainable Consumption and Production—a South-South Transfer (SCP South-South)

Within its NDC, Indonesia aims to reduce greenhouse gas emissions by 29% in 2030 (using own resources). The expansion of oil palm plantations poses a great sustainability challenge and is a major driving force for forest conversion, leading to increased emissions. Despite various national regulations to reduce emissions from the oil palm sector, current actions are insufficient to meet the NDC targets in 2030. Therefore, from September to December 2020, a **series of meetings and discussions with relevant key stakeholders (government, universities, companies and certification bodies) was conducted to review Indonesia's NDCs and strengthen mitigation actions and policy recommendations for the agriculture sector.**

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

The MRV-MMI project is now extended to March 2021 with additional outputs focusing on the **green recovery after COVID-19**. The German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) has provided additional budget to the MRV-MMI project to support BAPPENAS to assess options on how the government's COVID-19 stimulus packages can benefit the green economy and best provide co-benefits green investments that deliver improved economic, social and environmental benefits. This support is a contribution to the NDC-Partnership.

Rare, Fishing for Climate Resilience

In November 2020, **BMU confirmed additional financial support to Rare's project through the COVID-19 response package**. Complementary to the parent project, *Fishing for Climate Resilience*, Rare will support small-scale fisheries-based microenterprises in Indonesia and the Philippines to cope with the socio-economic impacts of the Covid-19 crisis. Further initiatives will focus on 'greening' the sector by integrating Ecosystem-based Adaptation (EbA) measures and principles into the businesses' operations. Further, it will strengthen community-based surveillance and reporting systems to help governments mitigate the anticipated increase in fishing pressure on critical ecosystems.

GIZ, Low-Emission Oil Palm Development (LEOPALD) and Sustainable and Climate-Friendly Palm Oil Production and Procurement (SCPOPP)

A web-based land suitability tool, that can identify high conservation value/ high carbon stock (HCV/ HCS) and assist the plantation licensing process, has been developed under the Berau District Government data portal. This initiative has been supported by GIZ and Yayasan Konservasi Alam Nusantara (YKAN) under the LEOPALD project. The next step is to enshrine the standard operation procedure in law and train managers and users. In November 2020, GIZ, through the LEOPALD project in Berau District and the SCPOPP project, provided inputs to the National Standards, Procedures and Criteria (NSPK) related to smallholder plantation data.

The East Kutai Regency Government, supported by the SCPOPP project, is about to **revise the district spatial plan and integrate the identification and management of HCV/ HCS areas through a Strategic Environmental Assessment (SEA) process.**

INTERNATIONAL CLIMATE INITIATIVE (IKI) IN INDONESIA

57 Projects under Implementation

29 Implementing Organisations



26 Political Partners

Coordinating Ministry of Economic Affairs	Peat Restoration Agency (BRG)
Coordinating Ministry of Marine Affairs	Government of the Districts Pesisir Barat and Lampung Barat
Ministry of National Development Planning (BAPPENAS)	Association of South East Asian Nations (ASEAN)
Ministry of Environment and Forestry (KLHK)	District Government of Berau
Ministry of Energy and Mineral Resources (ESDM)	Marine and Fishery Service Aceh
Ministry of Transport	Marine and Fishery Service North Sulawesi
Ministry of Finance	Marine and Fishery Service West Nusa Tenggara
Ministry of Industry	East Kalimantan Provincial Climate Change Center (DDPI)
Ministry of Marine Affairs and Fisheries	Local Development Planning Agency Berau (BAPPEDA)
Ministry of Public Work (PU)	Forestry Service of Jambi Province
Ministry of Agriculture	Government of Lampung Province
Executive Office of the President of the Republic of Indonesia	East Kalimantan Provincial Climate Change Center (DDPI)
National Park Authority (BBS)	
National Authority for Marine Conservation Areas (MMAF)	

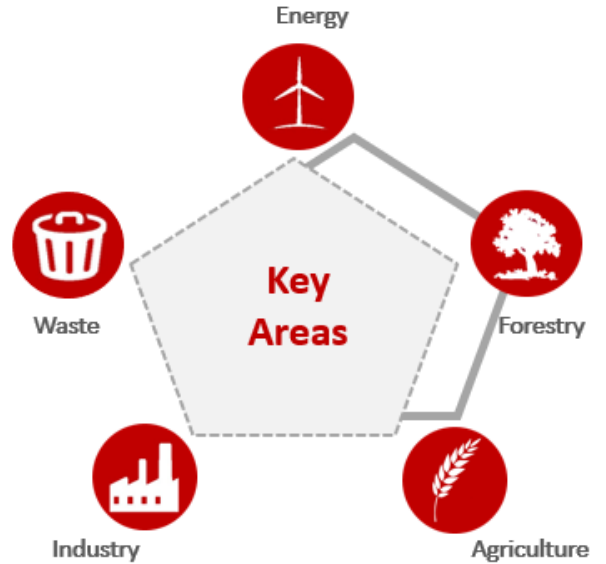
Adelphi
Center for International Forestry Research (CIFOR)
Climate Policy Initiative (CPI)
Conservation International (CI)
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Deutsches Institut für Wirtschaftsforschung e.V. (DIW)
Earth Innovation Institute
Fairventures Worldwide (FVW) gGmbH
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 Centre for Research in Agroforestry (ICRAF)
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 (UN Development)
United Nations Environment Programme (UN Environment)
Wetlands International (WI)
World Bank Group
World Resources Institute (WRI)
World Wide Fund for Nature (WWF)

CLIMATE SITUATION IN INDONESIA

Climate change impacts



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 peatland

40% of Indonesia's total carbon emissions are as a result of conversion of peatland

World Bank estimated that the Peat fire in 2015 resulted in an estimated economic cost of around **\$16 billion**

Deforestation and land-use change drives about 80% of Indonesia's Greenhouse Gas Emissions

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BIODIVERSITY

1st of the 17 Mega-Diverse Countries in the world

2nd of the world's 25 biodiversity hotspots

18 World Wildlife Fund's 'Global 200' ecoregions

24 of Bird Life International's Endemic Bird Areas

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

© GIZ / Ranak Martin

Update from ongoing IKI projects in Indonesia



A mangrove-shrimp farmer in South Sorong, one of the economic activities of mangroves



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Virtual 3.IKI Networking Workshop Indonesia

By GIZ, Strengthening Climate Governance for Implementing the Paris Agreement in Indonesia

On 20 and 21 October, the International Climate Initiative (IKI) interface project Indonesia “Strengthening Climate Governance for Implementing the Paris Agreement in Indonesia” in cooperation with BAPPENAS conducted the 3.IKI Networking Workshop Indonesia. The IKI Networking Workshop Indonesia series provides a platform to facilitate knowledge exchange and cooperation between the International Climate Initiative and the Indonesian government as well as networking between the IKI-funded projects implemented in Indonesia.

The two-day virtual workshop was opened by Dr. Arifin Rudiyanto, Deputy Minister for Maritime and Natural Resources Affairs of the Ministry of National Development Planning (BAPPENAS) and by Mr. Thomas Graf, *Chargé d’Affaires a.i.*, Embassy of the Federal Republic of Germany in Indonesia.



Dr. Arifin Rudiyanto during his opening remarks

Dr. Arifin Rudiyanto acknowledges the strategic role of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) in accelerating the progress of Indonesia’s low carbon development and pointed out that “with only ten years to prevent global warming from exceeding 1.5°C and to achieve the UN Sustainable Development Goals, we recognize that the government cannot work alone and needs to collaborate with multi-stakeholders, including development partners.”

Dr. Philipp Behrens, Head of Division IKI I 6, International Climate Initiative, BMU highlighted the importance of the partner country Indonesia

since it is a mega-biodiverse country, highly vulnerability to the effects of climate change and a mayor emerging economy. He introduced the participants to IKI and its funding mechanisms and informed about the IKI Corona Response Package that provided 29 ongoing projects in 25 countries with an additional funding of 68 million Euro.



Dr. Philipp Behrens presenting the IKI Corona Response Package

This was followed by a talk show at which Ir. Medrilzam, M.Prof.Econ, Ph.D, Director for Environment, BAPPENAS, Yulia Suryanti S.Si, M.Sc., Deputy Director for Monitoring of Climate Change Mitigation, KLHK, Nining Ngudi Purnamaningtyas, S.Hut., M.Si, Head of Sub Directorate Implementation of International Conventions, KLHK and Dr. Ir. Hariyanto M.T, Director for Energy Conservation, ESDM provided first-hand information about the status of low carbon development and biodiversity during the pandemic.



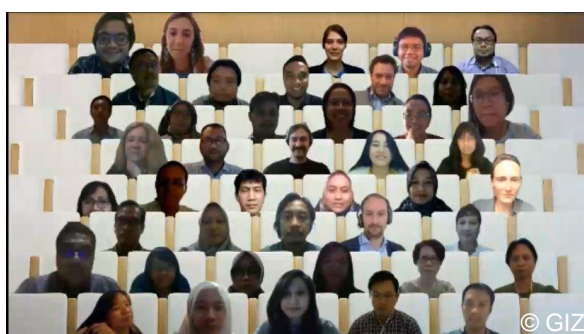
Discussion during the talk show session

During the talk show, Mr. Medrilzam shared insights about Indonesia’s Mid-term National Development Plan (RPJMN) 2020-2024 being the first development plan that includes low carbon development targets such as a GHG emission reduction goal of 27.3% compared to business as usual. He further stated that BAPPENAS recently published a policy brief to inform the public about the impact of the pandemic on low carbon development. Due to financial shifts for



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immediate pandemic response measures, the budget for low carbon development was reduced by 0,7 billion USD compared to 2019. However, it is expected that with the help of major low carbon development projects starting in 2021, implementation will be back to full gear in 2022. Ms. Yulia Suryanti informed about the ongoing development of various national strategies to support the implementation of the country's Nationally Determined Contribution (NDC) like the NDC Roadmap on Mitigation and on Adaptation. The Updated NDC is currently being finalized. A vital question is how sector implementation can be ensured. Ms. Nining Ngudi Purnamaningtyas pointed out that the pandemic requires everyone to rethink and reconnect the need of people to nature and how nature provides services for a clean and healthy environment. Tasked by the RPJMN 2020-2024, the Ministry of Environment and Forestry is working on the verification of 70 million ha of conservation area, engaged in the topic of genetic resources and has a closer look on how benefits can be shared fairly and equally. Mr. Hariyanto announced the development of a presidential regulation that aims to attract investments for renewable energy (RE) installations in Indonesia. So far only 10 GW of the existing 420GW RE potential is used. Lack of funding, higher prices for RE and the need to import technology are still existing challenges.



Group picture of the second workshop day

The second workshop day brought together representatives from IKI projects conducting activities in Indonesia. During a parallel thematic group session, participants could join one of the six break-out groups, namely climate mitigation policy and transparency; climate change adaptation; energy; transport as well as agriculture, forestry and other land use (AFOLU) and biodiversity east and west. Key outcomes of

this session are thematic or sector specific posters that provide an overview about the contribution of the IKI portfolio to Indonesia's climate and biodiversity related targets. Besides, the projects exchanged about Covid-19 related activities as well as requirements to increase future collaboration.

Dissemination of the Governor Regulation on RAD-GRK in South Sulawesi

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

The 'Regional Action Plan for Greenhouse Gas Emission Reduction' (RAD-GRK) review document has been finalised through a collaborative process involving the Province's Development Planning and Research Agency (Bappelitbangda) of South Sulawesi, the Low Carbon Development Indonesia (LCDI) Secretariat at BAPPENAS (formerly RAN-GRK Secretariat) and other partner organisations. The result of the RAD-GRK review document serves as a basis to determine greenhouse gas (GHG) emission reduction targets stipulated by the governor's regulation.

Announcing the issuance of Governor Regulation No. 11/2020 which amends Governor Regulation No. 59/2012 regarding the 'Regional Action Plan for Greenhouse Gas Emission Reductions' of South Sulawesi, the provincial government of South Sulawesi with the support from the Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV-MMI) project, conducted a hybrid-format event on 30 November 2020. The event aimed to disseminate information and motivate stakeholders, primarily the city/ regency level government, to implement the regulation.

The event was opened by the Acting Head of Bappelitbangda, Junaedi B and welcome remarks were delivered by the Regional Secretary of South Sulawesi, Abdul Hayat Gani. The stipulation of the governor's regulation is expected to create synergies among the local government, development partners and private sector at the provincial and city/ regency level to achieve sustainable development for a better



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environment and economy. This dissemination event was part of a workshop on 'LCDI Planning and Monitoring Application' (AKSARA) for 24 city/ regency level stakeholders.



Group photo of the Acting Head of Regional Secretary of Bappelitbangda, representatives of the Province's LCDI Working Group on RAD-GRK and representatives from the city/ regency level BAPPEDA

reporting their mitigation actions and its achievements to AKSARA, so that, GHG mitigation activities can be captured thoroughly. With support from the local governments, the emission reduction targets, as stated in Governor Regulation No. 11/2020, can be achieved.



A hybrid-format workshop on AKSARA for local governments

Enhancing Capacity of City/ Regency Level Stakeholders in Using AKSARA

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

A hybrid format workshop with the Low Carbon Development Indonesia (LCDI) Secretariat/ BAPPENAS, the LCDI Provincial Working Group, representatives of regional government agencies and the regional development planning agency (Bappeda) from 24 city/ regency level governments was conducted on 1–3 December 2020. It was followed by the symbolic commitment signing among 24 city/ regency level governments with the governor to implement Low Carbon Development Indonesia (LCDI) in the South Sulawesi Province. This will be realised through greenhouse gas (GHG) mitigation programs and activities to achieve the provincial emission reduction target of 300,000 tCO₂eq per year. The workshop aimed to enhance stakeholders' capacity in using AKSARA, an online LCDI monitoring and planning platform.

The Regional Development Planning, Research and Development Agency (Bappelitbangda) of South Sulawesi Province, with support from GIZ through the *Project Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV-MMI)* initiated collaboration with local governments that signed the commitment to LCDI implementation. This cooperation is expected to encourage local stakeholders in

Workshop on AKSARA for Technical Ministries/ Agencies

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

Low Carbon Development Indonesia (LCDI) is part of the Medium-Term Development Planning Target (RPJMN) 2020-2024. Therefore, LCDI implementation should be monitored and evaluated. As mandated by the Government Regulation No. 39/2006 on procedures for controlling and evaluating the implementation of development plans, Ministry of National Development Planning (BAPPENAS) is responsible to monitor and evaluate the achievement of the development target in the RPJMN, including emission reductions and emission intensity targets. Programs or activities under the 'national priority 6.3' are monitored and evaluated by using AKSARA, an online LCDI monitoring and planning platform. Therefore, technical ministries/ agencies that touch on climate change-related issues are urged to report in AKSARA.

To encourage ministries/ agencies to use the AKSARA platform, the BMU-funded MRV-MMI project supported BAPPENAS in conducting workshops on 7–8 December 2020. In this workshop, AKSARA, as a means to report the emission reduction achievements, was introduced. Methodologies for calculating



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potential emission reductions embedded in AKSARA were explained. The workshop was carried out to ensure that monitoring and reporting mechanisms for national emission reductions are properly disseminated and to receive feedback related to reporting mechanisms in AKSARA from the relevant ministries/ agencies.



Presentation on the AKSARA tool to relevant ministries/ agencies

Build Back Better with Low Carbon Development

By GIZ, Monitoring, Reporting and Verification for Mitigation Measures in Indonesia (MRV-MMI) and Green Economy Transformation (GET)

In response to the impact of the Covid-19 pandemic by considering the medium- and long-term benefits to national development, the Ministry of National Development Planning (BAPPENAS) carries out the so-called 'Build Back Better with Low Carbon Development' initiative to balance social, economic and environmental aspects in the economic recovery packages. A series of activities have been carried out to strengthen the foundation of the initiative. Currently, communication and coordination with the public and various stakeholders should expand and enrich the perspective, as part of the efforts to rebuild a better, more resilient and sustainable Indonesia.

Together with BAPPENAS and the Ministry of Finance, the MRV-MMI and the global GET project organised the webinar 'Build Back Better: Building a Greener and Resilient Indonesia for the Covid-19 Recovery with Low Carbon Development' on 14 December 2020. In this event, experts on economics and green economy-based development as well as stakeholders from the government presented

and discussed the strategy to support green development after the pandemic to ensure economic recovery.



Webinar on 'Build Back Better: Building a Greener and Resilient Indonesia for the Covid-19 Recovery' with Low Carbon Development

Public Consultation for Developing Mitigation Actions and Policy Recommendations for the Palm Oil Sector

By WWF Indonesia, Establish Sustainable Consumption and Production—a South-South Transfer (SCP South-South)

WWF Indonesia developed a draft report on mitigation actions and policy recommendations for the palm oil sector to meet Indonesia's Nationally Determined Contributions (NDC) target in reducing carbon emissions. Through meetings and discussions with key stakeholders, namely the Ministry of Environment and Forestry (KLHK), the Ministry of Agriculture, universities, private companies and certification bodies, some input was incorporated into the draft report.

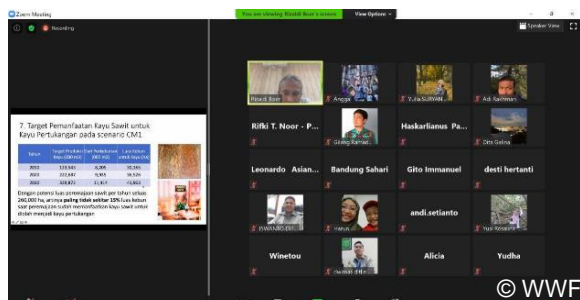
The Indonesian government has declared in its NDC to reduce GHG emissions by 29% from the baseline in 2030 and up to 41% with international financial support. Forestry/ peatland and energy are the two sectors that will contribute up to 90% to meet the emission reduction target. It is believed that the palm oil sector is the dominant source for GHG emissions from estate plantations as the growth rate of palm oil



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plantations is the highest compared to other plantation commodities.

The largest share of emissions from palm oil plantations comes from peat decomposition and the loss of above-ground biomass during the conversion, particularly from the conversion of forest lands, cropland and grassland. In the period from 2001 to 2016, the total grassland converted to agricultural plantations reached 1,857,591 ha (116,099 ha per year), while that of forest land was about 1,591,453 ha (99,466 ha per year).



Public consultation virtual with key stakeholders (September 2020)

Despite various laws and regulations to reduce GHG emissions from the palm oil sector, private companies and smallholders are mostly doing business as usual. Therefore, the report has proposed the following measures to reduce GHG emissions from palm oil plantations and thus achieve the NDC target: 1) conserve natural forests with concessions and avoid deforestation; 2) peat management through improved water management systems; 3) land rehabilitation outside of the concession areas; 4) crop management through: (i) increasing oil palm productivity by supporting smallholders with certified seeds; and (ii) increasing the efficiency on the use of nitrogen fertiliser by using coated nitrogen; and 5) other mitigation options including: (i) the integration of livestock and food crops on the plantations; (ii) substitution of fuel diesel with biodiesel for transportation; and (iii) waste management by using the solid or liquid waste of palm oil for energy production and as organic fertiliser, which may also reduce electricity consumption (indirect emissions) and nitrogen fertiliser application.

The report aims to guide the private sector, particularly palm oil companies, to contribute to

the NDC emission reduction target and comply with existing national laws and regulations.

One Infrastructure Financing Company Joins IKBI

By WWF Indonesia, Indonesia Sustainable Finance Initiative (IKBI)

On 21 October 2019, the Indonesia Sustainable Financial Initiative (IKBI), officially welcomed the entry of a non-bank financial institution, PT Sarana Multi Infrastruktur (PT SMI). IKBI is now supported by an infrastructure financing company, a non-profit conservation organisation and 14 banks, representing 62% of the national banking assets.

IKBI is expected to be the catalyst for financial institutions in the country to integrate environmental, social and governance (ESG) aspects into their business strategies. Its members can utilise the platform to increase their capacity and knowledge related to ESG aspects, expand business opportunities by creating new and innovative sustainable finance solutions and facilitating dialogue with stakeholders such as regulators, investors and relevant companies.

PT SMI is one of the Special Mission Vehicles (SMV) under the Ministry of Finance, engaged in financing and preparing infrastructure projects. This state-owned company aims to support the achievement of the Sustainable Development Goals (SDGs), efforts to respond to climate change (adaptation and mitigation) and the optimisation of social and economic benefits. It has experiences in financing projects supporting sustainability, including energy efficiency and renewable energy projects. As IKBI supports the exchange of knowledge among relevant stakeholders, PT SMI is expected to share positive lessons learned on sustainable finance. Hence, it could lead to more implementation of sustainable finance in Indonesia.



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Developing Impactful Green Financing Products

By WWF Indonesia, Indonesia Sustainable Finance Initiative (IKBI)

On 12 October 2020, PT Bank CIMB Niaga Tbk (CIMB Niaga) and WWF Indonesia held a webinar, entitled 'Developing Impactful Green Finance Products'. This webinar was part of the 'Cooler Earth Sustainability Summit 2020' which focused on implementing sustainable finance in Indonesia. It explored the financing models that are already available in Indonesia. PT Sarana Multi Infrastruktur (PT SMI), the Tropical Landscape Finance Facility (TLFF) Indonesia, along with WWF Indonesia and Sustainalytics, shared their experiences on how to develop a meaningful green financial product and discuss what the eligibility criteria are in order to tap certain funding instruments that will help to create more significant impacts.



CIMB Cooler Earth Sustainability Summit 2020: Developing Impactful Green Finance Products (12 October 2020)

The businesses that the financial institutions are financing are exposed to various environment, social and governance (ESG) related risks. Ms Rizkiasari Yudawinata, a representative from WWF Indonesia, shared the importance in developing a financial product that integrates the ESG aspects and positively impact the environment and society. Currently, financial regulators are planning to put measures in place to foster the development of green financial products. In addition, there is a gap between the green finance supply and its demand. Roughly only 20% of current annual demand can be met with the current annual supply, which creates huge opportunities for the financial institutions. She also shared the lessons learned from the business case 'Bankable Nature Solutions' (BNS).

Furthermore, TLFF and PT SMI also shared their experiences in providing green finance products. Meanwhile, Sustainalytics explored steps to develop a standard for impact reporting, which is essential for green finance products.

Launching a Course on 'Driving Renewable Energy Development via Sustainable Finance'

By WWF Indonesia, Indonesia Sustainable Finance Initiative (IKBI)

For the last ten years, Agriculture, Forestry and Other Land Use (AFOLU) and the energy sector are the highest contributors to Indonesia's greenhouse gas (GHG) emissions. Referring to Government Regulation No. 79/2014 on the National Energy Policy, the Government of Indonesian has set a target of 23% renewables in the national primary energy mix by 2025. Nonetheless, since 2011, the percentage of renewable energy power generation has stagnated between 11–13% (BP Statistical Review in Our World in Data, n.d.). One of the reasons is the limited funding for renewable energy development. Therefore, the Indonesia Sustainable Finance Initiative (IKBI), WWF Indonesia and HSBC Indonesia, with the support of the International Climate Initiative (IKI) organised a virtual finance course on: 'Energy Transition and Renewable Energy Investment'. The objective was to give financial institutions a better understanding of the renewable energy sector and their responsibility to contribute to the government's national energy mix target.

Speakers were experts in energy transition, renewable energy and/ or sustainable finance, including representatives from the regulators, financial institutions, developers, non-profit organisations and academics. Some agencies presenting were: the Ministry of Energy and Mineral Resources (ESDM), the State Electricity Company (PLN), the Financial Services Authority (OJK), the Fiscal Policy Agency of the Ministry of Finance, PT Sarana Multi Infrastruktur, Tropical Land Financing Facility, HSBC, Bank Negara Indonesia, WWF Indonesia, CSF Indonesia, Bogor Agricultural University and the University of Indonesia. The course was divided into five



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sessions spread throughout December 2020. Various topics were discussed, starting from the urgency of energy transition, renewable energy policies in Indonesia, renewable technologies (namely hydro, solar, wind and geothermal), the ESG safeguards to ensure the sustainability of the projects, challenges and opportunities and business cases (including lessons learned) from current renewable energy financing, both in Indonesia and across regions.



Sustainable Finance Course Cohort 1: Energy Transition and Renewable Energy Investments (4–15 December 2020)

35 participants were selected from hundreds of applicants from various financial institutions and relevant regulators. This event is expected to be held regularly as an educational platform/ tool to facilitate sustainable finance issues in Indonesia. The next course is planned to cover the AFOLU/ land-based sector and is planned for the end of 2021.

Sustainable Banking Assessment 2020: Indonesia’s Achievement

By WWF Indonesia, Indonesia Sustainable Finance Initiative (IKBI)

WWF released its fourth Sustainable Banking Assessment report of banks’ environmental, social and governance (ESG) integration performance in eight Asian countries (two countries were added this year). The assessment focuses on the six aspects purpose, policies, process, people, products and portfolio. Based on the report, Indonesian banks have made a progress of 34% in their overall ESG integration, mostly on the topics of purpose, policy and people.

Since 2019, Financial Services Authority (OJK) Regulation No. 51/2017 on Sustainable Finance Implementation has mandated financial institutions of the BUKU III and IV categories, to disclose their ESG integration annually. This puts Indonesia in second place when it comes to sustainable finance implementation in ASEAN. The report found that Indonesian banks excel in integrating ESG aspects in the banks’ business strategies, developing sector-specific policies as well as being active in internal capacity development, especially regarding topics related to sustainable finance. Six out of eight Indonesian banks assessed require their clients to provide the Indonesia Sustainable Palm Oil (ISPO) certification and two of them have also required the Roundtable on Sustainable Palm Oil (RSPO) certification. Besides, one bank has put in place a measurement for ESG risks and has set a strategy in managing climate-related risks at the portfolio level. Furthermore, one Indonesian bank is among the top ten banks in ASEAN by achieving 40 out of 70 criteria.

From now on, it is important for Indonesian banks to maintain their progress. Referring to the Global Risk Report 2020, extreme weather events and climate action failure will result in severe impacts. Indonesia is one of the countries that is exposed to climate change risks. Therefore, there is an urgency for banks to improve their sustainable finance practice and develop a better and more resilient business strategy to face such risks.

Synergies in the Development of the BRT System Amidst COVID-19 Pandemic

By GIZ, Financing Energy for Low-carbon Investment—Cities Advisory Facility (FELICITY)

FELICITY continues efforts in setting up project preparation support for low carbon urban infrastructure projects in Indonesian cities. In July 2020, BRT projects in Batam City and the Makassar Metropolitan (or Mamminasata) were selected and approved by the Ministry of National Development Planning (BAPPENAS and



Climate Policy

the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).



The planned BRT Corridor in Makassar Metropolitan

To ensure the BRT system development in both cities aligns with the international BRT standard (www.brtstandard.org) and international financial institution's bankability requirements, a cooperation between the GIZ projects—FELICITY and SUTRI NAMA & INDOBUS—was established.

FELICITY prepares the project to meet the European Investment Bank's (EIB) financing requirements, whereas SUTRI NAMA & INDOBUS focuses on the technical concept and design with its vast network and expertise in Indonesian sustainable transport.

After the projects were selected, FELICITY and its consultant from the GFA Consulting Group, worked together with the Project Promoters (PPs)—the government of Batam City and the South Sulawesi Province—to conduct a gap analysis and a rapid capacity needs assessment.

A series of virtual meetings with PPs were organised between August and November 2020 to gather data and information needed. The following categories were assessed: 1) governance; 2) technical aspects; 3) economic analysis; 4) financial model; 5) legal and tendering aspects; 6) environmental and social issues; and 7) climate impacts.

Further project preparation support includes the development of comprehensive feasibility studies, accompanied by intensive organisational development support and tailor-made thematic training. The joint support of FELICITY and SUTRI NAMA & INDOBUS is currently planned until December 2021.



Virtual Meeting with South Sulawesi Province



Sustainable Transport

Opening Job Markets and Increasing the Capacity of Urban Bus Drivers in Indonesian Cities

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

The Ministry of Transportation (MoT) has implemented the ‘Buy the Service’ (BTS) programme to support the implementation of bus-based urban mass public transport through financial support (operational subsidy) and technical assistance. To support the implementation of the BTS programme, MoT requested consultants, cities and the provincial governments to prepare further information for the dissemination of BTS to the public. Further, they seek insights into any other necessary supporting policies as well as technical assistance. On that note, SUTRI NAMA & INDOBUS support in the preparation of regulatory frameworks of the BTS, providing the proposed route based on the BRT feasibility study in Bandung and Makassar and through a series of training programmes on safety and eco-driving.

Through close collaboration with the MoT, SUTRI NAMA & INDOBUS conducted a series of training programmes entitled ‘Capacity Development on Safety and Eco Driving of Urban Bus Services’. The programme, which used a mixed method of online and offline learning, started with an online assessment to understand the participants’ competency baseline. The offline session of the programme used a state-of-the-art bus simulator as well as defensive and eco-driving on-road sessions. Lastly, the participants underwent a comprehensive post-assessment to certify their qualifications based on the nationally approved Level III standard of the Indonesian National Qualifications Framework (*Kerangka Kualifikasi Nasional Indonesia*—KKNi) for Urban Bus Mass Driver certificates.

The programme was successfully conducted on 21–26 September 2020 in Yogyakarta, 14–19 December 2020 in Denpasar and 5–10 January 2021 in Palembang. With a total of 192 participants in Yogyakarta and Denpasar, 188 qualified for the Level III KKNi—Urban Bus Mass

Driver certificates, which provides them with enhanced competency within the BTS programme. The 100 participants in Palembang are currently awaiting their post-assessment review to earn their certification.



A training participant utilising a state-of-the-art bus simulator to enhance safety and eco driving

Improving Bankability of Road-based Urban Transport Project

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

The List of Medium-Term Planned Foreign Loans and Grants (also known as the *Blue Book*) published by the Ministry of National Development Planning (BAPPENAS) 2020–2024 has reflected SUTRI NAMA & INDOBUS’s support to the Ministry of Transportation (MoT) in the implementation of public transport projects and the management of transport demands by leveraging both public and private sector financing. The *Blue Book*, launched in October 2020 by BAPPENAS, includes the project on ‘Public Transportation Systems for Urban Mass Transportation Development Programmes’ with an overall cost estimation of USD 500 million and based on SUTRI NAMA’s & INDOBUS’s deliverables and recommendations.

In the continuous support to MOT, SUTRI NAMA & INDOBUS participated in discussions with the Planning Bureau and the Directorate of Land Transportation of MOT, BAPPENAS and the World Bank refining the ‘Road-based Urban Transport Project’ on 23 November 2020 at Santika Hotel, Belitung. The discussion aimed to



Sustainable Transport

confirm the *Blue Book* for the 'Road-based Urban Transport Project' and identify the necessary steps to advance the list to the List of Planned Priority Foreign Loans published in the *Green Book*.



SUTRI NAMA & INDOBUS, MoT, BAPPENAS and the World Bank are discussing the Blue Book in Belitung

The *Blue Book* initially targeted six metropolitan areas for the 'Urban Transport Project' indicated in the National Medium Term Development Plan (RPJMN) 2020-2024. Bandung and Medan, which are included in metropolitan areas' original list, are prioritised for the *Green Book* in 2021. Based on the feasibility studies that were conducted in 2020, SUTRI NAMA & INDOBUS will provide inputs for the negotiations to include them in the *Green Book* which will take place in Bandung from February 2021 onwards.

On that note, SUTRI NAMA & INDOBUS had further discussions with the World Bank along with other donors and implementers, including AfD, KfW, ADB, IsDB, AIIB) on the preparations of the *Green Book* for the Bandung metropolitan BRT development. The World Bank has committed to a loan of USD 500 million with a possible top-up from other donors and is interested in financing and increasing the loan portion for the development of the BRT corridors in the city of Bandung. The agreed timeline for the *Green Book* preparations is the following: A project steering team and management unit will be formed in February 2021; the *Green Book* will be submitted in April 2021 and the approval for the loan is expected for March 2022. The other four targeted metropolitan cities, including Semarang and Makassar, will complete the feasibility studies (FS) of INDOBUS.

Reaffirming the Commitment for BRT Development in the City of Pekanbaru

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

The progress of the feasibility study (FS) on the development of the Bus Rapid Transit (BRT) in Pekanbaru which was conducted by SUTRI NAMA & INDOBUS, was presented to the Ministry of Transportation (MoT), local transport agencies, to the city and provincial governments on 1 December 2020. The discussions included an update on the progress made and clarified on the concept design of the BRT as well as institutional and financial aspects.

Based on the FS findings, the offline and virtual participants provided valuable inputs for BRT development. At the end of the discussion, the relevant stakeholders made agreements on the BRT concept design and institutional aspects, such as the distribution of duties and responsibilities for the BRT development and construction.

Following that discussion, SUTRI NAMA & INDOBUS held a meeting with the Mayor of Pekanbaru, H. Firdaus. Firdaus shared his plans for the future of Pekanbaru City, namely the economic development, which is driven by various activities.



The Mayor of Pekanbaru is sharing his urban development plans to the SUTRI NAMA & INDOBUS project team



Sustainable Transport

As one of the pilot cities of SUTRI NAMA & INDOBUS, the Mayor of Pekanbaru emphasised that Pekanbaru is in dire need of a fast and reliable mass public transport mode. He conveyed that various types of mass transit modes will be part of public facilities that can be used by its residents in the future. Therefore, efforts should begin at the soonest, starting with the realisation of the BRT system based on the result of the FS. He also reaffirmed the commitment of the Government of Pekanbaru regarding the BRT development as indicated in existing planning documents (RPJMN and the Regional Spatial Plan, RTRW).



The SUTRI NAMA & INDOBUS project team with the Mayor of Pekanbaru and city officials

Establishment of a Task Force for BRT Development in the Bandung Metropolitan

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

On 26 November 2020, SUTRI NAMA & INDOBUS conducted a Focus Group Discussion (FGD) with the Ministry of Transportation (MoT), local transport agencies and the city and provincial governments of Bandung to present the progress of the Feasibility Study (FS) on the development of the Bus Rapid Transit (BRT) in the Bandung metropolitan area. The discussions also allowed clarifications on the concept design as well as institutional and financial aspects of the BRT. Based on the Feasibility Study (FS) findings, participants from the venue as well as those who attended virtually provided valuable inputs for the BRT development.

In addition, SUTRI NAMA & INDOBUS, as part of MoT's Buy the Service (BTS) programme, support the Bandung metropolitan area in the implementation of bus-based urban mass public transport via financial and technical assistance, especially on the FS which gives indications regarding the route selection. Also, SUTRI NAMA & INDOBUS will support the coordination with the West Java Transport Agency (Dishub) and MOT to synchronise and harmonise the proposed BTS routes.

On 15 December 2020, SUTRI NAMA & INDOBUS conducted a follow-up meeting with the nominated task force of Bandung to further discuss and agree on pending issues of the first FGD. Topics discussed were route selection, institutional arrangements and financial analysis. The discussion resulted in agreements on the route selection, institutional arrangements, the financial model and a concrete action plan and timeline for the BRT development in the Bandung metropolitan area.

On December 2020, to successfully implement both the BRT and BTS programmes, the Governor of West Java established a task force for the Bandung metropolitan area. The main duty of this task force is to provide guidance and assistance on the preparation and planning related to the realisation of the BRT in Bandung Raya as well to manage the coordination between agencies at the provincial and city level. The nominated task force consists of the city and provincial agencies related to transportation, namely public works and city planning.



Renewable Energy/Energy Efficiency

The Importance of Multilevel Governance and Cross-Sectoral Collaboration for the Transition to 100% Renewable Energy

By ICLEI—Local Governments for Sustainability Indonesia, 100% Renewables Cities and Regions Roadmap Project (100% RE)

ICLEI—Local Governments for Sustainability Indonesia convened a Multi-Level Governance (MLG) Dialogue on 4 November 2020. The virtual event highlighted the importance of horizontal and vertical integration in developing a renewable energy roadmap for West Nusa Tenggara. Around 60 participants from local (city/ regency), provincial, national and international levels joined the discussion.

The exchange allowed the National Energy Council to encourage West Nusa Tenggara to implement their Regional Energy Plan (RUED-P) and accelerate the sustainable energy transition. They stressed the urgency to act. The Indonesian government targets a renewable energy share of at least 23% in the total energy mix by 2025, where West Nusa Tenggara only had a renewable energy share of less than 10% in their mix. Establishing regional commitments are critical as they support the achievement of national goals and raise the ambition levels related to renewable energy deployment in the country. Localising climate action can support national governments to identify overlooked potentials and, in this case, also support energy infrastructure development at the subnational level.

The RUED-P document is interrelated with other regional plans such as the Long-, Mid- and Annual Regional Development Plans, the Spatial Planning Document (RTRW) and the Regional Electricity Plan (RUKD). Thus, energy supply and generation are the responsibility of the Ministry of Energy and Mineral Resources (ESDM) and other departments and sectors, such as the Ministry of National Development Planning (BAPPENAS) and the community. For instance, the deployment of biomass energy in West Nusa Tenggara requires the collaboration between ESDM, BAPPENAS, the Ministry for

Environment and Forestry (KLHK), the Ministry of Industry, the Ministry of Trade and the Ministry of Agriculture. Moreover, close cooperation between utilities and relevant decision-makers is crucial in enabling the renewable energy transition. These multi-stakeholder partnerships can promote project ownership and sustainability.

The importance of the local government’s roles for the energy transition was also raised during the discussion. Although the regulatory mandates for RUED-P are limited to the provincial authorities, city/ regency governments can help implement the plan according to Law No. 23/2014. Moving towards a renewable energy future, the involvement of local governments in this process is necessary to understand the local context and the needs of the communities. Furthermore, local governments are the consumers, planners, regulators, awareness-builders and operators of the energy systems.



The energy sector has been listed as one out of 32 concurrent government affairs. Therefore, both regional and local governments have their authority related to renewable energy and energy efficiency projects

Additionally, since local governments have an active role in providing and mobilising project funds, the dialogue also addressed the role of multinational institutions to support the access to capital. Many multinational institutions offer technical assistance to bring cities and potential funders together. The Cities Development Initiative for Asia (CDIA), for example, supports the identification and development of urban investment projects focusing on climate change mitigation and/ or adaptation, environmental improvement, poverty reduction and improved governance.



Renewable Energy/Energy Efficiency

In the end, accelerating the transition towards renewable energy requires collaborative actions from ESDM and stakeholders from different sectors and levels. To understand the contributions and opportunities that can be made by the other agencies at various levels will make the renewable energy strategy a success.

Mini-Web Seminar on Biomethane Development in Indonesia

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

On 3 November 2020, the project *Strategic Exploration of Economic Mitigation Potentials through Renewables* (ExploRE) had the opportunity to participate in the mini-web seminar on 'Biomethane Development in Indonesia and the European Union: Opportunities, Challenges and Lessons-Learned in Its Use as Bio-CNG'. The webinar was held by the Resilience Development Initiative (RDI), an Indonesian think tank under the Digital Global Biogas Cooperation (DiBiCoo).

The first speaker was Dr Johannes Anhorn, DiBiCoo's Project Lead Coordinator, from the GIZ Regional Office South, Munich/ Feldafing. He raised the topic of supporting the biogas sector in Indonesia through regional collaborations. During his presentation, he promoted an innovative digital platform developed by DiBiCoo to enable networking, information exchange, promotion and advisory. The platform acts as a business (B2B) matchmaking tool and a database, which allows biogas/ biomethane stakeholders to find relevant business partners from across the world. Users can also sign up for training courses, workshops and seminars. The platform can be found [here](#).



Speakers and moderator of the Mini-Web Seminar

Poster of the mini-webinar RDI x DiBiCoo

The mini-webinar took place with three outstanding speakers and was led by Dr Niken Prilandita as moderator and representative of RDI.

Trois Dilisusendi, Head of Bioenergy Program Preparation, Subdivision of the Directorate General of New, Renewable Energy and Energy Conservation (DGNREEC), Ministry of Energy and Mineral Resources Indonesia (ESDM), representing the government of Indonesia, brought up the topic of the biogas and bio-compressed natural gas (bio-CNG) regulatory framework in Indonesia. He elaborated the national target of bioenergy in Indonesia, which is 5.5 GW by 2025. However, currently, only about 1.84 GW of bioenergy is generated. He also encouraged the utilisation of biogas and bio-CNG, being part of the bioenergy development strategy to support national energy security, reduce the consumption of imported liquefied petroleum gas (LPG), accelerate energy access provisions for isolated and underdeveloped areas as well as save foreign exchange and support domestic economic growth. Apart from that, he also addressed the challenges, issues and opportunities that the bioenergy sector faces



Renewable Energy/Energy Efficiency

from upstream to downstream. Lastly, he explained several proposed efforts and follow-up actions for bio-CNG development, such as the allocation of LPG subsidies for bio-CNG development, promoting and implementing bio-CNG development for replacing diesel power plants and supporting regulations and technical standards.

Windri Aji Brata, Advisor of ExploRE (GIZ) presented opportunities and challenges of biomethane production from Palm Oil Mills Effluent (POME) in Indonesia. After providing an overview of ExploRE and its activities, he emphasised that only approximately 10% of the technical biogas potential in Indonesia has been utilised. Based on the study findings, with the assumption of a POM minimum capacity of 60 ton per hour, all biomethane generated can be fully utilised and can compete with other fuels such as diesel, LPG and gasoline. However, it is very dependent on the business model and market conditions. He also elaborated the opportunities and challenges of biomethane utilisation for the gas grid, as vehicle fuel, diesel and LPG replacement.

To sum up, ESDM on behalf of the Government of Indonesia is open and encourages all stakeholders to give recommendations on bio-CNG regulation and take part to develop a bio-CNG implementation. Cooperation and collaboration among all stakeholders, including government, private sector, communities, development agencies, research institutions and other related stakeholders are needed to support and realise the implementation of bio-CNG in Indonesia.

Further information and the webinar recording can be available [here](#).

Coordination and Updating the Database of Bioenergy Potential with DGNREEC

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

On 16 November 2020, the Directorate of Bioenergy held a discussion on coordinating and updating the Bioenergy Potential Database. The objective of this discussion was to coordinate the synchronisation of ExploRE's study on the database for Bioenergy Potential from agro-industrial waste with applications of the Directorate General, such as Renewable Energy Data and Information (REDI), Ministry's of Energy and Mineral Resources (ESDM) One Map and ESDM's Data Enterprise. Further, the database dashboard was updated with new features on bioenergy. The Secretariat of the Directorate General (Sesditjen), Centre of Data and Information ESDM (Pusdatin), which oversees the applications mentioned above also participated in this discussion.



Discussion on the coordination and updating the database for Tangerang 2020

This discussion is based on a study of bioenergy potential conducted by ESDM back in 2013, followed-up by ExploRE Indonesia in 2018 with the database for bioenergy potential from agro-industrial waste. The study focused on agroindustry mill capacity data, technology conversion assumptions and the demand for energy by the mill. This study identifies a technical bioenergy potential of 15.6 GW from six agroindustries, which are palm oil, wood, rice, tapioca, sugar and pulp & paper. The highest contribution comes from the pulp & paper industry with 7.5 GW, followed by the

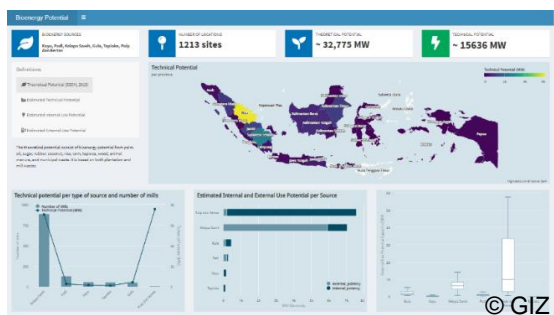


Renewable Energy/Energy Efficiency

palm oil industry with a bioenergy potential of 7.0 GW.

The information in the database will support the three key strategies for bioenergy development, which are: 1) to encourage the increase of bioenergy powerplant capacity; 2) to optimise the use of biomass; and 3) to produce biofuel. The database for bioenergy potential will be one of the tools for government planning and attempts to be as realistic as possible. The potential will be further discussed in the ExploRE study called 'Strategic Options of Bioenergy Development', which is currently developed and discussed together with the Directorate for Bioenergy as well as other related stakeholders.

The results of the database for bioenergy potential from agro-industrial waste will be transferred to applications of the Directorate General of New, Renewable Energy and Energy Conservation (EBTKE), which are REDI and ESDM One Map by the Directorate of Bioenergy. For further updating mechanisms, ExploRE Indonesia will provide a database structure compatible with REDI and ESDM One Map data structure. Further, they will conduct trainings on how to update the data and convert the data file format to be compatible with the REDI and ESDM One Map infrastructure.



The temporary bioenergy potential database dashboard

ExploRE provided a temporary dashboard for the bioenergy potential from agro-industrial waste database, consisting of several features such as an info-box, dynamic charts, tables and interactive maps of bioenergy potentials. The temporary dashboard can be accessed through this [link](#).

Disseminating Bioenergy Knowledge via the Bioenergy Goes to Campus Campaign

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

On 19 November 2020, 198 students and participants joined the 'Bioenergy Goes to Campus' event at the University of 17 Agustus 1945 (UNTAG) in Banyuwangi, East Java. Due to the Covid-19 pandemic, this event was held in a hybrid mode, namely online and on-site. The event was held in cooperation between the Directorate of Bioenergy of Directorate General of New, Renewable Energy and Energy Conservation (DGNREEC), the Faculty of Agriculture and Fisheries of UNTAG and GIZ. During the talk show, students were given the opportunity to listen to speakers from DGNREEC, UNTAG, GIZ, the Bioenergy the Electricity Producer Association (APLIBI), Yayasan Rumah Energi (YRE), the Biofuel Producer Association (APROBI), the Agency for the Assessment and Application of Technology (BPPT) and Toyota.



Opening speech of the event 'Bioenergy Goes to Campus' from the Director of Bioenergy

During her opening remarks Andriah Feby Misna S.T, M.T, Director of Bioenergy, explained the challenges and opportunities of bioenergy development, bioenergy programs managed by the Directorate of Bioenergy, current bioenergy achievements and potential future trends of bioenergy. She closed the opening remarks by stating the urgency of including academic stakeholders in terms of research and development of bioenergy as well as human resource development, underlining the role of students as agents of change for better bioenergy implementation in Indonesia.



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Furthermore, Elis Heviati S.T, the Head of Sub Directorate in Bioenergy Investment and Partnership, Directorate of Bioenergy of DGNREEC explained about policies and developments of bioenergy in Indonesia. Currently, more than 90% of Indonesia's energy consumption is coming from fossil fuels. However, fossil fuel resources continue to decline. Indonesia has renewable energy (RE) potential of 417 GW; however, the current installed capacity is still only 10 GW or 2.4%. RE development has become a national energy development priority. The Directorate of Bioenergy made the bioenergy development a strategic priority. It promotes activities that substitute the use of fossil fuel with bioenergy, such as converting diesel powerplants into bioenergy powerplants as well as LPG substitution with bio-CNG. She closed her presentation emphasizing that the government is trying to connect the three principles of higher education (*Tri Dharma Perguruan Tinggi*) with the RE sector and she hopes that university's research will be able to match with industrial needs in particular in the RE sector.

GIZ also had the opportunity to present at this routine event. Dody Setiawan, advisor of the ExploRE project, explained the bioenergy potential from agro-industrial waste. He stated that Indonesia's agroindustry would continue to grow in upcoming years due to the increase of domestic and international demand towards Indonesia's agroindustry products such as palm oil, sugar, rice, tapioca, wood and pulp & paper. Therefore the bioenergy potential will increased as well. It is expected that waste from agroindustry are utilised for internal use (heat and electricity), which is also in line with the latest data of ESDM showing that around 90% of bioenergy powerplants are utilised for off-grid utilisations. One attractive option for bioenergy utilisation is the production of biomethane, which could reduce energy imports, including LPG and diesel. Currently, ExploRE Indonesia is conducting a study on biomethane production from rice and corn waste. He closed his presentation by emphasizing that bioenergy implementation will contribute positively to energy security,

creating jobs and boosting economic productivity in remote areas.



Presentation by Dody Setiawan, GIZ Advisor

After the presentation of all speakers, the event continued with discussion rounds. Given the number of online and on-site questions, the pandemic did not reduce the enthusiasm and curiosity of the students. This event aimed to increase the students' knowledge on bioenergy and encourage them to participate in the development of bioenergy being part of the green recovery program.

Focus Group Discussion on Agro-Industrial Waste Management and Utilisations in Berau Regency

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

The Berau Regency government, in particular the Plantation Agency, is being supported by the *Low-Emission Oil Palm Development (LEOPALD)* project to prepare sustainable plantation planning documents. One important aspects to include in plantation planning is waste management from agro-industrial waste.

As ExploRE's activities are corresponding with waste to energy utilisation from agro-industrial waste, both projects collaborated to develop a study on agro-industrial waste management and utilisations in Berau Regency to provide recommendations for sustainable plantation planning documents.



Renewable Energy/Energy Efficiency

On 16 December 2020, the result was presented via a virtual focus group discussion (FGD), facilitated by the Berau Regency Sustainable Plantation Communication Forum. This FGD aimed to present the result of the study and to gather feedback from all key stakeholders. 36 participants from central, regional and local governments, palm oil companies as well as from private sector, the state-owned electricity company PLN and local NGOs joined the FGD.



Poster of the Focus Group Discussion

The event was moderated by Iwied Wahyulianto, advisor from LEOPALD and started by the opening speech from the Head of the Plantation Agency Berau Regency, Sumaryono.

Following that, Trois Dilisusendi, the Head of Bioenergy Program Preparation Subdivision of the Directorate General of New, Renewable Energy and Energy Conservation (DGNREEC), Ministry of Energy and Mineral Resources Indonesia (ESDM) provided a short presentation regarding the regulation of palm oil industry waste utilisation. He presented the government’s strategies for bioenergy development from palm oil, such as biodiesel, bioenergy power plants from palm oil waste development, biomass palette and bio-CNG utilisation. He emphasised that palm oil through its product and by-product could contribute to energy security. He also mentioned that good cooperation among all stakeholders is essential to achieve energy

independence, security and sustainable development.

Afterwards, Yudha Hartanto, a GIZ consultant, presented the study findings based on primary data from seven palm oil mills in Berau that were willing to provide the data. He explained about the existing treatment and utilisation of palm oil waste based on its products: empty fruit bunches, shells, fiber and palm oil mill effluents. He also explained the economic and social impacts for the palm oil production. Lastly, he gave recommendations of further utilisation based on proven technologies and business models. He emphasised that the current waste treatment and utilisation is not fully realised. However, there is a big potential to implement waste to energy measures that could be beneficial for palm oil companies, the government as well as the broader society.



Participants of the Focus Group Discussion

The FGD event lasted for around three hours and all key stakeholders provided suggestions and feedback. After three discussion sessions, Sumaryono delivered his closing remarks to end the FGD. He emphasised that the potential utilisation must follow the environmental quality standards and that the focus needs to be on environmental issues as well.

Several points were concluded from this FGD, namely that there is a need to increase awareness of all agro-industrial companies in terms of waste treatment and possible utilisation; regulations on buying and selling waste, quality standards, governance and price are essential to support the implementation of waste to energy utilisation; and lastly as waste management is a cross-sectoral topic, coordination between stakeholders.



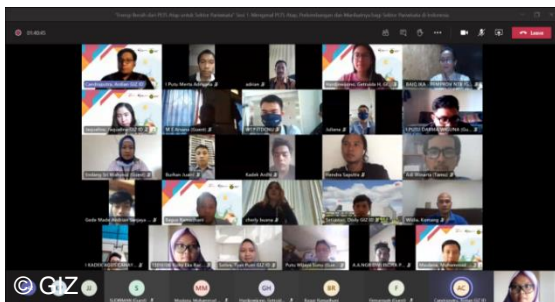
Renewable Energy/Energy Efficiency

A Green Future for Indonesian Tourism through Clean Energy

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

In the last month of 2020, representatives from resorts/ hotels and polytechnics from Eastern Indonesia as well as local government representatives from West Nusa Tenggara attended the 'Clean Energy from Rooftop Photovoltaic for Tourism' event organized by GIZ. The online event was held to raise awareness about the potential of green and clean energy to encourage the tourism sector to take part in the development of solar energy contributing to the energy transition program for a better and greener future of Indonesia.

This event consisted of two sessions. The first session took place on 10 December 2020 and introduced the development and benefits of solar PV rooftops. Meanwhile, the second session on 17 December 2020 discussed how to install and finance options for these systems, providing a guide for tourism businesses to start a green company profile. Bagus Ramadhani, solar photovoltaic expert, shared his expertise in photovoltaic rooftop installations by busting myths and explaining the right approaches of converting abundant solar energy potential into an economic advantage, especially for the tourism sector, which was impacted by the pandemic.



Group photo of the online awareness raising event for solar PV rooftops on 10 December 2020

Data Collection for Energy Modelling—Lessons Learned

By ICLEI—Local Governments for Sustainability Indonesia, 100% Renewables Cities and Regions Roadmap Project (100% RE)

Through the 100% Renewables Cities and Regions Roadmap Project, ICLEI supports the West Nusa Tenggara government in developing a 100% renewable energy roadmap for the region. To set-up an ambitious renewable energy target, it requires the evaluation of its feasibility by conducting a technical energy modelling exercise. In cooperation with the Fraunhofer Institute for Solar Energy Systems ISE, future energy scenarios exhibiting different sustainable development levels in the region are being evaluated and modelled, based on data collected between August and November 2020. This analysis includes various data, renewable energy sources, historical macroeconomic, energy generation and consumption data.

Data collection represented a challenge as accurate and complete information was difficult to obtain. Due to the complexity and limited access to information, several obstacles were encountered during the data collection process. Firstly, some energy consumption data was not regularly recorded and updated by the relevant institutions, such as the energy use in the agricultural and industrial sectors. Additionally, the recorded historical data presented inconsistencies due to the application of different measurement methodologies. Likewise, in many cases, it was challenging to request, obtain and validate the required data from relevant stakeholders due to staff availability or due to data confidentiality issues. In some instances, the data were limited or did not exist. Furthermore, the current Covid-19 situation also made the data collection process difficult.

Despite these challenges, the data collection process was finalised successfully with the help of local experts. An expert from the University of Mataram was able to identify the data gaps, to survey additional data and process the newly



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acquired data. The data collection activity leveraged by the 100% RE Project can be a starting point to identify and correct the existing problems. The energy modelling activity is also significant to evaluate the progress of existing plans, documents or regulations. Several critical factors have been identified to improve the data collection process in the future: 1) having a standardised data collection format where the data can be collected periodically and consistently; 2) having clear objectives to determine the type of data needed, whether maps, documents, figures, etc.; 3) conduct data source mapping to identify reliable data sources; 4). publicly available data sometimes does not match with the data requirements, so it is necessary to explore other data sources directly from the relevant stakeholders; 5) appropriate methodologies to fill the data gaps must be designed for efficient and effective data collection; and 6) processing new acquired data must be performed carefully to ensure a supply-demand balance when adjusting the energy intensity.

Lastly, for better data management and evaluation in the future, there are also some additional recommendations: 1) encourage relevant stakeholders, business actors and key communities to update energy consumption data regularly; 2) activate the Regional Energy Communication Forum (FORKENDA) to discuss current issues in the energy sectors, including the needs of data; optimise the function of the Information and Documentation Officers (PPID); and 3) utilise an existing portal/ website managed by BAPPENAS or ESDM, which could function as a data storage and information centre.

SUPA/ REPEAT Organised a Webinar on Peatlands Conservation in Times of COVID-19

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

People exposed to haze pollution are more prone to Covid-19 complications if infected. Therefore, sustainable peatland management and conservation are vital to decreasing the risk of Covid-19 impacts and increasing the resilience of communities. These were the main topic discussed in the webinar *'Livelihoods and Conservation on Peatlands—Strengthening Resilience in Response to COVID-19'* organised by SUPA/ REPEAT on 26 November 2020. The webinar was concluded with a panel discussion followed by a Q&A session with the audience. The Deputy Head of Mission, EU Mission to ASEAN, Lukas Gajdos and the First Secretary of Climate and Environment of the German Embassy, Warthane Puvanarajah, delivered opening remarks. The thematic session was opened by Johanna Son from Reporting ASEAN, who shared her opinion on *'Will ASEAN Go Greener in Response to COVID-19?'*



The speakers of the *'Livelihoods and Conservation on Peatlands—Strengthening Resilience in Response to COVID-19'* webinar

This was followed by a dedicated session on *'Livelihoods on Peatlands'* with two presentations. Maria Nuutinen, Food and Agriculture Organization (FAO), talked about livelihoods in wet peatland landscapes and Sonya Dewi and Telly Kurniasari, World Agroforestry Centre (ICRAF), discussed the different methods to develop sustainable peatland management in the ASEAN region during pandemics. In a session dedicated to *'Conservation on peatlands'*, Francesco Ricciardi, Asian Development Bank (ADB), presented about biodiversity conservation and

how it contributes to mitigating risks of the Covid-19 pandemic. Theresa Lim, ASEAN Centre for Biodiversity, informed the participants about ASEAN's response to address future pandemics. The last session was held by Orbita Roswintarti, National Institute of Aeronautics and Space of Indonesia (LAPAN) by sharing LAPAN's most recent work *'The Use of Remote Sensing to Map COVID-19 Hotspots in Indonesia'*.

The webinar was attended by almost 200 participants and reached more than 3,000 people on Facebook Live. During the discussions, inputs were collected from experts and the audience, such as how to maximise the resilience of ASEAN peatlands and wetlands and how to prevent the impacts from future pandemic situations. This will be used as a reference for training materials and practice briefs for sustainable livelihoods and conservation of peatlands. To watch the full session, visit <https://bit.ly/SUPAWebinar>.

A New Strategic Coordination Team for Wetlands Management to Achieve Sustainable Development Goals and Low Carbon Development in Indonesia

By Conservation International Indonesia and Center for International Forestry Research (CIFOR), Mitigation, Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystem (IKI-PME) Project

As of October 2020, a *'Strategic Coordination Team for Wetland Management'* was officially established by the Ministry of National Development Planning (BAPPENAS Ministerial Decree No. 89/M.PPN/HK/10/2020).

Out of 17 Sustainable Development Goals (SDGs), the team will contribute to SDG 13 - take urgent action to combat climate change and its impacts, SDG 14 - conserve and sustainability use the oceans, seas and marine resources for sustainable development and SDG 15 - protect, restore and promote



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sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss.

The team's primary responsibilities are planning, data and information collection, synchronising policies, evaluation, monitoring and reporting for peatland and mangrove management.

The establishment of this 'Strategic Coordination Team' was initiated by Conservation International (CI), the Center for International Forestry Research (CIFOR) and Wetlands International under the project: 'Mitigation, Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peatland and Mangrove Ecosystems' (PME). The PME Project is part of the International Climate Initiative (IKI) and supported by the German Federal Ministry for the Environment, Nature, Conservation and Nuclear Safety (BMU).

The efforts to form this group started in March 2020 through consultations, workshops, webinars and focus group discussions with related ministries/ agencies, including high officials of BAPPENAS as the leading political partner of this project. Due to the Covid-19 pandemic, most of the consultations were conducted virtually.

Ketut Sarjana Putra (CI), Iman Santoso (CI), Ardanti Sutarto (CI), Aloysius Suratin (CI), Daniel Murdiyarso (CIFOR) and Nyoman Suryadiputra (Wetlands International) will contribute as members of the working group of the 'Strategic Coordination Team'.

The 'Strategic Coordination Team' will develop a roadmap to develop a strategy for peatland and mangrove ecosystem management in Indonesia, featuring monitoring and reporting as well as funding mechanisms.

The kick-off meeting of the team is scheduled for February 2021 and all members from related ministries/ agencies are expected to attend. The meeting's main agenda will be to

discuss the work plan, including the development of the roadmap.

Bio-rights Contract Signing in Muara Manompas Strengthens Local Commitment for Peatland Restoration

By Wetlands International Indonesia/ WII (also known as Yayasan Lahan Basah/ YLBA), Mitigation and Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystems (IKI-PME) Project

On 30 November 2020, representatives of a total of 20 community-based organisations (CBOs) signed the *Bio-rights* contract. The contract outlined the cooperation between CBO's with WII to implement sustainable peatland management and thus contribute to climate change mitigation and adaptation efforts in Indonesia. Each contract outlines a series of restoration activities which will be carried out by the communities until March 2022.



© YLBA/ WII/ Didik Fitrianto

A total of 20 community group representatives gathered after the *Bio-rights* contract signing

Bio-rights is an innovative financing mechanism for reconciling poverty alleviation and environmental conservation. By providing micro-credits for sustainable development, the approach enables local communities to refrain from unsustainable livelihood practices and be actively involved in environmental conservation and restoration. Micro-credits are converted into definitive payments upon

successful delivery of conservation services at the end of a contracting period.

Bio-rights contracts are developed through a participatory eleven-month long process. Each group, consisting of ten households, receives EUR 5,000 conditional loans that will turn into grants after the groups successfully maintain 80% survival rate of the developed *paludiculture* (peat native species) plants and successfully prevent peat fire in their areas. In return, the communities are obliged to implement ten activities to support peatland restoration and conservation during the project period. The activities include participation in regular coordination meetings and trainings; conduct monitoring of peat water level and management; conduct nursery maintenance; apply *paludiculture* practice, participate in peat-fire patrol; maintain the canal blockings, early warning system tools, borehole and dip wells; implement sustainable livelihood practices and participate in policy dialogue processes at the village level.

The community has used the *Bio-rights* fund to improve their income through several alternative livelihood activities such as aquaculture, livestock farming, vegetable farming and various small-scale services (e.g., mechanic repair shop, coffee shop, food stalls and groceries).

It is expected that through the *Bio-rights* contract, local communities will have a strong sense of belonging and participate in restoring, conserving and sustainably manage peatland. *'Bio-right contract become the new hope for us to more sustainably manage our peatland'* said Maswat Hasibuan, the Chief of Muara Manompas Village.

Public Consultations on West Papua Forestry Management Plan

By Conservation International Indonesia (CI), Mitigation and Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystems (IKI-PME) Project

The West Papua Government has developed the Provincial Forestry Management Plan (*Rencana Kehutanan Tingkat Provinsi—RKTP*) 2021–2040 as a direction for forest management in West Papua. The document will be further elaborated in the *'Long-Term Forest Management Plan'* (*Rencana Pengelolaan Hutan Jangka Panjang—RPHJP*) by 21 forest management units (*Kesatuan Pengelolaan Hutan—KPH*) that currently exist in the West Papua Province. Public consultations were held in Manokwari (November 2020) and in Sorong (December 2020) as part of a consultations series before the official enactment by the governor.

The RKTP document is a provincial policy for forest resources management and development in West Papua for the next 20 years. The document will serve as direction at the provincial level to promote forest management, reflecting its use for the economy, ecology and social interests and aligns with the government's commitment to sustainable development.



© Conservation International/ Yance de Fretes
Public consultations in November 2020

Hendrik Runaweri, Head of the West Papua Forestry Agency, stated that the participatory process of developing the RKTP is part of the governments' commitment towards sustainable resources management and to



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provide benefits for the people living around it. The RKTP is a strong foundation for sustainable forest management in West Papua and is in line with the Province's vision to protect a minimum of 70% of the land. The development of RKTP is mandated by Forestry Law No. 41/1999 and Government Regulation No. 44/2004 about Forest Management.

The result of the spatial analysis (based on the criteria of seven types of forest function) indicates two major regions in West Papua. Firstly, protected areas (natural forest and peatland) covering an area of 3,550,761 ha (34.52%) and secondly, conservation areas, including landscape and the marine areas covering an area of 3,123,184 ha (30.36%). The protection of forests and peatlands is also linked to climate mitigation and adaptation, for example, carbon sequestration. The forests and peatlands also have economic benefits through payment for ecosystem services and non-timber forest products.

The RKTP 2021–2040 is part of the strategy for the development of the West Papua Province. It will align with the vision of sustainable development in the province by endorsing the multiple-use of forest approach that aims for people's benefits. As the next steps, Conservation International will provide technical assistance in conducting follow-up trainings to ten KPH's on transforming RKTP into a detailed RPJHP in February 2021.

Identify Training Needs for Improving Communities' Livelihoods and Food Security

By Conservation International Indonesia (CI), Mitigation and Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystems (IKI-PME) Project

Conservation International, together with its local partners, conducted a series of rapid socio-economic surveys within 29 villages in West Papua. These surveys aim to identify training needs that link to green development

pathways to improving food security, livelihoods, peatland/ mangrove ecosystem restoration/ conservation and sustainable forest products practices. The survey locations were located in Fakfak, Kaimana, Sorong, Sorong Selatan districts as these areas have major peat and mangrove ecosystems.

Being a high-carbon storage ecosystem, the conservation of peatland and mangroves are a nature-based solution to minimise climate change and have the potential to support low carbon development. Peatlands and mangroves store two to ten times more carbon than tropical forests and they provide multiple benefits for the economy, society and the environment. The local communities living close to mangroves and peatland areas are the real guardians to protect and sustainably manage these ecosystems. Thus, any conservation efforts must allow their participation and must provide tangible benefits to them.



A mangrove-shrimp farmer in South Sorong, one of the economic activities of mangroves

West Papua holds a vast mangrove area in Indonesia with area coverage of 479,481 ha (6% of the total global mangrove area). Its sustainable management is crucial for local communities and global climate security. Currently, less than 10% of West Papua's mangroves are protected, despite having the highest diversity of mangrove species in the world. The rapid socio-economic survey is the foundation for long-term socio-economic approaches to promote sustainable peat and mangrove management in order to achieve communities' resilience and adaptation to climate change.



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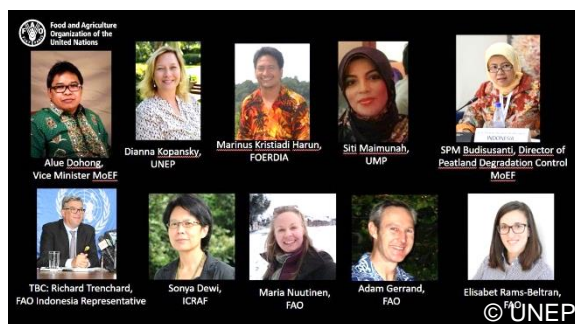
This survey is an important step to determine a potential training series that will support local economic development. In the long-term, the project will enhance market access for mangrove products, so the communities could continuously sustain peat and mangrove ecosystems while at the same time sustaining their livelihoods.

Global Peatlands Initiative—Peatland Management and Livelihood Opportunities in Indonesia

By UNEP, Global Peatlands Initiative Project—Assessing, Measuring, and Preserving Peat Carbon

On 19 January 2021, the Global Peatlands Initiative (GPI) project held a workshop entitled ‘Peatland Management and Wet Livelihood Opportunities in Indonesia’. This workshop is the first part in a series of two workshops planned. The project is funded by the International Climate Initiative (IKI), and led by the UN Environment Programme (UNEP) - with country work coordinated by the Food and Agriculture Organization (FAO) - and in collaboration with the Indonesian Ministry of Environment and Forestry (KLHK).

Moderated by Maria Nuutinen and Elisabet Rams-Beltran from FAO, the event brought together Alue Dohong, Vice Minister of KLHK, Dianna Kopansky, GPI coordinator (UNEP), Marinus Kristiadi Harun (FOERDIA), Siti Maimunah (UMP), Atik SPM Budisusanti (KLHK), Sonya Dewi (ICRAF) and Adam Gerrand (FAO), who discussed key factors to plan, implement, and monitor a successful wet management of peatlands.



The event panellists

During the event, the Vice Minister gave a keynote speech on livelihood approaches at the landscape level to reduce poverty, fires, and greenhouse gas emissions. His message was loud and clear: ‘Peatlands must be wet – that is the only way for sustainable management’.

Other speakers showcased incredible examples of successful wet livelihood opportunities and approaches that support sustainable peatlands management. The pre- and post-workshop outreach included a [needs assessment survey](#), and preliminary results were shared. This survey should help understand the institutional and knowledge needs to help the GPI advance with improving peatlands management and identify solutions for Indonesia.

How will we move forward...

- The workshop’s results is expected to contribute to determining what are the key factors to plan, implement and monitor the improved livelihood options in peatland landscapes.
- Indonesia is proud to carry on contributing to the Global Peatlands Initiative, and investing in knowledge sharing through our joint International Tropical Peatlands Center.
- Indonesia has already included peatlands as part of the national strategies.
- Commitment to build back better, with a long-term vision for developing livelihoods from peatlands.

Workshop slide on Peatland Management and Wet Livelihood Opportunities in Indonesia

The event was a big success, with more than 150 participants from different organisations. Participants actively discussed the key factors to plan and implement existing successful wet, sustainable peatlands management approaches that enhance livelihoods. All participants agreed that solutions that keep peatlands wet are urgently needed as the only sustainable pathway to stop emissions, fires and peatland degradation and prevent the loss of livelihoods. Participants underlined the need for a landscape approach combined with empowering local communities in the process. A recording of the event is available [here](#).

Peatlands—a Nature-based Solution: Home and Refuge for Unique and Threatened Biodiversity

By UNEP, Global Peatlands Initiative Project—Assessing, Measuring, and Preserving Peat Carbon

In October 2020, the Global Peatlands Initiative (GPI) project hosted a session at the GLF One World One Health Biodiversity Conference on ‘Peatlands as a Super Nature-based Solution to Climate Change, and a Refuge for Unique and Threatened Biodiversity’. Bringing together the Minister of Tourism and Environment from the Republic of Congo and Vice Ministers from Indonesia and Peru, the session offered an opportunity for South-South exchange regarding their efforts to protect the rare and endangered biodiversity housed in peatlands. The session took people on a world tour to share the realities and experiences in multiple locations. Drawing attention to the importance of peatlands that connect places from north to south and across the world, CMS Executive Secretary called on all participants to take notice and make efforts to protect peatlands as vital breeding grounds and stops for migratory species. ‘Species do not go extinct alone. They represent an ecosystem,’ said Franziska Tanneberger, the Director of the Greifswald Mire Centre in Germany.

The journey began in Russia, which has one of the largest contiguous peatland landscapes on the planet. Hans Schutten, Peatland Lead at Wetlands International, shared their award-winning experience working on peatland rewetting, ecological restoration and fire risk reduction in Russia. They were travelling then to the South of the Equator, Alue Dohong, representing the largest extent of tropical peatland in the world. The Indonesian Government’s Vice Minister for Environment and Forestry - shared some of his institution’s efforts to protect and maintain the country’s peatlands. European peatlands were also highlighted during the session when Tina Claffey, an award-winning Irish photographer, offered a compelling glimpse into some of the peatland’s biodiversity, by sharing close-up

photographs of the easily-missed micro-marvels of the peatlands near her home.



Bird with its catch

Crossing the Mediterranean Sea, participants arrived in the Cuvette Centrale Peatlands, home to several emblematic species such as forest elephants and several species of gorillas. Arlette Soudan-Nonault, the Minister of Tourism and Environment of the Republic of Congo, emphasised the urgency to preserve and sustainably manage peatlands, as they are a critical ecosystem regarding the fight against climate change. ‘Tropical peatlands are a mysterious, authentic world and a treasure of exceptional biodiversity’ he said, before adding that ‘studies on the role that animals and plants from this particular ecosystem play in the life cycle of living beings are critically needed’ said Ifo Suspens, Lecturer at Marien Ngouabi University.

Then participants crossed the Pacific Ocean and arrived in Peru, where the Vice Minister for the strategic development of natural resources, Gabriel Quijandría Acosta, shared some of the reasons why his country’s peatlands represent cultural and economic cornerstones. As their final stop, participants arrived in Patagonia. They had the pleasure to hear from the conservationist Kristine McDivitt Tompkins, President of the Tompkins Foundation and a UN patron of protected areas, who made a passionate plea for immediate protection and attention to rare places like Peninsula Mitre and global peatland protection. ‘We may start by protecting the places we know and love. But it’s time that we defend the wild places and become vocal advocates for peatlands. The future of all life depends on it.’ The session was



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a huge success with more than 615 participants and is available in [English](#), [French](#) and [Spanish](#).

Series of Webinars—Exploring Criteria and Indicators for Tropical Peatland Restoration

By UNEP, Global Peatlands Initiative Project—Assessing, Measuring, and Preserving Peat Carbon

Building on the on-going the Global Peatlands Initiative (GPI) work to establish sustainably and establish indicators to improve data harmony and peatlands research, CIFOR, in collaboration with the Indonesian Ministry of Environment and Forestry (KLHK), the International Tropical Peatlands Center (ITPC), the Peatland Restoration Agency (BRG) and supported by the GPI, the Food and Agriculture Organization (FAO), the US Agency for International Development (USAID), and Norway’s International Climate and Forest Initiative (NICFI) organised a series of workshops ‘Exploring Criteria and Indicators for Tropical Peatland Restoration’.

application, responsiveness, representativeness, consistency and sensitivity to local conditions.

The second session, entitled ‘Exploring Criteria and Indicators for Tropical Peatlands Restoration: Biophysical Attributes and Peatland Fires’ was held in October 2020. It focused on an adaptive approach for monitoring peatlands and their restoration using the criteria and indicators that are locally relevant, and are easy to recognise, measure and monitor over time.

The third session, entitled ‘Governance and Socio-Economic Attributes’ was held in November and engaged stakeholders in facilitated discussions with resource persons to allow an exchange of knowledge on how to identify social, economic, and governance attributes in the on-going restoration when degraded peatlands are rewetted, revegetated, and economic activities are revitalised. The workshop proposed associated criteria and indicators as well as identified steps for verification processes.

Organized by: [cifor.org/insamp/exploring-criteria-and-indicators-for-tropical-peatland-restoration](https://www.cifor.org/insamp/exploring-criteria-and-indicators-for-tropical-peatland-restoration) [Register now](#)

Online Workshop Series
Exploring criteria and indicators for tropical peatland restoration

WEDNESDAY 2 SEPT 2020 01.30 pm (GMT+7)

Keynote speaker
 Alisa Dobson, Vice Manager, MEF, Republic of Indonesia

Welcome and opening remarks
 Nafiz Fozal, Head of Peatland Restoration Agency (BRG)

Facilitators
 David Mardiyono (CIFOR), Harati Krisnawati (ITPC), Ruzeh Shema (CIFOR)

Speakers
 SPM Bralissanti (CIFOR), Lisa Miles (UNEP-WCHC), Maria Nhasitani (FAO), Ibul Wardhana (Deputy BRG for Planning & Cooperation), Azwar Malik (Gadjah Mada University), Agustina Tanggabulan (FORIA-UNEP), Imat Mambasari (University of Indonesia), Haris Ghuwanan (Deputy BRG for Research & Development)

supported by:

The speakers of the online workshop series ‘Exploring Criteria and Indicators for Tropical Peatland Restoration’

The first session, held in September, helped to identify key contributors and identified suitable methodologies for selecting appropriate criteria and associated indicators based on characteristics such as relevance, ease of



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Switching from Paper-based to Digital Surveys to Investigate the Socio-Economic State of Communities in North Sulawesi

By YAPEKA, Conservation of Biodiversity, Seagrass Ecosystems and Their Services—Safeguarding Food Security and Resilience in Vulnerable Coastal Communities in a Changing Climate

In the first half of 2020, following the delivery of the *Dugong Catch and Bycatch Questionnaire* with support from the Marine Research Foundation (MRF), YAPEKA and Blue Ventures (BV) navigated challenging Covid-19 restrictions to complete a series of community assessment surveys in North Minahasa and Sangihe, North Sulawesi.

The objective of the surveys was to collect socio-economic data on the project’s target communities to inform the development of business models aimed at establishing and sustaining locally led seagrass conservation and marine management efforts, whilst also boosting alternative livelihood opportunities within the community. With limited time in the field and the need to collect this data safely and efficiently, we chose to test a digital surveying method. *Kobo Toolbox* was selected because it has a simple but powerful platform for digital data collection and it offers free unlimited use for humanitarian organisations.

As YAPEKA has limited experience carrying out digital surveys, BV offered their support with trainings and knowledge sharing sessions. On 19–23 October 2020, YAPEKA’s field team and volunteers participated in daily training sessions with BV. These were conducted virtually due to Covid-19 restrictions and covered the basics of successful digital surveying, how to build a layered and effective e-survey form, introducing the KoBo user interface and functionalities and how to use the KoBo app to collect, export and analyse data on a mobile device or computer.



The socio-economic data collection in North Minahasa (on the right: the volunteer Stanley Loliwu)



The socio-economic data collection in North Minahasa (on the left: the volunteer Bill Maroangi)



The socio-economic survey training in Sangihe (counterclockwise from right: Community Local Organiser Sam Barahama, the volunteers Okky, Presman Musa, Jerry, Saddam Onthoni and Yanti and the North Sulawesi Site Manager Ami Raini Putriraya)

After testing and optimisation, the surveys were completed in November 2020, with a total of 188 respondents from eight communities. The results showed that a large majority of respondents are highly dependent on coastal natural resources and over 50% belong to low-income households, where a secondary occupation is needed to support their families. The responses also confirmed a significant interest in alternative livelihood opportunities, particularly within ecotourism and aquaculture.



Biodiversity

In early 2021, these results will be refined through a series of community needs assessment workshops where community representatives will discuss business, policy and seagrass conservation opportunities in line with their vision for the future.

For YAPEKA, switching from paper-based to digital surveys was a new challenge. There are clear advantages, such as cutting down survey time, extra functionality and reducing paper use. However, a valuable lesson learned was the need to improve the survey design so that data clean-up and analysis can be done more quickly and efficiently in the future.

Village Conservation Agreement, a Path to Sustainable Land Management

By WCS, WWF, YABI, Conserving Priority Habitats in Bukit Barisan Selatan National Park Project

In 2020, eight villages located in the buffer zones of Bukit Barisan Selatan National Park (BBNSP) established a community's agreement on managing natural resources in these villages and their vicinities to support sustainable village development called *Village Conservation Agreement (VCA)*. The eight villages are Margo Mulyo, Sukabandar, Ulok Mukti, Pakunegara, Penengahan, Sukamarga, Bumi Hantatai and Teba Liyokh in Lampung Province, Sumatra. The VCA was prepared by exploring the village's potential, facilitated by *Bestari Program* through WWF Indonesia and the Rhino Foundation Indonesia (YABI). The discussion started in each sub-village and finally reached the village level. Furthermore, the VCA will be converted into village regulations (*Perdes*) to demonstrate villages' commitment and facilitated implementation.

The Bestari program also encourages villages to develop their spatial planning. Both aim to reduce pressure on conservation areas through restoring encroached areas and improving land use management in surrounding villages.

'Based on the Law No. 6/2014, the development of the spatial village plan is mandatory for villages. Moreover, the Law No. 26/2007 concerning Spatial Planning, also requires villages to have village land use maps,' explained Sutarno, Bestari's Livelihood Coordinator.

Based on the initial mapping conducted by YABI, most of the Bumi Hantatai village area is located inside the BBNSP. *'Currently we are accompanying residents of Bumi Hantatai to apply for the Conservation Partnership Program with the national park. If communities have become part of the program, they will be motivated to restore the forest and enable people to sustainably prosper'* explained Edi, the community facilitator from YABI.

Villages Developing Spatial Plans

With the assistance of WWF Indonesia, the Margomulyo Village in Semaka District in the Tanggamus Regency has also designed its village spatial plan. It helps residents identify which areas are already compatible with its function and which areas need to be changed. It also helps the community to establish their medium- and long-term village development planning. *'Several of our fertile farms are located at the border of the national park, but they turn out to be at places where elephants are roaming. Therefore, we plan to replace existing plants which elephants eat such as coconut, banana, cassava and papaya, with crops that elephants refuse to consume such as pepper, coffee, nutmeg or candlenut'*, said Umi from the Margomulyo Village.



A woman from the Margomulyo Village was pointing out a future settlement area



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Meanwhile, in the Teba Liyokh Village, which is assisted by YABI, the village's spatial plan has been implemented by cultivating vegetable crops with terrace farming concepts (*terasering*) in the sloped area, while the steeper slope areas are planted with deep-rooted plants to prevent landslides.

Deforestation-Free Coffee from a Misty Village

By WCS, WWF, YABI, Conserving Priority Habitats in Bukit Barisan Selatan National Park Project

Situated at an altitude of about 800 meters above sea level (asl), the misty village of Ujung Rembun is highly suitable for Robusta coffee cultivation. Ujung Rembun, located in Lumbok Seminung Subdistrict, West Lampung regency, remains reliant on coffee as the main source of income.

Since June 2019, BBS KEKAL (Bukit Barisan Selatan Sustainable Commodity Partnership/*Kemitraan Komoditas Lestari*) and the Bestari programme through the Wildlife Conservation Society-Indonesia Program (WCS-IP) in collaboration with the local governments, the Bukit Barisan Selatan National Park (BBSNP) authority, NGOs, communities and the private sector have provided Good Agricultural Practices (GAP) training to farmer groups (FGs) in Ujung Rembun.

Significant Productivity Increase

One of the farmer groups supported is Sumber Asih FG. *'We learned how to make and utilise organic fertilisers, the correct pruning techniques as well as weeding and coffee plant rejuvenation. We also learned about coffee harvesting and post-harvesting techniques along with good farm management'*, said Samuji, a member of the farmer's group. Approximately 60% of Sumber Asih FG have implemented GAP at their coffee farms. Now, their yield reaches 1.2 to 1.5 ton per hectare, which is a significant increase from the previously 700 kg per hectare.



A farmer is picking his coffee bean which is grown sustainably

Strengthening the Organisation to Strengthen the Economy

In addition to GAP training, Sumber Asih FG was also trained to strengthen their institutional and financial management. This group has successfully passed the proposal selection at the West Lampung District Agricultural Extension Service Agency and received two tons of garlic seeds, two tons of fertilizers and was able to use agricultural production facilities.

'We have also established fruit tree nurseries such as durian and avocado as well as tree nurseries such as dadap, damar mata kucing and cempaka to be planted as shade trees in the coffee farm. Last year, our group planted maize and the yield was divided equally among members, we also set aside a portion to be sold and be used as capital for the farmer's group', said Samuji.

As the farmer's group grew stronger, Sumber Asih started to establish a network and receive support from the Plantation and Livestock Agency (Disbunak) of Lampung Barat District, including the provision of two units of lawnmowers. BBSNP also provided two compost material cutting machines. Sumber Asih FG showcases the opportunity to support farmers in producing deforestation-free coffee through strong partnerships and cooperations between stakeholders, including the government, NGOs and the private sector.

'The members of Sumber Asih FG and I are very excited to participate in the training given by WCS-IP. Hopefully, with the knowledge we gain,



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the coffee farms can be more productive. We hope that with the small land that we have, we could get maximum yield, so we no longer have to clear land inside the BBSNP', Samuji added.

Dealing with COVID-19 through Ecosystem-based Adaptation

By Rare, Fishing for Climate Resilience

As the world continues to battle Covid-19, the need to protect and manage coastal resources for food and livelihoods has become ever-more-urgent, as coastal leaders and their communities cope with the [pandemic's pressures](#). The pandemic exacerbates existing threats ranging from climate change to pollution, overfishing and biodiversity loss. Protecting coastal habitats has become imperative as global economies and billions of lives depend on the ocean and its resources.

Communities and local leaders in Southeast Sulawesi Province are facing this challenge. In the last quarter of 2020, Rare worked with local partners and communities on establishing approximately 19,000 hectares of [networks of marine reserves](#) in 22 areas in the province. These reserves are areas where fishing is not allowed to give marine habitats the chance to replenish and sustain local fisheries. In a participatory approach, community leaders were empowered to apply a method that combines fisheries and climate science and combines it with local knowledge to identify the right location for the reserves. The reserves are intended to restore ecologically important fish populations, sustain ecosystem functions and create ecological resilience to phenomena such as climate change. At the same time, designated areas are created where local fishers receive exclusive rights to fish sustainably. This combination of reserves and exclusive fishing zones ensures a balance between protecting resources and sustainable utilisation from people who depend on them. To ensure that these interventions 'stick', Rare and its partners deploy a range of behavioural-based tools and social marketing techniques. Following the mantra: *'Fish at the right time, with the right gear, at the right place'*, local

communities learn to embrace sustainable fishing as a prideful and beneficial practice for their communities. At the same time, fishers are empowered to collectively tackle the aforementioned challenges by adopting *Ecosystem-based Adaptation (EbA)* measures.



Using the Climate Change Vulnerability Assessments results, local leaders and communities discuss different climate adaptation and mitigation actions to integrate into the management plan for their marine reserves and fishing grounds.

For Rare, the fishermen and women's behaviour towards their coastal ecosystems has always been the source for solutions to far-reaching problems. For instance, La Amani, a fisher in one of Rare's project sites in Buton Tengah District, used to fish with dynamite—a practice that causes significant damage to critical ecosystems. He knew that this practice destroyed the marine habitats, but it was a practice that generated short-term profits for him and his family. He thought that using sustainable and selective fishing gears will not give his family the same benefits. *'I despised what I did. I have been caught three times by the navy and even stayed in jail for a whole week,'* he said. *'But I still ignored what happens to the fish and the ecosystem since our family solely depended on fishing. It is the only skill that I know,'* he continued. Since the project's inception in 2019, he has seen campaigns encouraging fishers to adopt more responsible fishing behaviours. He also witnessed how the leaders and community members chose designated fishing areas and reserve zones themselves. Upon hearing and reflecting on the campaign messages, his confidence grew and



Biodiversity

La Amani knew he had to change his fishing practices. So, in November 2020, he met with Rare's local partner to express his interest in joining the program and to seek advice on how he can fish sustainably. Since then, La Amani has stopped using dynamite and is now using gillnets to the fish—a change which was also witnessed by his fellow fishers who now treat him with more respect. *'It is not so bad using a gillnet after all. I still earn enough while using this gear,'* he proudly reported.

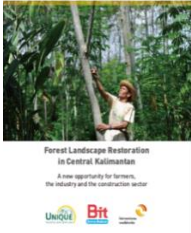


Community members determine different fishing regulations that they will enforce in the marine reserves and fishing grounds. The regulations will form an integral part of the management plan for the network of marine reserve areas


La Amani sets a shining example for his community and fellow fishers. By collectively engaging in EbA solutions through responsible fishing behaviours, small-scale fishers like him are empowered to tackle the tragedy of the commons and significantly contribute to the recovery of coastal ecosystems and increase the resilience against climate change and other external shocks.

Knowledge Products

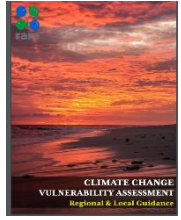
By Fairventures Worldwide GmbH, Rehabilitation of Degraded Lands with Native Tree Species in Kalimantan, Indonesia

<p>Forest Landscape Restoration in Central Kalimantan: a New Opportunity for Farmers, the Industry and the Construction Sector</p>	<p>This report summarises the findings from Fairventures’s five-year project that resulted in a feasibility study on the reforestation of degraded land with fast-growing lightwood tree species. The report details how reforestation with these types of trees can be accomplished by smallholders and in commercial set-ups and describes the climate, biodiversity and income benefits of the trees as well as existing and yet to be developed lightwood products and their potential for the Indonesian wood-processing and building sectors. The report draws extensively on the project results and the experiences from Fairventures Social Forestry’s implementation as one of the first commercial scaling cases. The report also provides recommendations on how to adopt, transfer and scale-up the project results.</p> <p>www.fairventures.org/flrstudy</p>	
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By WCS, WWF, YABI, Conserving Priority Habitats in Bukit Barisan Selatan National Park

<p>Konservasi Murni Ajaran Islam Conservation in Islamic teachings</p>	<p>This book was developed due to the fact that many Islamic preachers near the forest have little knowledge on how to deliver a religious speech or preach including a conservation perspective. Most Islamic preachers mainly talk about God-human or inter-human relationships, but hardly speak about human-nature relations, which is also a part of the Islamic values. It drives us to develop a local, easy to read and understand book for Islamic preachers in rural villages who want to teach and raise their voice about conservation linked with Islamic values. The book was published by WWF Indonesia with LPLH-SDA Majelis Ulama Indonesia (MUI)—a council of Indonesian Moslem scholars.</p> <p>http://bit.ly/konservasimurniajaranislam</p>	
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By Rare, Fishing for Climate Resilience

<p>Climate Change Vulnerability Assessments (CCVA): Regional & Local Guidance</p>	<p>The CCVA guidance presents two options for assessing climate change vulnerability: a high-level regional approach for comparing vulnerability across larger areas and a detailed local approach for exploring the specific drivers of vulnerability unique to each location. The paring of top-down and bottom-up approaches both guides where actions should be focused regionally, while also providing specific guidance for actions locally by understanding the drivers, factors and opportunities to minimise those impacts.</p> <p>https://portal.rare.org/en/make-decisions/climate-change-vulnerability/</p>	
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Knowledge Products

<p>Enhancing Nationally Determined Contributions: Opportunities for Ocean-Based Climate Action</p>	<p>As a sector module, this guide supplements the overarching guide, namely <i>Enhancing NDCs: A Guide to Strengthen National Climate Plans by 2020</i> (Fransen et al. 2019). It helps countries enhance their climate goals with clearer and more tangible ocean-based mitigation and adaptation targets, policies and measures. The guide also provides relevant insights into options for a sustainable blue recovery from the Covid-19 pandemic, focusing on delivering the Paris Agreement and the 2030 Agenda for Sustainable Development including its Sustainable Development Goals (SDGs).</p> <p>https://files.wri.org/s3fs-public/enhancing-nationally-determined-contributions-opportunities-ocean-based-climate-action.pdf?7jhTeR_u6EVwnymRQAS.csuLOXTFZp6X</p>	
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