On behalf of:







of the Federal Republic of Germany

IKI Newsletter Indonesia

18TH EDITION



About the International Climate Initiative

The International Climate Initiative (IKI) is an important part of the German government's international climate finance commitment. Since 2022, the Federal Ministry for Economic Affairs and Climate Action (BMWK) has been the lead ministry for IKI. The funding programme cooperates with its founding ministry, the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), as well as the Federal Foreign Office (AA). Through IKI, the ministries jointly support approaches in developing and emerging countries to implement and ambitiously develop the Nationally Determined Contributions (NDCs) anchored in the Paris Agreement. This includes measures to adapt to the impacts of climate change and to conserve and rebuild natural carbon sinks, taking into account environmental, economic and social concerns. With regards to biodiversity, IKI also supports its partner countries in achieving the goals of the Convention on Biological Diversity (CBD).

The activities from IKI projects range, for example, from advising policy-makers on capacity building and technology partnerships to risk hedging through innovative financial instruments. They also include studies, project preparation advice for infrastructure development, and investment instruments for climate change mitigation or biodiversity conservation.

To date, IKI has approved more than 800 climate and biodiversity projects in over 60 countries worldwide with a total funding volume of five billion euros (2008–2021).

The programme management, evaluations, and technical assistance of the projects, as well as the management of IKI media and communication are supported by the IKI Office at the government owned Zukunft – Umwelt – Gesellschaft (ZUG) gGmbH.

The IKI finances projects run by organisations that implement measures together with developing, emerging, and transitional countries within the four IKI funding 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+); and conserving biological diversity. Many projects normally involve more than one funding area.
More information is available on the <u>IKI website</u> .

Policy Highlights

Group of Twenty (G20)

Environment ministers of the G20 countries met in Bali for the **Joint Environment and Climate Ministers' Meeting** (JECMM) which took place on 31 August 2022. The meeting produced a joint agreement focusing on three priority issues: i) Supporting more sustainable recovery, ii) Enhancing land and ocean-based climate action, and iii) Enhancing resource mobilisation to accelerate environmental protection. The G20 Chair's summary is available here.

KLHK hosted a G20 side event of the Joint Environment and Climate Ministers' Meeting on "G20 Partnership for Ocean-Based Action for Climate Mitigation and Adaptation" which took place on 1 September 2022. At the workshop, Indonesia proposed a G20 Partnership to explore opportunities to establish partnerships on the ocean-climate nexus to advance ocean-based mitigation and adaptation actions among all G20 members. The workshop served as a kick-off to exchange best practices, lessons learned, and knowledge, as well as research and innovation on coastal resilience and protection, equal social development, increased sink capacity of the ocean, and sustainable green-blue economies.

Bappenas continues to promote the nexus between development, climate, and biodiversity as pillars for economic recovery and transformation in the Development Working Group (DWG) of the G20. Bappenas launched the **Green Economic Index** (GEI) during the G20 DWG side event on 9 August 2022. The 15 indicators of the GEI are expected to help the government in evaluating social, economic, and environmental interactions as well as identifying potential risks and opportunities for greener economic policies. The keynote speeches were provided by the UK Ambassador, the German Ambassador, and the Bappenas Minister.

Sustainable Transport

The DKI Jakarta Provincial Government through the DKI Jakarta Transportation Agency (Dishub) conducted Traffic Engineering in Kota Tua Area, West Jakarta Administrative City, starting from 1 August 2022. This activity is in line with the **implementation of a Low Emission Zone** (LEZ) system policy or Low Emission Area in Kota Tua. The DKI Jakarta Transportation Agency said that this traffic engineering trial will be rolled out at several points designated as LEZs, namely: Traffic from Pluit to Harmoni, Traffic from Pluit to Priok, Traffic from East/North Jakarta to Asemka/Harmoni, Traffic from North Jakarta to West Kali Besar, and Traffic from South Jakarta to Asemka. The DKI Jakarta Provincial Government will also conduct Traffic Engineering Trials on TransJakarta Bus Corridors 1 and 12.

The DKI Jakarta Provincial Government has started to implement an integrated fare scheme for public transport in Jakarta. The scheme allows passengers to only pay an entry fee of IDR 2,500 and an IDR 250/km distance-based fee for multimodal journeys using MRT, LRT, and TransJakarta. The fare is capped at IDR 10,000 for each multimodal journey made within 180 minutes. The scheme was first introduced to be accessible only from a mobile application, but recently the Government is rolling out electronic card payment to reach more user segments.

The President has increased subsidised petrol fuel and diesel fuel prices in Indonesia. As compensation, the National Government is planning to increase cash subsidy disbursement to eligible lower-income households. To further control the consumption of subsidised fuel, four-wheeler users will have to be verified as eligible consumers for the subsidised fuel. The registration process is currently in motion, starting in July 2022.

The Ministry of Transport's plan to increase the fare of ride-hailing services is delayed. The plan was to increase the ride-hailing service fare in Greater Jakarta from IDR 2,000-2,500/km to IDR 2,600-2,700 (around 30% increase from the minimum service fare) and to increase the minimum fare by around 60%. A Ministry spokesperson stated that the plan is delayed in consideration to the current economic situation in Indonesia, as well as to have more time to gather feedback from the private sectors and transport experts.

The House of Representatives (DPR-RI) is in the process of revising the Law No. 22/2009 concerning Road Traffic and Road-Based Transportation. The legislative process, which has started in 2015, was previously put on halt due to the COVID-19 pandemic. The discourse surrounding the revision is mainly driven by the rapid development of online motorcycle ride-hailing services, the upcoming adoption of electric vehicles, including e-bikes, measures to accelerate public transport provision and financing of transportation systems, as well as measures to regulate overloaded and excessively dimensioned freight vehicles. From January to June 2022, the DPR-RI conducted a series of public hearings and meetings to gather feedback for the revision.

Sustainable Finance

Bank Indonesia has issued the <u>Bank Indonesia Regulation (PBI) No. 24/3/PBI/2022</u> concerning the Amendment to Macroprudential Inclusive Financing Ratio (RPIM) for Conventional Commercial Banks, Sharia Banks and Sharia Business Units, effective from 31 January 2022. The regulation was promulgated by Bank Indonesia to increase economic inclusion and unlock financial access, while strengthening MSME's contribution to the national economic recovery. Furthermore, the policy has expanded the scope of inclusive financing to include sustainable finance-related bonds/securities. This incentivises banks to increase their sustainable finance portfolios.

Bank BCA, the largest commercial bank in Indonesia has developed a **climate change strategy roadmap** to identify the bank's risks and opportunities in relation to climate change by following the steps outlined in the Task Force on Climate-related Financial Disclosures (TCFD). Currently, BCA is in the 'Get Ready' stage, which focuses on dissemination, capacity building, data collection, and identifying existing mitigation activities. A transition risk analysis is performed to provide an overview on how far the portfolio of BCA might be affected by climate change. BCA has considered palm oil, coal, pulp, and paper industries as starting points for the transition risk and climate scenario analysis. They have also started to monitor the climate-related investment sector.

Forestry, REDD+

Peatland degradation has become an emerging issue during the second meeting of the G20 Presidency in Labuan Bajo, on 12 July 2022. This shows the world's interest and concern for the sustainability of peat ecosystems.

In implementing the Indonesia Net Sink FOLU 2030, several Provincial Governments are mandated to develop the Sub-National Work Plan for Indonesia's Forestry and Other Land Use (FOLU). In the implementation of the Indonesia Net Sink FOLU Operational Plan 2030, several mitigation actions for the FOLU sector have been identified, including: (1) reducing deforestation rate in mineral lands, (2) reducing deforestation rate of peatlands, (3) reducing forest degradation in mineral lands, (4) reducing peatland forest degradation, (5) developing plantation forest, (6) managing sustainable forests, (7) rotational rehabilitation, (8) non-rotational rehabilitation, (9) peat restoration, (10) peat water system improvement, (11) mangrove management, and (12) biodiversity conservation. The preparation of this sub-national work plan will be prioritised in 10 provinces, including East Kalimantan, North Kalimantan, Aceh, West Sumatra, West Kalimantan, Central Kalimantan, Riau, Jambi, Lampung, and South Sumatra.

Renewable Energy

On 13 September 2022, the Presidential Regulation No 112 Year 2022 concerning the **Acceleration of Renewable Energy Development** has been signed, including a plan to retire some coal plants early.

Changes in personnel

On 28 August 2022, the **Deputy of Maritime Affairs and Natural Resources** of Bappenas, Mr Josaphat Rizal Permana, passed away. The Expert Staff for Social Affairs and Poverty Reduction to the Minister of National Development Planning, Dr Vivi Yulaswati, has been appointed Acting Deputy. She also serves as the Head of the SDG Secretariat.

IKI Project Highlights

UNDP, Biodiversity Finance Initiative (BIOFIN II)

The Inception Workshop was held on 25 July 2022 in Semarang as a first step to develop Ecological Fiscal Transfer (EFT) indicators and to provide an overview of the concept and importance of EFT to the relevant Local Government Organisations (OPD) in the Central Java Provincial government. The workshop was attended by 53 participants from the district and provincial government who attended offline and online.

Rare, Fishing for Climate Resilience

Rare conducted a workshop with the Southeast Sulawesi government and district offices of Bombana and Buton to increase policy support for small-scale fisheries businesses. Representatives from the Office for Fisheries and Marine Affairs, the Office for Trade and Industries, and the Office for Cooperative and Small-Scale Business participated in the event. Participants recommended the enactment of a policy to make updated information on the sector more widely available. This policy will help relevant government offices to allocate resources for business development.

World Agroforestry (ICRAF) Indonesia, Peat-IMPACTS Indonesia

OKI government agreed to integrate peat management and restoration into their SEA and spatial planning (RTRW) process.

40% of RPPEG (peat management and restoration plan) document preparation in the Banyuasin Districts has been achieved.

Stakeholders have agreed on two business models for the Banyuasin Districts and they have been implemented in the form of collaborative activities in the field.

Six village livelihood agreements were finalised in Kubu Raya District, West Kalimantan, as a basis for intervention activities at site level.

The Wikigambut community has been established in West Kalimantan. The Wikigambut application is available on Google PlayStore, so it can be installed or used on a cellphone.

A local curriculum on Peat and Mangrove has been piloted in Kubu Raya, West Kalimantan, in two elementary schools and two junior high schools.

Konservasi Indonesia and CIFOR, Mitigation and Adaptation through Conservation and Sustainable Livelihoods in Indonesia's Peat and Mangrove Ecosystems

The IKI-PME Programme supported a kick-off meeting to establish the West Papua Regional Mangrove Working Group on 5 July 2022.

The IKI-PME Programme collaborated with the North Sumatra Regional Development Planning Agency and the University of North Sumatra to organise the Geographic Information System Training in North Sumatra on 26-27 July 2022.

The IKI-PME Programme supported the establishment process of the West Papua Provincial Forestry Plan for 2022-2041 on 9 August 2022.

CIFOR, Konservasi Indonesia, and their partner from the Indonesian Academy of Sciences (AIPI) have successfully published an Info Brief on Coastal Zone Rehabilitation for Low Carbon Development. This Info Brief contains four important key messages that contribute to mangrove rehabilitation efforts in Indonesia to achieve the Low Carbon Development goals.

ITDP, Reducing Emissions through Integration and Optimization of Public Transport in Indonesia

The Government of Medan City is willing to endorse and implement the recommendations on Medan City Inclusive Mobility provided by ITDP Indonesia. The recommendations are the result of many discussions with vulnerable residents in Medan. They cover various fields, such as Trans Metro Deli services, pedestrian facilities, bicycle facilities, and regional planning.

As the document of recommendations for inclusive mobility in Semarang City is being finalised, three Multi-Stakeholder Dialogues (MSD) are held to ensure various groups are included in the preparation of the recommendations so that various needs are addressed. The MSDs are held in three parts, each discussing a different topic/segment of the recommendations, namely (1) pedestrian facilities, (2) bus stops, and (3) bus designs, with emphasis on the inclusive aspects. The recommendations will be submitted to the Government of Semarang, but the endorsement and the ceremony had to be postponed due to the COVID-19 situation and were eventually planned to be conducted in September 2022.

ITDP has been involved in developing and reviewing a number of regulations as well as physical transformations related to Transit Oriented Development in Jakarta. In July to August 2022, to ensure the upcoming pedestrian plaza plan can connect and integrate with surrounding spatial planning, we conducted a site visit and coordination meeting led by the Jakarta Assistant of Economy and Finance. Directors from MRT Jakarta, TransJakarta, MITJ, ITJ, Jakarta Transport Agency, Jakarta Public Work Agency, Jakarta Spatial Planning Agency, and Jakarta Water Management Agency joined these series of meetings. ITDP coordinated all the site plans and developed a recommendation to implement the transit and pedestrian plaza.

ITDP Indonesia has been involved in reviewing the design and concepts to organise both pedestrianisation concepts and shared-street infrastructure in Kota Tua Jakarta. As the results of this assistance, on 26 August 2022, this area was launched by the Governor of Jakarta alongside a public festival as one of the activation strategies. Within this intervention, the integration between TransJakarta and KRL Commuter Line was also improved. Two streets of Ketumbar and Lada are now pedestrianised and closed for traffic, connecting the KRL commuter line and TransJakarta bus station to the Fatahillah Plaza. The pedestrian facility is increased up to 329 m² with the revitalisation, including the addition of an approximately 810 m long bike lane.

WWF Indonesia, IKI Green Finance Project Asia

In 2022 alone, WWF Indonesia Green Finance Project Asia has provided trainings and workshops on sustainable finance-related topics to financial institutions, regulators, and industry (more than 6,000 individuals).

PT Bank Negara Indonesia (BNI) Tbk, a member of IKBI (Indonesia Sustainable Finance Initiative) has issued its first green bond in June this year in the amount of IDR 5 trillion, subscribed four times. PT Bank Rakyat Indonesia (BRI) Tbk has issued its second sustainability bond in the same amount with BNI, where the use of proceeds will be distributed to energy efficiency, sustainable land-use, biodiversity, and water conservation projects.

GIZ, Low-Emissions Oil Palm Development in Berau District, East Kalimantan (LEOPALD)

With technical support from the GIZ-LEOPALD project, the Berau Estate Crop Agency successfully facilitated a sustainable value chain partnership between a palm oil mill company and 408 farmers in five villages organised in the Harapan Masyarakat Berau cooperative (combined farm areas of 2,415 ha) in February 2022. The agreement clearly defines the rights and responsibilities of the parties, covering the following essential stages of plantation development and management: (a) crop cultivation, (b) farm advisory service support, (c) harvesting, (d) trade and price, (e) environmental protection, and (f) occupational health and safety.

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

Since mid-2019, SCPOPP has been supporting four smallholder cooperatives to improve their organisational capacity and promoting good oil-palm plantation practices through farmer field schools to meet the ISPO (Indonesia Sustainable Palm Oil) and RSPO (Roundtable Sustainable Palm Oil) sustainability standards. The support is provided in cooperation with the Kutai Timur District Government extension office in the Kombeng sub-district and in coordination with two palm oil mill companies. In June and July 2022, 590 farmers of the four partner cooperatives—managing 1,048 farms (1,938 hectares)—were certified by ISPO and RSPO. SCPOPP introduces the simultaneous approach to independent smallholder certifications, in which the partner smallholders are guided and supported by assessing the sustainability gaps, performing corrective actions, and external audits concurrently for the two standards. The simultaneous approach serves not only to reduce costs by streamlining the farmer training programme and avoiding double implementation for the same activities but also as a measure to comply with the two standards.

GIZ, Climate and Biodiversity Hub Indonesia

The Ministry of Environment and Forestry with the support of IKI projects, namely "Climate and Biodiversity Hub Indonesia", "Support to the International Climate Initiative", and "Strategic Environmental Dialogues", hosted a G20 side event workshop on "G20 Partnership for Ocean-Based Action for Climate Mitigation and Adaptation" on 1 September 2022 at the Westin Hotel, Nusa Dua Bali. Indonesia proposes a G20 Partnership to explore opportunities to establish partnerships on the ocean-climate nexus to advance ocean-based mitigation and adaptation actions among all G20 members.

The Climate and Biodiversity Hub Indonesia alongside Konservasi Indonesia organised an IKI Thematic Workshop on Forestry and Peatland to provide a platform to facilitate exchange between BMUV representatives and IKI implementers in Indonesia on the challenges of forest and peatland management and how IKI projects could address these challenges. The workshop was opened by Parliamentary State Secretary of BMUV, Dr Bettina Hoffmann, and attended by the Director General for International Policy of BMUV, Dr Eva Kracht, BMUV delegates and seven IKI implementing organisations on 2 September 2022 at GIZ Country Office Indonesia, Jakarta. Participating IKI implementers were as follows: Konservasi Indonesia, Wetlands International, CIFOR, ICRAF, UNEP, FAO, and GIZ.

Bappenas, with the joint support by the Climate and Biodiversity Hub Indonesia project, WRI Indonesia (UK-funded project), UN PAGE, and GGGI held the G20 3rd Development Working Group Side Event — Towards Implementation and Beyond: Measuring the Progress of Low Carbon and Green Economy on 9 August 2022. At the event, the Green Economy Index was launched, followed by a talk-show on the Nexus Between Development, Climate Change, and Biodiversity. The project also provided a G20 exhibition booth on 8-9 August 2022 to promote awareness on the nexus between climate, biodiversity, and low carbon development.

INTERNATIONAL CLIMATE INITIATIVE (IKI) IN

INDONESIA

53 Projects under Implementation



22 Political Partners

Coordinating Ministry of Economic Affairs

Ministry of National Development Planning (Bappenas)

Ministry of Environment and Forestry (KLHK)

Ministry of Energy and Mineral Resources (ESDM)

Ministry of Transportation

Ministry of Finance

Ministry of Industry

Ministry of Marine Affairs and Fisheries

Ministry of Agriculture

Executive Office of the President of the Republic of Indonesia

National Authority for Marine Conservation Areas (MMAF) Peatland and Mangrove Restoration Agency (BRGM)

Association of Southeast Asian Nations (ASEAN)

National Park Authority of Bukit Barisan Selatan (BBS)

Provincial Government of Lampung

Provincial Forestry Service of Jambi

Provincial Marine and Fishery Service of Aceh

Provincial Marine and Fishery Service of North Sulawesi

Provincial Marine and Fishery Service of West Nusa Tenggara

District Government of Pesisir Barat

District Government of Lampung Barat

District Government of Kapuas Hulu

25 Implementing Organisations

Adelphi

Berlin Governance Platform (BGP) gGmbH

Center for International Forestry Research (CIFOR)

Conservation International (CI)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Deutsches Institut für Wirtschaftsforschung e.V. (DIW)

ICLEI - Local Governments for Sustainability

International Council on Clean Transportation (ICCT)

Institut du Développement Durable et des Relations Internationales (IDDRI)

Institute for Transportation & Development Policy (ITDP)

International Institute for Applied Systems Analysis (IIASA)

Kreditbank für Wiederaufbau (KfW)

The Organisation for Economic Cooperation and Development (OECD)

Perkumpulan Desa Lestari

Perspectives Climate Group GmbH

Rare

Renewables Academy AG (RENAC)

Secretary of Convention on Migratory Species Office (CMS)

su-re.co (Sustainability & Resilience)

United Nations Development Programme (UNDP)

United Nations Environment Programme (UN Environment)

United Nations Office for Project Services (UNOPS)

World Agroforestry Centre (ICRAF)

World Bank Group

World Wide Fund for Nature (WWF)

INDONESIA

ADAPTATION

Climate Change Impacts



Maritime and Fisheries

FORESTRY / REDD+ country in the world with the 3rd largest extent of rainforest of Indonesia's total land area is Nearly 11% covered by peatlands of Indonesia's total carbon 40% emissions are the result of peatland conversion estimated economic loss due to \$16 billion peat fires in 2015 according to the World Bank Deforestation and land-use change have driven around 80% of Indonesia's greenhouse gas emissions © GIZ

MITIGATION

Greenhouse Gas (GHG) Emissions



BIODIVERSITY on the World's 17 1st **Megadiverse Countries list** on the World's 25 2nd **Biodiversity Hotspots list** on the WWF 'Global 200' 18 **Ecoregions list** on BirdLife International's 24 **Endemic Bird Areas list** national parks covering 36,069,368.04 hectares: 490 terrestrial protected areas 566 and 76 marine protected areas © GIZ / Ranak Martin





Indonesian Green Economy Index Launch at the G20 3rd Development Working Group Side Event "Towards Implementation and Beyond: Measuring the Progress of Low Carbon and Green Economy"

By GIZ, Climate and Biodiversity Hub Indonesia (ClimB Component)

The latest report of the Intergovernmental Panel for Climate Change (IPCC) published in 2022 highlighted the fact that the impact of climate change was more intense and severe than previously expected. Within the last two years, the surging impact of climate-related crises has collided with the COVID-19 pandemic and created a multidimensional crisis that has affected every aspect of life, especially the economy. Indonesia, like many other countries, experienced an economic slowdown due to the pandemic. Indonesia's effort to escape the middle-income trap while at the same time addressing climate change impacts should be doubled to revive the economy and return to prepandemic levels.



Green Economy Index Launch

The Ministry of National Development Planning (Bappenas) has established the Economic Transformation Strategy with Green Economy as one of the "game-changers" to emerge from the crisis better and stronger—following Indonesia's G20 presidency theme "Recover Together, Recover Stronger". Moving forward, the transition towards a Green Economy with low carbon emissions and climate resilience development will require specific tools and approaches to measure the effectiveness of the

Green Economy transformation progress and its achievements.

The Ministry of National Development Planning (Bappenas) held the G20 3rd Development Working Group Side Event on 9 August 2022 "Towards Implementation and Beyond: Measuring the Progress of Low Carbon and Green Economy". The highlights of the event included the launch of the Green Economy Index and a discussion session on the Nexus Between Development, Climate Change, and Biodiversity.



Exhibition booth

GIZ, through the Climate and Biodiversity Hub (ClimB Component) also supported Bappenas in exhibition booth on 8-9 August 2022 together with other development partners including WRI Indonesia, UN PAGE, and GGGI.

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Low Carbon and Climate Resilience Development as the backbone of the Green Economy to achieve SDG Goal 13

By GIZ, Climate and Biodiversity Hub Indonesia (ClimB Component)

The commitment of the Government of Indonesia to tackle climate change is reflected by the fact that environmental issues have been declared National Priority 6 (PN6) in the 2020-2024 National Medium Term Development Plan (RPJMN), which includes a Low Carbon Development (LCDI) in the Priority 3 Programme (PP3) and Climate Resilience in the Priority 2



Programme (PP2). As a result, GHG emission reductions have been included in the 2020-2024 RPJMN Macroeconomic Framework with the target of reducing GHG emissions by 27.3 percent by 2024.

The Directorate of Environmental Affairs and the Ministry of National Development Planning (Bappenas) held a Regional Workshop on Low Carbon and Climate Resilience Development through the Low Carbon Development Indonesia (LCDI) Secretariat with support from the Climate and Biodiversity Hub (ClimB Component) as well as other development partners. The workshop consisted of two sessions. The first session was held on 10-12 August 2022 in Bali, involving 205 participants representing governments from 18 provinces in the eastern region. The second session was held on 23-25 August 2022 in involving 207 Semarang, participants representing governments from 16 provinces in western and central regions. The workshop aimed at mainstreaming SDG Goal 13 as the main objective in the Low Carbon and Climate Resilience actions, a higher integration of regional development planning, facilitating reporting and finalising Low Carbon actions in all provinces, and enhancing the capacity of local governments in planning and monitoring Low Carbon Development. The Director of Environmental **Affairs** of Bappenas, lr. Medrilzam, M. Prof.Econ, PhD, explained the context and encouraged participants to adopt the concept of a green economy and low carbon and climate resilience development as pillars in preparing the Regional Medium-Term Development Plan (RPJMD) for the provinces, districts and cities.



Introduction to Low Carbon and Climate Resilience Development by the Director of Environmental Affairs of Bappenas

The Climate and Biodiversity Hub project commissioned by the Federal Ministry for Economic Affairs and Climate Action (BMWK) continued to contribute to enhancing the national monitoring and evaluation system called AKSARA (Indonesia Low Carbon Development and Climate Resilience Planning and Monitoring Application) to allow for an effective monitoring of the LCDI implementation.

Thanks to the event, participants gained knowledge on how to monitor, evaluate, and report on low carbon actions through the AKSARA platform as well as knowledge on Climate Resilience Development (basic concepts, actions, and potential measures). During the workshop, 170 LCDI activities in districts and cities were reported, mostly from the waste management sector.

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G20 Partnership on Ocean-based Actions for Climate Adaptation and Mitigation

By GIZ, Climate and Biodiversity Hub Indonesia (CLARITY Component), Project Support for the International Climate Initiative, and Strategic Environmental Dialogues (SUD)

The Ministry of Environment and Forestry hosted a G20 side event workshop on "G20 Partnership for Ocean-Based Action for Climate Mitigation and Adaptation" on 1 September 2022 at the Westin Hotel in Nusa Dua, Bali, with the support of the Climate and Biodiversity Hub Indonesia, the Project Support for the International Climate Initiative and the Strategic Environmental Dialogues. At the workshop, Indonesia proposed a G20 Partnership to explore opportunities for new partnerships on the ocean-climate nexus to advance ocean-based mitigation and adaptation actions among all G20 members. A total of more than 100 online participants and almost 50 offline participants took part in the workshop.



As the side event of the Joint Environment and Climate Ministers' Meeting, the workshop served as a kick-off to exchange best practices, lessons learned, and knowledge, as well as research and innovation on coastal resilience and protection, equal social development, increased sink capacity of the ocean, and sustainable green-blue economies.

The G20 partnership will provide closer cooperation on the importance of enhancing the policy interface of social, physical, and economic sciences. Apart from that, G20 members can share their perspectives and experiences on policy options, research, innovation, and best practice examples for ocean-based actions for climate adaptation and mitigation. The G20 partnership is voluntary in nature. It will explore the possibility of engaging experts from G20 members, international organisations, and other relevant organisations.

The workshop was opened by the Indonesian Minister of Environment and Forestry and the Indonesian Minister of Marine Affairs and Fisheries. Among the key speakers were Prof. Nathan Bindhoff from the University of Tasmania in Australia (the Coordinating Lead Author of the IPCC SROCC), Mr. Victor Gustaf Manoppo (Director General of Marine Spatial Management), Prof. Kouadio Affian (Advisory Board of the UN Ocean Decade), Hide Sakaguchi (President of the Ocean Policy Research Institute of the Sakagawa Peace Foundation), and Prof. William Cheung (University of British Columbia). The closing remarks were delivered by Ibu Laksmi Dhewanti (Director General of Climate Change, Ministry of Environment and Forestry).

In her opening speech, the Indonesian Minister of Environment and Forestry reiterated that "the ocean and climate are inter-connected; hence climate change will affect the ocean in various aspects." The Minister expects that the results of this workshop can be used as a basis for formulating policies for G20 countries, given that G20 members consist of countries that have coastlines and play a vital role in significantly reducing greenhouse gas emission, promoting the role of research, innovation, and development in technology.

Delegates from the UK Government, the German Embassy and the Governments of India and Brazil, as upcoming G20 presidencies, also participated in the workshop and expressed their interest in joining the partnership.

KLHK expects that the partnership will benefit from any avenue in the upcoming G20 CSWG meetings. KLHK is also planning to hold a follow-up workshop in Sharm-el-Sheikh in conjunction with the UNFCCC COP 27. Further information is available here.



Group photo session with Chair EDM-CSWG

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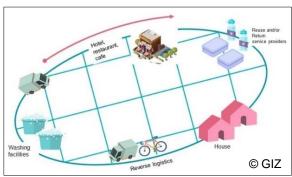
Reusable Grid Infrastructure to support Single-Use Plastic Prevention on Food Delivery Service in DKI Jakarta Province

By GIZ, The Collaborative Actions for Single Use Plastic Prevention in Southeast Asia (CAP SEA) Project

Reuse is considered one of the most sustainable alternatives for upstream solutions to curb plastic waste. To this end, GIZ Indonesia is supporting solution providers to mainstream their reuse initiatives through Collaborative Actions for Single Use Plastic Prevention in Southeast Asia (CAP SEA). In Jakarta, CAP SEA is collaborating with The Indonesian Plastic Diet Movement (GIDKP) and ALLAS by Enviu to create



a favourable ecosystem for reusable packaging for food delivery service in the DKI Jakarta Province. The partnership has organised a public consultation and a webinar on "Single-Use Plastic (SUP) Prevention on Food Delivery Service in DKI Jakarta Province" by bringing together leading public sector actors, businesses, and community representatives to discuss the feasibility of creating a reusable grid infrastructure in the city.



Reusable grid infrastructure for F&B delivery service

National and local policies supporting SUP prevention

Reuse initiatives are aligned with the principle of waste reduction from the sources that are embedded in the KLHK Regulation No. 75/2019. During the webinar on "Single-Use Plastic (SUP) Prevention on Food Delivery Service in DKI Jakarta Province", Mrs. Ir. Sinta Saptarina Soemiarno, M. Sc., Director of Waste Reduction of KLHK, reiterated that the regulation not only set national policies for SUP prevention but also set the mandate for the local government to support the targets stipulated by the KLHK Regulation No. 75/2019.



The panellists during a webinar on 29 August 2022

During the <u>webinar</u>, Mrs. Rita Ningsih, Section Head of Waste Management of The Environmental Office of DKI Jakarta, shared that the Provincial Government has pushed policies for SUP waste reduction, namely Governor Regulation No. 142/2019, concerning the mandatory use of environmentally friendly shopping bags which is supported by the fiscal incentives provision regulated under Governor Regulation No. 111/2021. She highlighted that those fiscal incentives boosted compliance for using environmentally friendly shopping bags. "In this regard, the compliance level of the targeted location can increase significantly to more than 90%, especially in traditional markets where levels are still below 45% according to recent monitoring."

Mrs. Sinta's deputy, Mr. Ujang Solihin Sidik, also stated at a public consultation event that the regulation has stimulated socioentrepreneurship as well as sustainable and business models through the innovative utilisation of digital ecosystems in Indonesia. He noted that as of May 2022, there are 145 business actors that actively support circular economy business models, including bulk stores, refill, reuse, waste collectors, and upcycling actions. This gives rise to hope for a future with less plastic waste in Indonesia.

The viability of reusable grid infrastructure for food & beverage delivery service

CAP SEA's online baseline survey (mid2022) regarding reuse systems for food and beverage delivery services has revealed the following critical measures for scaling-up reuse initiatives: (1) near zero emission of the reverse logistics system; (2) policies regulating reuse practices in the field; (3) massive communication & campaigns for government regulations; (4) financial incentive to improve product affordability.

Meanwhile, the public consultation and webinar concluded that (a) a standardisation for reusable products, (b) mechanisms and policies to ensure hygiene, safe reusable practices, and product affordability, and (c) infrastructure and platforms for door-to-door reverse logistics, including washing facilities, are decisive for the pace and trajectory of the shift towards reuse.

In light of these findings, CAP SEA, with the support of GIDKP and Allas by Enviu, is working on policy recommendations, hygiene and sanitation guidelines, and preliminary risk profiling for a reusable food and beverage



packaging study, as well as providing monitoring and evaluation support for the viability of reusable packaging systems in food delivery in Jakarta to assist the DKI Jakarta Provincial Government in the shift towards reuse.



A moderated focus group discussion during public consultation on 27 July 2022 with participants from government, civil society organisations, online food & beverage service providers, restaurants & cafés, and reusable businesses

CAP SEA is a module of GIZ's global project to support the Export Initiative Environmental Protection of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).

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2nd CAP SEA Indonesia Dialogue Series "Single-use Products in a Plastics Circular Economy"

By GIZ, The Collaborative Actions for Single Use Plastic Prevention in Southeast Asia (CAP SEA) Project

On 2 August 2022, The Collaborative Actions for Single Use Plastic Prevention in Southeast Asia (CAP SEA) in partnership with the Coordinating Ministry of Maritime Affairs and Investment (Kemenko Marves) and the Indonesia National Plastic Action Partnership (NPAP) held the second CAP SEA Indonesia Dialogue Series which aimed to provide knowledge on the overall impact of single-use plastic products and their substitution along with a debate on alternative solutions that are more sustainable in the long term, such as reusable and refillable products.

Remarks from the Assistant Deputy of Waste Management, Kemenko Marves, Mr. Rofi Alhanif, kicked off the event. He highlighted that material substitution alone (to bio-based/bio-degradable products) is insufficient to tackle plastic waste. Circular design and innovative business models such as reuse and refill systems need to be widely promoted. This transition effort is highly aligned with a full lifecycle plastic approach adopted in the recent UN Resolution: End Plastic Pollution. On the national level, Mr. Rofi Alhanif stressed that the government's effort alone is inadequate to achieve the target of the Presidential Regulation 83/2018 to reduce marine plastic debris by 70% by 2025. He expects businesses to become actively involved to collaboratively create solutions.

During the event, Mrs. Tiza Mafira, Executive Director of Gerakan Indonesia Diet Kantong Plastik (GIDKP), discussed some findings of the CAP SEA pilot project's baseline study to assess initial attitudes and behaviour for reuse solutions in food delivery systems. The baseline revealed that 90% of respondents (ALLAS' customers) have carried out refill-at-home initiatives. With comprehensive support, this provides an opportunity for the wider adoption of reuse practices.



The panellists during a dialogue series on 2 August 2022

Highlighting the business practices supporting reuse models, Mr. Eric Kawabata, Asia Pacific Manager of Loop, discussed some key approaches to reuse practices. He emphasised that "reuse should be easy, convenient, and affordable". To this end, he underlined that reuse advocates need to attract investment for reuse infrastructure and he encouraged solution providers to build broad partnerships with local and global brands.



For the refill model, Mr. Laksamana Sakti, Head of Operation from Siklus, underlined that the product price is a very essential factor for a household's decision to incorporate more environmentally friendly behaviour and adopt such solutions. Therefore, support from producers and the government to create a circular supply chain system is extremely important.

Until the beginning of January 2023, three additional dialogue events will be carried out to familiarise Indonesia's stakeholders with upstream solutions for single-use plastic (SUP) prevention.

CAP SEA is funded by the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV) and is part of the GIZ global project to support the Export Initiative Environmental Protection.

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Executive Leadership Programme (ELP) of Bank Indonesia includes Sustainable Finance

By WWF-Indonesia, IKI Green Finance Project Asia

The implementation of sustainable finance strategies is gaining momentum globally. The increasing application of the concept of Environment, Social, Governance (ESG) in the financial industry is also affecting the central bank and the regulatory framework of financial supervisors.

Bank Indonesia, as the central bank, has an Executive Leadership Programme (ELP) that also included sustainable finance. The programme was aimed at Directors and Managerial staff and invited WWF-Indonesia to introduce the SUSREG (Sustainable Financial Regulations and Central Bank Activities), a framework and tool to assess how financial regulators, supervisors, and central banks integrate climate and broader environmental and social considerations in their practice. As this tool has helped assess 40

countries, it provides a detailed practical guidance to help regulators advance the E&S integration into their oversight and monetary policies.



Bank Indonesia ELP Programme for Managers and Assistant Managers, 6 June 2022, attended by 68 participants

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IKBI Training Programme: Agriculture and Forestry Risk Management in the Banking Sector

By WWF-Indonesia, IKI Green Finance Project Asia

Supported by IKI and in collaboration ith UNEP FI, the Indonesia Sustainable Finance Initiative (IKBI) has organised four series of training programmes on Agriculture and Forestry Risk Management for the banking sector. It was attended by 153 participants representing 20 financial institutions and regulators and hosted by IKBI members such as PT SMI and HSBC Indonesia. Speakers included representative from the UNEP FI, OJK, WWF-Indonesia, BNI, BRI, UNEP WCMC, Agri 3 Funds, AndGreen, BPDP LH, Trase, and WRI. The training was carried out on a weekly basis from 8 June to 6 July 2022.

The training programme was divided into four sessions: 1) Introduction to Sustainable Land-Use and Land Conversion Risk; 2) Risk Identification, Screening, and Assessment; 3) Managing Financial Risks and Exploring Opportunities; and 4) Business Case and Exercise as closing session.





IKBI, UNEP FI Training Programme, Supported by IKI

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G20 – Finance Track Side Event: Scaling Up Green Finance in Indonesia

By WWF-Indonesia, IKI Green Finance Project Asia

Bank Indonesia convened a seminar on Scaling Up Green Finance in Indonesia in collaboration with the Indonesian Chamber of Commerce (KADIN) and Indonesian Sustainable Finance Initiative (IKBI) as part of the Official G20 Finance Track Side Event, at the Bali Nusa Dua Convention Center (BNDCC) on 15 July 2022.

The session was kicked-off by Juda Agung, Deputy Governor of Bank Indonesia, who provided Leader Insight. He clearly mentioned that without proper mitigation measures, extreme weather events will cause an economic cost that equals 40% of Indonesia's GDP by 2050. However, with mitigation measures in accordance with the Paris Agreement, the cost will only amount to 4% of the Indonesia's GDP by 2050.

Shinta Kamdani Widjaja, Chair of B20 Indonesia 2022, Coordinator and Deputy Chair for Maritime, Investment, and International Relation Affairs of KADIN Indonesia, as well as Board Member of WWF-Indonesia, mentioned that the current movement and policies are on track and aligned across institutions. KADIN has attempted

to promote the net zero Bank Indonesia has started to integrate E&S considerations into its foreign exchange management and IKBI has promoted ESG integration as a key prerequisite.

In addition, Yati Kurniati, Executive Director at the Macroprudential Policy Department of Bank Indonesia, explained the roadmap of Bank Indonesia incentivising the banks to contribute to meeting the net zero target aligned with the NDC.



Yati Kurniati explained the roadmap to net zero emissions for the banking sector

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G20 Side Event: Our Roles in Sustainable Finance

By WWF-Indonesia, IKI Green Finance Project Asia

The G20 Sustainable Finance Working Group (SFWG) has received a mandate by the Finance Ministers and Central Bank Governors to develop a G20 Sustainable Finance Roadmap ("the roadmap") to help focus the attention of the G20, international organisations, and stakeholders on key priorities of the sustainable finance agenda and form consensus on key actions to be taken. Bank Indonesia, in collaboration with WWF-Indonesia and the Indonesia Sustainable Finance Initiative (IKBI), convened a seminar on "Our Roles in Sustainable Finance" as part of the Official G20 Finance Track awareness programme series on sustainable finance focusing on aligning investment with the sustainability goals.



The first session was held at the Bank Indonesia museum. Haris Munandar, Director and Head International Policy Group, Bank Indonesia, and Dian Lestari, Director of the Center for Climate Change Finance and Multilateral Policy—both of them are Co-Chairs of the SFWG under the Indonesian Presidency—hosted the panel with WWF-Indonesia Rizkiasari Yudawinata, Sustainable Finance Programme Lead. Munandar underlined the importance of taking into account climate-related risks as part of risk management. In addition, Lestari stated that the financing needs for mitigating GHG emission and adapting to climate change amounted to IDR 3,400 trillion.

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Improving the Quality of Bandung BTS Drivers with Training and Certification

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



Trainer from SUTRI NAMA & INDOBUS explaining safety and eco-driving

One form of collaboration between the Ministry of Transportation (MoT) and SUTRI NAMA & INDOBUS in developing sustainable transport projects in Indonesia through the development of a bus rapid transit (BRT) system is capacity-building activities within the national and local institutions. The capacity development programme consists of training, competency tests and certification for bus drivers of selected operators who are contracted under the MoT's Buy the Service (BTS) programme. This activity aims to improve the quality of public transport.

The BTS programme aims to operate bus services in five cities by the end of 2020: Palembang, Surakarta, Medan, Yogyakarta, and Denpasar. The programmes were launched in Palembang and Surakarta in 2020. As of January 2022, BTS operations have expanded to major metropolitan cities such as Bandung, Makassar, and Surabaya, as well as Banyumas in Central Java and Banjarmasin in South Kalimantan.

After being successfully carried out in Makassar 2022 23-28 May with 95 TransMamminasata bus drivers, the training activity was also successfully held in Bandung on 13-25 June 2022 with 191 BTS Trans Metro Pasundan drivers. In his speech at the opening of the event, MoT's Head of Mass Transportation Division, Hadi Setyabudi Pramono, appreciated the collaboration

between MoT and SUTRI NAMA & INDOBUS with this driver training activity. He said he hoped that all drivers would gain a lot of knowledge to improve the capabilities and services of BTS in Bandung.

Due to the high number of participants, the driver training in Bandung was divided into two groups. With guidance from transport experts from SUTRI NAMA & INDOBUS, the approx. two-week training programme included lessons on safety, a friendly driving etiquette, and how to use the engine system on buses to make them more environmentally friendly.



BTS Driver Training Bandung participants using a driving simulator

Apart from theoretical classes, participants also applied their knowledge on traffic signs and road terrain through a bus simulator. The programme also included driving a bus on the street, followed by parking practices. At the end of the activity, all participants did a competency test and finally, 191 drivers got certified by the assessors.

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Gaining Knowledge on Sustainable Urban Transport from Capacity Development

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

The success of implementing sustainable urban transport in the bus rapid transit (BRT) system cannot be separated from the readiness of decision-making officials who already possess knowledge of the functions and services of



good public transportation. This readiness to manage sustainable urban transport in accordance with international standards has become one of the focuses of the collaboration between the Indonesian Ministry of Transportation (MoT) and SUTRI NAMA & INDOBUS through its Capacity Building activities.

This year, Capacity Building activities were held in Jakarta from 11 July to 16 August 2022. The participants were representatives from various agencies that will be responsible for the construction of BRT systems in five pilot cities in Indonesia, ranging from the Transportation local operators and Agency to Environmental Agency. "This activity is expected to be a forum for the exchange of knowledge that is beneficial for the development of sustainable urban transport and BRT in Indonesia's five pilot cities," said MoT's Sub-directorate of Urban Transport, Tonny Agus Setiono, in his speech during the opening ceremony.



Participants during a presentation on urban transport planning

With activities being organised over a period of one month, about 150 participants attended discussion sessions and workshops guided by trainers from SUTRI NAMA & INDOBUS, which divided were according to seven predetermined Capacity Development modules, namely: (1) Urban transport planning with an emphasis on integrated BRT systems; (2) Development and implementation of nonmotorised transport (NMT) facilities and parking projects; (3) Transport demand modelling and simulation of infrastructure impact; (4) Infrastructure investment and financing; (5) Tender processes for sustainable urban transport projects; (6) BRT management and operations; and (7) Measurement, reporting, and verification (MRV) of greenhouse gases (GHGs).



Participants visiting the PT TransJakarta electric bus garage

In addition, participants joined working visit sessions at the National Public Procurement Agency (LKKP), DKI Jakarta Government Procurement Service Agency (BPPBJ), DKI Jakarta Transport Agency, and PT Mayasari Bakti. At LKKP and BPPBJ, participants inquired about a proper and fair BRT facility procurement flow. The Capacity Building concluded with a final exam and the awarding of certificates to all participants.

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ITDP Indonesia Submits Medan City Inclusive Mobility Consensus and Recommendation Documents

By ITDP, Reducing Emissions through Integration and Optimization of Public Transport in Indonesia

The submission of the Medan City Inclusive Mobility Planning Process document and the Medan City Inclusive Mobility Recommendation were received by the Mayor of Medan, Bobby Nasution, represented by the Head of the Medan City Transportation Service, Iswar, at the Medan Mayor's Office, on 26 July 2022.

The process of submitting this document was also witnessed by OPD representatives within the Medan City Government and a number of community groups. The Head of Medan



Transportation Office, Iswar, expressed his gratitude to ITDP Indonesia for compiling this recommendation document. The submitted planning document will certainly be an important input for the Medan City Government in building a better transportation system in Medan City in line with the vision and mission of the Mayor of Medan, Bobby Nasution, and Deputy Mayor of Medan, H Aulia Rachman.

"Development must begin with planning. Therefore, I appreciate and thank ITDP Indonesia for compiling a recommendation document and consensus on inclusive mobility for the City of Medan," said Iswar. He also that the submission of recommendation document and the consensus on inclusive mobility of the City of Medan will result in the commitment of all parties to carry out these recommendations. "Thus, we hope that the recommendations and consensus on inclusive mobility of the City of Medan can be useful for the Medan Government, especially for all the people of the city of Medan," he said.



Institute for Transportation and Development Policy (ITDP) Indonesia submitted the Medan City Inclusive Mobility Recommendation and Consensus document to the Medan City Government (Pemko)

Meanwhile, Faela Sufa, as ITDP's Southeast Asia Director, said that ITDP has been accompanying the Medan City Government for a long time in planning arrangements for public transportation and pedestrian facilities. It is possible that it will be implemented in the future so that the city of Medan will have better mass transportation.

"We also ensure that the implementation of this transformation system can be accessed by all people in the city of Medan," said Faela Sufa. Faela Sufa also added that Medan City's inclusive mobility consensus and recommendation document was prepared based on field observations and discussions by various community groups. They hope that the submission of this document will be the first step in making Medan a city of collaboration for vulnerable communities and for all. Further information is available here.

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Kota Tua Revitalisation into Low Emission Zone

By ITDP, Reducing Emissions through Integration and Optimization of Public Transport in Indonesia



Revitalising Kota Tua into a lower emission zone and a better pedestrian area

The Kota Tua tourist area was designated as a low emission zone (LEZ). DKI Jakarta Governor Anies Baswedan said that this measure was aimed at reducing pollution and congestion. To achieve this, the Provincial Government of DKI Jakarta has prepared pedestrian facilities covering an area of 29,000 square meters.

Several pedestrian facilities have been prepared at various sites, including Plaza Lada and Kemukus, Plaza Transit BEOS, North Kali Besar Promenade, and several other pedestrian spaces around Kota Tua. This area is now connected to various modes of public transportation, such as TransJakarta, the Commuter Line and soon MRT. With the launch of Kota Tua as LEZ, ITDP Indonesia is preparing a recommendation document to assess the



traffic management, PT and NMT mobility as well as air quality. The document was released in September.

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Indonesia Toll Road Authority (BPJT) Announces Special Application for Users

By ITDP, Reducing Emissions through Integration and Optimization of Public Transport in Indonesia

The card-free and stop-toll transaction system or Multi Lane Free Flow (MLFF) is scheduled to start testing at the end of 2022.

There are several alternative technologies that can be used as ETC is already used by other countries, including: Dedicated Short Range Communication (DSRC), Radio Frequency Identification (RFID), Automatic Number Plate Recognition (ANPR), Global Navigation Satellite System (GNSS), and Short-Range Communication based on Calm Active Infrared (ISRC).

In assisting Jakarta in implementing an Electronic Road Pricing (ERP) system, ITDP cooperates with Indonesia Toll Road Authority (BPJT) to analyse the GNSS system that has the potential to become a technology system used in ERP. Further information is available here.



A number of toll service users making payment transactions at the Karang Tengah toll gate, Tangerang

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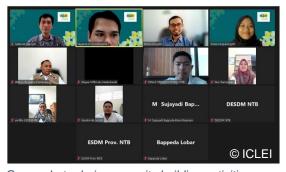
Capacity Building on Renewable Energy (RE) Technology: Solar, Wind, Geothermal, Waste, and Biomass

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

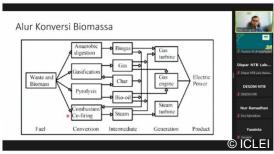
ICLEI's 100% RE team has carried out capacity building activities to increase local stakeholder capacity and participation in 100% RE projects. The workshop was held on 10 August 2022 and aimed to increase the West Nusa Tenggara (WNT) Province's ability to fulfil its needs in implementing the 100% RE project.

The workshop invited the representatives of the Regional Development Planning Board (Bappeda) in the WNT province and the Project Implementation Team (PIT) of the 100% RE Project, which consisted of stakeholders from various departments, including the department of energy and mineral resources, the department of transportation, the department of tourism, the department of agriculture and plantation, the department of public works and spatial planning, as well as universities.

The workshop covered different renewable energy technologies: solar, wind, geothermal, waste, and biomass. It aimed at increasing the knowledge about various renewable energy technologies that can be implemented in the region.



Group photo during capacity building activities



Panellist presents material during the workshop

The session also discussed several challenges faced by the local governments in transitioning to completely clean and renewable resources. The challenges included overlapping cross-sectoral regulations, inadequate horizontal and vertical coordination, and limited access to funding and technology.

Qualified and skilled staff is needed to overcome these challenges. ICLEI will support the WNT Province by providing capacity building activities to develop and implement a 100% renewable energy strategy.

This is one out of 9 priority topics of the capacity building activities focusing on (i) technical aspects, (ii) regulation, planning, and monitoring, and (iii) financing aspects that have been identified through three processes:

The capacity building needs of the WNT Province have been identified through three processes:

- Debate on and engagement on the project development process with key stakeholders
- A lighter assessment was conducted in July 2020 where an online survey was distributed to participants in a deep-dive kick-off meeting
- 3. A comprehensive assessment was conducted between December 2020 and January 2021 with various stakeholders

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Indonesia's G20 presidency to lead a sustainable energy transition toward global economic recovery

By GIZ Clean, Affordable and Secure Energy for Southeast Asia (CASE)

The Clean, Affordable, and Secure Energy for Southeast Asia (CASE) programme and the Ministry of National Development Planning (Bappenas) conducted an expert sharing session at the G20 3rd Development Working Group (DWG) Side Event on 8 August 2022.

The objective of the event was to share national perspectives and experiences on concrete approaches and measures to achieve the decarbonisation of the power system based on each country's respective situation.

Raden Siliwanti, the Co-Chair of the G20 DWG and Director of Multilateral Funding at Bappenas, opened the event by stating the importance of mainstreaming a just and inclusive transition in this year's DWG.

Providing a comparison across some G20 countries, Dr. Tharinya Supasa, Project Lead on Energy Policy of Southeast Asia at Agora Energiewende, emphasised that a larger share of COVID-19 recovery spending must be allocated to green spending. G20 countries had caused 80% of global greenhouse gas emissions, with fossil fuels subsidies still being significant—around USD 3.3 trillion between 2015 and 2019.

Jadhie J. Ardajat, Chief Planner for the Directorate of Electricity, Telecommunications, and Informatics at Bappenas, reiterated Indonesia's 2045 vision, which will help Indonesia to get out of the middle-income trap while achieving a green economy and an energy transition for the economic transformation.

Sharing the perspective of South Korea, Seungchan Chang, Korea Energy Agency's Technology Certification Team Lead at the New and Renewable Energy Division, stated the country's ambition to achieve NZE by 2050 through a focus on bolstering South Korea's industrial research and manufacturing capacities for carbon-neutral technologies, including renewable energies.

Sharlin Hemraj shared the South African example of a carbon tax as an instrument to incentivise emissions reductions. The carbon tax, now set at USD 8.58 per ton of carbon dioxide equivalent, will be revenue-neutral and have minimal impact on the price of electricity during its first phase due to tax incentives and credits.

Meanwhile, Germany had committed to phase out coal by 2038, or possibly even earlier, on top of its NZE resolution for 2045. Anne Baguette, Economic Advisor of the Federal Network Agency—German's regulatory office for utilities—explained about the country's measure to phase out hard coal through auction processes.

The panel further agreed that the current global energy crisis reconfirmed the urgency to move towards a decarbonised energy system through reduced dependence on fossil fuel imports and a greater focus on energy conservation and efficiency.

Lisa Tinschert, the Director of the Energy Programme at GIZ Indonesia, concluded the session by restating the importance of decarbonising the power system through cooperation between G20 countries.



Raden Siliwanti, Jadhie J. Ardajat, Seungchan Chang, Sharlin Hemraj, Anne Baguette, Tharinya Supasa, and the CASE team

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Exploring the Future of Greer Hydrogen from Geothermal

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

Indonesia has the potential to be a major green hydrogen producer thanks to its abundant reserves of geothermal energy. In fact, Indonesia has the largest latent geothermal resources in the world making it a potential key green hydrogen player for domestic and international markets.

Because of its high-capacity factor essential for hydrogen production plants and other downstream facilities, geothermal power generation is an attractive energy source for creating green hydrogen. Geothermal's potential for 'base load' power generation on the electricity market is decisive for a stable energy supply.

To encourage further development of green hydrogen from geothermal energy, ExploRE partners with Pertamina and Jacobs to undertake a preliminary desktop study to assess Indonesia's potential for developing the green hydrogen geothermal sector of scale. The study includes the potential production of green hydrogen from geothermal, the potential application for domestic and international markets as well as an analysis of applicable market priorities as well as business and financial schemes.



Screenshot from online presentation attended by Pertamina Research, Technology & Innovation, Pertamina Power Indonesia and Pertamina Geothermal Energy

Launched in 2021, the study is currently entering the final stage. On 23 August 2022, ExploRE met with Pertamina and Jacobs to analyse the results of the study. Pertamina

Holdings was represented by Pertamina Research, Technology and Innovation (RTI), Pertamina Power Indonesia (PPI), and Pertamina Geothermal Energy (PGE).

The findings of this study provide strategic recommendations which can serve as a basis for policy making, market development, and innovative pilot projects. Specifically, the study will feed into Pertamina's future steps for the development of green hydrogen from geothermal. Apart from that, ExploRE will use the findings of this study for further research on the "Thematic Study of the National Medium-Term Development Planning (RPJMN) 2025-2029 on Indonesia's Green Hydrogen Deployment Strategy". This advanced step will be jointly undertaken with the Ministry of National Development Planning (Bappenas) later this year.

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Joint Study on Fossil Fuel Substitution with Bio-CNG

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

In line with the project mandate to provide strategic options for renewable energy development in Indonesia, ExploRE collaborates with PLN, GGGI and ADMC/TLFF to carry out a joint study on the conversion of fossil fuels at diesel power plants (PLTD) to Bio-CNG. Similar to natural gas in its properties, Bio-CNG is a versatile material with various utilisation potentials, one of which is to replace fossil fuels in a generator machine.

This conversion would be beneficial for PLN's effort to turn PLTD into a renewable energy power plant. This would also contribute to the de-dieselisation programme and widen the use of green technology and green fuels. Furthermore, the conversion could open up a new market (off-taker) and create a potential profit for business players.



The joint study will cover various key aspects, including technical feasibility, legal and financial aspects, with a case study on diesel conversion at PLTD Muara Wahau, East Kalimantan. The site was chosen due to its proximity with Bio-CNG installation owned by PT Darma Satya Nusantara Tbk (PT DSN Tbk)—is the first operating Bio-CNG producer in the country.

On 14-17 June 2022, ExploRE and other parties involved in the joint study visited the sites of PT DSN Bio-CNG installation and PLTD Muara Wahau. The visit aimed at facilitating a knowledge transfer process and a socialisation of the study as well as a collection of data. It was attended by representatives from the Directorate of Bioenergy of the Ministry of Energy and Mineral Resources, the Office of Energy and Mineral Resources of East Kalimantan Province, PLN, GIZ, GGGI, and TLFF.

The joint study on Bio-CNG conversion of PLTD aims to support green and sustainable development, specifically by contributing to the national energy mix target. It will also encourage public-private partnerships to create innovative solutions for low-emission renewable energy deployment. The study also aims to mobilise collective sources in conducting the technical and business assessment of Bio-CNG as a potential solution to significantly reduce emissions from fossil fuels.



Group photo taken during the site visit to Muara Wahau. East Kalimantan

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Improving Cold Chain Access with Green Energy

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

In collaboration with the University of Indonesia (P2M Teknik Mesin), ExploRE is currently conducting a study on improving cold chain access in Indonesia. The study identifies opportunities for utilising renewable energy and energy conservation in cold chain businesses. A priority sector highlighted in this study is fisheries, which is one of the main drivers of post-pandemic economic recovery. Despite the pandemic, the fisheries sector contributed 2.8% to the 2020 GDP (PDB, 2020). In the same year, fish exports grew by 7.96%, even more than the previous year when the pandemic was still far off.

Indonesia's cold chain industry is predicted to increase rapidly in the future. Thus, innovative technologies for sustainable cold chain access in the archipelago will become even more essential. Solar PV cold storage and solar ice makers are among the much-needed technology innovations in the cold chain industry, supporting the growth of the fisheries sector as well as contributing to achieving the energy mix target.



Focus Group Discussion on the Green Cold Chain Study, June 2022

To synergise the result of the Green Cold Chain Study with the national plan, ExploRE organised a focus group discussion (FGD) involving key stakeholders from related ministries. The discussion aimed at sharing the initial results of the study and at collecting inputs from all participants.



The discussion raised the urgency of multiparties' collaboration, involving the government, associations, and private sectors to fill the gap between cold chain demand and the availability of supporting infrastructure and facilities. Further exploration of renewable energy options to improve cold chain access is also necessary, taking into account that solar energy is dominating the sector. Advanced research on the use of solar energy in the cold chain industry also needs to address performance and efficiency.

At the end of the meeting, ExploRE shared a progress update on the Solar Ice Maker pilot project. Launched in 2019, the commissioning phase of the solar ice maker facility in Sulamu, East Nusa Tenggara, has been completed and the plant is now fully operational. SIM is currently serving small-scale fishers who used to buy ice blocks from Kupang, which is nearly 85 km away from Sulamu. The commissioning was followed by a training session for local operators at the site. A study on the socioeconomic impact of SIM will be conducted at a later stage.

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Biogas Digesters and Climate Field Schools for Farmers in Bali, Flores, and Java

By su-re.co, Biogas Initiative for Agriculture in Bali and Flores funded by carbon offset

The <u>Biogas Initiative for Agriculture</u> in Indonesia is a project implemented by su-re.co, a Balibased environmental think-do-be tank. The project aims to reduce emissions by installing small-scale biogas digesters across Bali, Flores, and Java. In total, 40 biogas digesters will be installed by October 2022. This project also includes a capacity building output to ensure the long-term success of biogas adoption while also improving the livelihood of the beneficiaries.

Starting in July 2022, su-re.co has organised four Climate Field Schools (CFS) with cacao

farmers in Mendoyo and Melaya, Bali, and coffee farmers in Kintamani, Bali, and Bajawa, Flores. su-re.co runs the CFSs together with the Indonesian Meteorology, Climatology, and Geophysical Agency (BMKG) and agricultural extension workers from the Assessment Institute for Agricultural Technology (AIAT). The team teaches farmers to understand climate data, adaptation practices, and conserving biodiversity by using the biogas digester and its organic fertiliser by-product.



Presentation during the Climate Field School in Melaya

In total, over 100 coffee and cacao farmers attended the CFSs from several cooperatives. Each CFS started with a field visit to one of the farms nearby to identify core problems. Then, farmers consulted with the local agriculture extension workers to define the action plan to tackle the problems based on climate and weather forecasting data provided by BMKG. Lastly, su-re.co explained the installation, maintenance, and benefits of biogas digesters.

After the field schools, su-re.co installed a biogas digester in each farmer group. In this way, pilot tests are carried out in each village so that biogas can be installed autonomously in the future. Many farmers often say that tangible proof is needed before they are willing to use the technology. By conducting a capacity building programme before the installation, farmers can understand and share the benefits of the digester. Biogas digesters are then installed not farmer-to-farmer but village-to-village. In Melaya, su-re.co supported one biogas installation, while 14 digesters were assembled by the farmers. The same happened in Bajawa, where five digesters were built in



cooperation with su-re.co and the remaining five were installed by the farmers.



Biogas installation in Bajawa

During the process, there were many lessons learned in terms of incentivising the farmers. For some farmers, the reduction of LPG and firewood was the main incentive for owning a digester, while others were attracted by the reduced use and purchase of chemical fertilisers. For instance, the Head of the Cipta Gemilang Cacao Farmer Group, I Ketut Dale, coordinated a mass installation for the farmers in Melaya, hoping that the farmers would be independent from fertilisers. "This biogas will be very useful for us, as we stopped receiving fertilisers during the pandemic," said I Ketut Dale.

A similar approach was pursued in Flores. Fabianus Deru, Head of the Famasa Coffee Cooperative in Bajawa, installed the biogas digester both in his house and in the cooperative office as a showcase for the village. "If we can turn untreated manure into organic fertilisers, we can solve many problems in our village. For instance, the contamination and smell from manure causes inconveniences in the neighbourhood. This way, we can collect manure centrally in our cooperative," said Fabianus Deru in one of the interviews.

Often, climate change adaptation and mitigation solutions are considered in a separate manner. However, they are more like two sides of the same coin that need to be addressed together. This project shows solutions at the intersection, such as the biogas digester combined with the CFS. With a mission to provide for the millions of smallholder farmers in the country, su-re.co hopes to be able to replicate this project in other areas of

Indonesia and collaborate with new partners in the future.

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Peatlands feature prominently in G20 discussions

By UNEP, Global Peatlands Initiative project

Following bilateral discussions with the Global Peatlands Initiative (GPI), led by UNEP and funded by the International Climate Initiative (IKI), on the need to enable synergies and partnerships for scaling climate and nature conservation action, Indonesia organised a series of three workshops to advance collaboration across the G20 countries to support implementation of the UNEA4 resolution on Peatlands and to point out the importance of including peatlands in action against land degradation, to support rapid climate and nature conservation action and for the health and well-being of people. The workshops are part of the G20 Environment Deputies Meeting and Climate Sustainability Working Group (EDM-CSWG) convened in June by Indonesia, which holds the presidency of the G20 grouping this year and were co-designed and supported technically by GPI. Such appreciation of the importance of peatlands for the planet, the people, and the climate and the need to protect, restore, and sustainably manage them at the G20 level is crucial as the G20 accounts for 78% of the global GHG emissions worldwide.

On 10 June 2022, the side-event entitled "multi-stakeholder engagement and southnorth-south collaboration on peatland ecosystems conservation and sustainable management" was opened by Dr Alue Dohong, Vice-Minister, Ministry of Environment and Forestry of the Republic of Indonesia (KLHK), with a keynote speech highlighting the need to enhance collaboration and partnerships to reduce land degradation and achieve better land quality and livelihoods. The first session presented successful cases of S-S and triangular collaboration including the GPI, which was recently highlighted as a SSC best practice across the UN system, and lessons learned by UNCCD and KLHK. The second session explored the role of donors and international agencies to build collaboration between countries with presentations from IFAD, the Government of Germany, and the International Tropical <u>Peatlands Center</u>, launched in 2018 in Indonesia with support from UNEP, CIFOR, and other GPI members as a centre of excellence for development and exchange of knowledge on conservation and sustainable management of peatland ecosystems.



Speakers at the G20 side event on peatlands on 10 June 2022

The second workshop, held on 19 June 2022 with contributions from GPI, UNCCD, KLHK, GMC, FAO, and ITPC, enabled the exchange of knowledge and lessons learned on the conservation and sustainable management of peatland ecosystems. The session raised awareness on the importance of peatland ecosystem inventory, mapping, monitoring, and reporting as the basis for developing policies to achieve successful conservation and sustainable management of peatland ecosystems at national, regional, international levels. The Global Peatlands Assessment (GPA), a GPI flagship to be launched at the UNFCCC COP27, will be a step in that direction. The GPA will be a comprehensive and accurate inventory of global peatlands and determine appropriate interventions, increase understanding of the value and potential of carbon sequestration, and aide decision-makers planning sustainable peatlands management.

Building on these discussions, <u>Indonesia</u> recently recognised the contribution of coastal ecosystems including peatlands in the country's <u>blue carbon</u>, and called on other countries to



preserve and rehabilitate them for the multiple ecosystem services they provide. The country is now aiming to include Blue Carbon Ecosystems in their NDC.

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Farmers in Baru and Daya Kesuma Village are ready to implement Eco-Friendly Agriculture through a trial of farming demonstration plots

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

Since mid-2022, farmers in Baru and Daya Kesuma Village in Banyuasin District, South Sumatra, have made demonstration plots. These are managed by the community under the guidance of researchers and experts and there goal was to find a model of environmentally friendly farming that increased livelihoods.

The selection of Baru and Daya Kesuma Village was based on a data collection that had been previously carried out by World Agroforestry (ICRAF) Indonesia. The data is processed and discussed with the community and other stakeholders by looking at how sustainable peat management can improve the economy of the community.



Demonstration plot of agrosilvofishery in Baru Village.

They hope that the farmers' capacities can be strengthened by implementing several intervention activities leading to environmentally friendly agriculture in six selected villages. The six Peat-IMPACTS target villages include Baru Village and Daya Kesuma Village in Banyuasin District.

In general, farmers still prefer traditional planting practices, especially the use of fertilisation, pesticides, and chemical fertilisers, which are still spread in inaccurate amounts. For this reason, the initial intervention to support environmentally friendly agriculture aims to produce solid and liquid organic fertilisers.



The spread of dolomite lime on rice field embankments to increase soil pH and neutralise acidity levels at Baru Village demonstration plot

In accordance with the data and in addition to environmentally friendly agriculture, the experiment carried out in Baru Village focused on agrosilvofishery and kelulut bee cultivation, while Daya Kesuma Village focused on maize and rice planting. The planting trial is carried out in phases, in which farmers are expected to adopt the provided training practices. Farmers will be able to see what agricultural practices they should best apply to their land.

There was a close cooperation on introducing the farming system as well as strengthening capacities on marketing aspects with village institutions called Village-Owned Enterprises (BUMDes). That way farmers and institutions such as BUMDes can continue working together when the programme is completed.





Demonstration plot of maize cultivation at Daya Kesuma Village

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SUPA/REPEAT Component 1 identified digital opportunities to monitor and prevent fire incidents in ASEAN Members States

By GIZ, Sustainable Use of Peatland and Haze Mitigation in ASEAN (SUPA)/REPEAT Component 1

Recognizing the need for greater efforts toward vigilance, preparedness, and early mobilisation of emergency response actions to mitigate fires during the drv season, SUPA/REPEAT Component 1 organised a webinar to discuss the potential of using digital tools to support monitoring and prevention of fire and haze on 3 August 2022. The primary goal of this event was to exchange knowledge and identify synergies and future opportunities for collaboration regarding the use of digital tools, with a focus on mobile phone apps, to address monitoring and prevention of fire and haze in ASEAN.

Dr. Nion Sirimongkonlertkun of Rajamangala University of Technology Lanna, Thailand, presented "Smoke Watch," an app that visualises near real time fire hotspot location from satellite observation data and provides fire hotspot monitoring for public sectors.

The second speaker, Dr. Dimitris Stratoulias, from the Asian Disaster Preparedness Center, explained the Mekong Air Quality Explorer Tool (MAQE). The app can develop location based on

'nowcasting' and 'forecasting' from ground measurements and the GEOS-5 satellite estimation.

The ASEAN Fire Alert Tool works as a platform that transmits information from available sources (mostly government agencies) to the public, private sector, individual landowners, and other stakeholders. Mr Faisal Parish from the Global Environment Centre explained that the app features hotspots and the Fire Danger Rating System (FDRS) from MET Malaysia using the Fire Weather Index with daily updates.

Dr. Israr Albar and Mr. Helmy Tariq Othman spoke about the use of digital tools to monitor and prevent forest fire in Indonesia and Malaysia, respectively.

More than 120 participants joined the webinar. During the discussion, it was recognised that the digital tools had similar elements including data inputs and sources, algorithms, objectives, and outputs. It was recommended that an exchange of experience is set up and conducted regularly to properly understand each app, and asses the possibility to extend its use for the public and agencies across the ASEAN Member States.

The presentations from this webinar can be accessed here.



Participants of "Digital Opportunities to Monitor and Prevent Fire Incidence in ASEAN Members States and Minimise the Risk of Haze Pollution" Webinar

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Kick-off Meeting to Establish West Papua Regional Mangrove Working Group

By Yayasan Konservasi Indonesia, Mitigation and Adaptation through Conservation and Sustainable Livelihood on Indonesia's Peat and Mangrove Ecosystems (IKI-PME programme)

The IKI-PME programme supports mangrove protection and their sustainable management in West Papua by establishing the Regional Mangrove Working Group (KKMD). This working group aims to be a communication and coordination platform for stakeholders to plan, implement, monitor, and evaluate activities related to mangrove conservation management on a regional level. The kick-off meeting to establish the West Papua Regional Mangrove Working Group (KKMD) was held on 5 July 2022 by the Forestry Agency of West Papua in collaboration with Yayasan Konservasi Indonesia (YKI). The event was supported by the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety Consumer Protection, BMUV, of the Federal Republic of Germany through the IKI-PME programme as well as the Ministry of Environment and Forestry (KHLK).

The meeting was attended by several key stakeholders from relevant government institutions, academic institutions, the private sector, and non-governmental organisations, including the Ministry of Environment and Forestry (KLHK), the Peatland and Mangrove Restoration Agency (BRGM), the West Papua Development Planning Regional (Bappeda), and the West Papua Natural Resources Conservation Agency (BBKSDA), the University of Papua, EcoNusa, the Global Green Growth Institute (GGGI), and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) under the Forests and Climate Change Programme (Forclime). The participants agreed to assign a small team consisting of 8 people to represent them and to formulate the organisational structure and membership system of the working group and to draft the governor decree on the regional mangrove working group. The small team consists of representatives from the Forestry Agency of West Papua, the Remu Ransiki Watershed and Protection Forest Management Agency, the West Papua Regional Research and Development Agency, the West Papua Development Planning Agency, the West Papua Tourism Agency, the West Papua Marine and Fisheries Agency, Yayasan Konservasi Indonesia, and the Association of Indonesian Forest Concessionaires.



Initiation Meeting to Establish the West Papua Regional Mangrove Working Group

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Geographic Information System (GIS) Training in North Sumatra

By Yayasan Konservasi Indonesia, Mitigation and Adaptation through Conservation and Sustainable Livelihood on Indonesia's Peat and Mangrove Ecosystems (IKI-PME programme)

The Geographic Information System (GIS) training was held in Medan on 26 and 27 July 2022 by the North Sumatra Provincial Government through the Provincial Regional Research and Development Agency (Bappeda) in collaboration with Yayasan Konservasi Indonesia (YKI) and the University of North Sumatra (USU).

The training was attended by 34 participants from the drafting team of the North Sumatra Peat Ecosystem Protection and management planning document (with representatives from



9 provincial agencies and representatives from 9 districts in North Sumatra, particularly districts that have peatlands in their area of authority, including Asahan, Labuhan Batu, North Labuhan Batu, South Labuhan Batu, Humbang Hasundutan, Samosir, Mandailing Natal, Central Tapanuli, and South Tapanuli).



Geographic Information System Training in North Sumatra

The purpose of this training was to increase the participants' capacity to manage and analyse spatial data particularly in order to accelerate the process of the peatland ecosystem protection and management document (RPPEG), both at the provincial and in the district level.

The training used several learning methods, such as presentation and discussion, and the GIS simulation. The materials provided during the training include the basic concept of GIS and spatial data, the projection map and coordinate system, the Geodatabase, the basic spatial analysis, the attribute table, and the map presentation. According to a training evaluation, 82% of participants were able to conduct simple GIS analysis and managed to provide correct GIS information. It is expected that the participants will be able to help their regional government to accelerate the process of the RPPEG development in each area.

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The Key to Coastal Zone Rehabilitation for Low Carbon Development in Indonesia

By Center for International Forestry Research (CIFOR), Yayasan Konservasi Indonesia, Mitigation and Adaptation through Conservation and Sustainable Livelihood on Indonesia's Peat and Mangrove Ecosystems (IKI-PME programme)

Low Carbon Development (LCD) is a new international funding support for the business-as-usual scenario until 2030. Wetland ecosystems in the coastal area, especially mangrove ecosystems, have great potential as nature-based climate solutions (NbCS). Therefore, the government of Indonesia is determined to rehabilitate 638,000 ha of mangroves until 2024. Mangrove rehabilitation is unique and vulnerable to land conversion and climate change, so a comprehensive strategy is required to achieve this ambitious target.



Resource person and participants of the Coastal Zone Rehabilitation for Low Carbon Development Webinar on 31 March 2022 prepared by CIFOR, AIPI, and Yayasan Konservasi Indonesia

This Info Brief is written based on the webinar conducted on 31 March 2022. In the Info Brief on Coastal Zone Rehabilitation for Low Carbon Development, we discuss various important aspects related to coastal zone rehabilitation, especially of mangroves, in Indonesia, from the policy aspect to the urgency of mangrove rehabilitation for climate change mitigation and adaptation to support low carbon development in Indonesia. In the published Info Brief, we make several recommendations: (1) 2030 is a year full of challenges and opportunities for Indonesia to show its leadership in climate change at the global level. Some of the national and global agenda goals need to be achieved



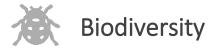
until this critical year; (2) Various national policies related to coastal zone rehabilitation, especially mangroves, will need to be synchronized harmonized and across institutions especially when the regulation is implemented at the local level. Consensus needs to be achieved in the form of open and honest dialogues for the success and sustainability of rehabilitation; (3) Very ambitious mangrove rehabilitation efforts need to be adjusted to the real conditions in the field related to the land status, social function, and value, as well as mangrove economy and ecology. Conservation of intact mangroves also requires serious action; and (4) Mangrove rehabilitation for climate change mitigation and adaptation needs to be performed simultaneously with an integrated monitoring, reporting, and verification system within at least ten years after the rehabilitation activities.



Recent publication "Rehabilitasi Kawasan Pesisir untuk Pembangunan Rendah Karbon"

The publication is available in Indonesian language and can be accessed by clicking on this link.

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Focus Group Discussion on Zero Draft of Indonesia Biodiversity Strategy and Action Plan (IBSAP) Post-2020 Main Indicator with Experts and Ministries/Agencies

By GIZ, Climate and Biodiversity Hub Indonesia (ClimB Component)

Management of Indonesia's biodiversity formally began in 1993 with the preparation of the Indonesia Biodiversity Action Plan (BAPI) document. In 2003, this document was amended and adapted to the results of the CBD COP under the name Indonesian Biodiversity Strategy and Action Plan (IBSAP). It was again updated in 2015 and implemented up to 2020. The BAPI and IBSAP documents have provided an important foundation for optimising the benefits of biological resources, balancing preservation against existence. It is crucial that the synthesis of implementation and lessons learned from the IBSAP preparation process become a lesson learned in Indonesia's Post-2020 biodiversity management. As the 2015-2020 IBSAP implementation period ends, the Indonesian government, which biodiversity as its basic capital for development, requires policy directions and strategies for managing diversity.

The formulation of IBSAP Post-2020 which is expected to be completed in August 2023 will adopt the results of COP 15 CBD and have a clear and measurable operational definition, scope, and main indicators. The IBSAP Post-2020 will also be supported by a monitoring and evaluation system, sustainable funding strategies, communication strategies, and the interlinkages of biodiversity with other development issues, such as climate change, green economy, SDGs, etc.

Initial efforts to collaborate with the parties in the IBSAP Post-2020, especially the Main Indicator formulation, have been carried out through a Technical Committee and Expert Meetings on 4 February 2022. Now, the Main Indicator has been synthesised to the Zero Draft of IBSAP Post-2020. As a follow-up to the Technical Committee and Expert Meeting coordination, Bappenas, with the support from

the Climate and Biodiversity Hub (ClimB Component), held a Focus Group Discussion on the Zero Draft of IBSAP Post-2020 Main Indicator on 18-19 August 2022 in Sentul, Bogor. The FGD was intended to thoroughly review each aspect of the Zero Draft of IBSAP Post-2020 Main Indicator as well as to sharpen the measurement of the main indicator of Indonesia's biodiversity management.



Review the Zero Draft of IBSAP Post 2020 Main Indicator

Technical coordination with the relevant Ministries/Agencies as well as invited biodiversity experts is necessary to sharpen the measurement of the Zero Draft of IBSAP Post-2020 Main Indicator.

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Capacity Building on Inventory and Verification of High Conservation Value (HCV) Area

By GIZ, Climate and Biodiversity Hub Indonesia (CLARITY Component)

The Directorate for Conservation of Biodiversity and Genetic Resources (KKHSG), Directorate General of Natural Resources and Ecosystem Conservation (KSDAE), Ministry of Environment and Forestry (KLHK), with the support of the Climate and Biodiversity Project (CLARITY), hosted two training events on the Inventory and Verification of High Conservation Value (HCV) Areas for the staff of KSDAE regional offices and national parks.



The first training was organised online on 24-25 July 2022 and focused on data collection and processing. The training was attended by 220 participants from KSDAE regional offices and national parks.

The second training was organised offline on 8-10 August 2022 at the Swiss-Bell Hotel in Bogor. It focused on data interpretation and analysis using Modelling Maximum Entropy (MaxEnt) Software. The three-day training was attended by 55 staff from national parks and 27 staff from regional offices of KSDAE. The training is expected to standardise the capacity of technical staff in the field.



Guiding the participants to run the MaxEnt model

The training was delivered by experienced trainers from universities, research institutes and civil society organisations such as IPB University, BRIN, Burung Indonesia, SINTAS, PERHAPPI, and Forum HarimauKita. During the training, the participants were taught software installation and operation, identification of bioecological species per group of taxa (terrestrial mammals, primates, Aves, and coral reefs) to determine the environmental variables, and the preparation of their own spatial data for analysis and modelling using MaxEnt.

KSDAE has been aiming to standardise the HCV Area report using MaxEnt modelling for species niches and distribution. MaxEnt is the most frequently used software for distribution modelling and uses several environmental datasets and encounter points to enable model distribution probability of a specific species according to environmental conditions. MaxEnt is effectively used on a large scale such as large islands, for specific species (habitats that have been fragmented or isolated) and has special habitat tendencies. The advantage of MaxEnt is that with limited data, it can still produce niche and distribution models with high validity.

The training received positive responses from KSDAE, participants, and trainers. The training is expected to contribute to government efforts to foster the inventory, identification, and verification of HCV areas. According to the National Medium-Term Development Plan (RPJM) and the Strategic Plan of the Directorate General of Natural Resources and Ecosystem Conservation (DG KSDAE) 2020-2024, the target of the verified HCV area is 70 million ha, of which 43 million ha are outside conservation areas. So far, the area that has been verified is only around 15 million ha, hence around 28 million ha need to be added to the inventory. Further information is available here.

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Field Assessment on Faith-based Biodiversity Fund Solution in Tuva Village, Central Sulawesi

By UNDP, Biodiversity Finance Initiative (BIOFIN II)

Leveraging the Faith-based Fund for Biodiversity is one of the finance solutions implemented by BIOFIN in Indonesia. This finance solution intends to institutionalise the process of identifying, implementing, and reporting faith-based funds for biodiversity finance.

Tuva Village is selected for pilot implementation of a faith-based biodiversity fund solution due to several factors, including proximity to the national park and the scale of economic and conservation issues in the area. Tuva Village has 1,852 inhabitants and most of them grow cocoa and maize for their living.

To obtain an understanding of the biophysical, social, and economic conditions of the community in the buffer zone of Lore Lindu National Park, a joint focus group discussion was held on 9 June 2022, between Bappenas, Lore Lindu National Park, Baznas Central Sulawesi, and the community, in Tuva Village. The meeting resulted in input and challenges for the preparation of the programme,



including community empowerment activities through Islamic social funds.

The Director of Environment of Bappenas, Mr. Medrilzam, supports the establishment of a cooperation between Lore Lindu National Park and Baznas in managing biodiversity and improving community welfare in Tuva Village as a buffer village for the National Park. He also said that it is necessary to pay attention to the location, stakeholders, forms of cooperation, the needs in the field, and who should be included, as well as the demand and market reach that need to be targeted.

That statement was reinforced by the Head of Lore Lindu National Park, Mr. Hasmuni Hasmar, who said that the current problem was the ability of local governments to deal with biodiversity issues at the site level and that environmental damage needed to be considered with the implemented programmes in mind so as not to cause other environmental damages.



FGD: Discussion Preparation of Islamic Social Fundbased Financial Solutions for the Biodiversity Sector in Tuva Village, Central Sulawesi

A representative from Baznas, Mrs. Masdiana Husain Ain, highlighted that cocoa production has been decreasing due to pests and disease, hence compromising the capability of people in Tuva Village to produce high-quality cocoa products. Moreover, she said that the Field Agricultural Extension (PPL) collaboration must also be carried out to overcome problems related to cocoa cultivation.

The farmers in Tuva Village mentioned pest and disease challenges particularly for cocoa and their rapid spread. The farmers need help in the form of seeds for rejuvenation.

As a follow-up to the meetings, it is necessary to identify the needs carefully so that the programmes implemented can be more effective; and efforts are needed to prepare the independence and sustainability of the programme so that the community does not always depend on external support.

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Enhancing sub-national transfer mechanism through Ecological Fiscal Transfer (EFT)

By UNDP, Biodiversity Finance Initiative (BIOFIN II)

Ecological Fiscal Transfer (EFT) is a financing instrument that allows revenue-sharing arrangements between various levels of government (national, provincial, and district) using environmental and ecological criteria/initiatives. EFT can provide incentives or rewards for encouraging regions to protect and preserve the environment.

The Inception Workshop was held on 25 July 2022 in Semarang as a first step to develop EFT indicators and provide an overview of the concept and importance of EFT to the relevant Local Government Organisations (OPD) in the Central Java Provincial government. The workshop was attended offline and online by 53 participants from the district and provincial government.

The Inception Workshop was chaired by Mr. Ir. Medrilzam, M. Prof. Econ, Ph.D, the Director of Environment of Bappenas, and moderated by Mr. Ir. Agung Tejo Prabowo, M.M, the Chair of the Bappeda of Central Java Province. While Mr. Widi Hartanto, S.T., M.T. is the Head of the Department of Environment and Forestry, and Mr. Bisuk Abraham Sisungkunon, S.E., M.Sc. is the Head of Institute for Economic and Social Research – Faculty of Economics and Business, University of Indonesia (LPEM FEB UI).

Mr. Agung highlighted 7 issues in the Central Java Medium-Term Development Plan (RPJM), one of which is related to sustainable



development by taking into account the carrying capacity of the environment and the preservation of natural resources. Mr. Widi, mentioned the strategic issues environmental problems including surface and seawater quality (pollution of the Bengawan Solo River and Lake Rawapening), air quality, coastal damage, and vulnerability to climate change. He also mentioned biodiversity management programmes that have been carried out such as the Management of Green Open Spaces in Central Java and Management of the Baturaden Botanical Gardens.

Mr. Bisuk from LPEM FEB UI presented the potential application of EFT in Central Java, among others, high fiscal capacity and low environmental spending plans. LPEM FEB UI also explained that there will be a study that will help Central Java Province to prepare ecological fiscal transfers at the regional level. The methodology used consists of several stages of analysis and mapping to the issuance of a draft governor regulation. Along the way, it will require a lot of interviews and confirmation of data.

To support the preparation of EFT indicators in Central Java, data and information related to the potential for biodiversity from various districts in Central Java will be collected. Then there will be a pilot implementation of the EFT scheme. After that, a report of the results will be submitted to Central Java Province.



Inception Workshop: Ecological Fiscal Transfer in Central Java Province

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Strengthening policy support for small-scale fisheries businesses in Southeast Sulawesi

By Rare, Fishing for Climate Resilience

Small-scale fisheries businesses are one of the most unrecognised and undervalued sectors whose combined impact on the marine ecosystem and the economy is significant. These small-scale businesses play an essential role in the fisheries value chain since they determine the size, quality, and variety of fish that enter the marketplace. They also impact the marine resources and the livelihood of fishers and other ocean-dependent businesses if they trade in poorly managed or exploited fisheries.

Under the Corona Response Package of the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU), Rare has been supporting small-scale fisheries businesses in integrating ecosystem-based adaptation measures and principles into their operations to promote sustainable fishing practices and protect the marine ecosystem.

Last July 2022, Rare conducted a workshop with the Southeast Sulawesi government and district offices of Bombana and Buton to strengthen policy support for the sector. Participants came from the Office for Fisheries and Marine Affairs, the Office for Trade and Industries, and the Office for Cooperative and Small-Scale Business. Government partners assessed their current programmes for the sector and determined that most of these are focused on ensuring the sector's compliance to economic and business regulations. There is less focus on ensuring that businesses are compliant with regulations underpinning the health of marine ecosystems as well as safe and fair working conditions of workers.

Partners also recognised the need to put more attention on developing the capacities of the sector and refining their programme, so that it aligns with their long-term strategy for the sector.

In the end, Rare and its government partners agreed on the need to have a policy that will urge government offices to allocate more

resources for the sector's development. There is also a need to regularly update and disseminate sectoral data so government offices can adjust their programme to suit the businesses' needs. The participants also recommended that offices should have a standard for fishing gears and processing machines that will be distributed to small-scale fisheries businesses.

This workshop is an initial step to increasing policy support for the small-scale fisheries businesses. Rare will continue its coordination with the District Office for Cooperative and Small-Scale Businesses to ensure that the businesses can access formal services and support (e.g., small grant or training programme for coastal communities) from the government.



Government partners align their works with Rare to determine policy support for small-scale fisheries businesses.

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

100%
Renewables
Energy System
Modelling
Results for West
Nusa Tenggara,
Indonesia

ICLEI has collaborated with Fraunhofer ISE to develop the WNT energy modelling to reach the 100% renewable energy goal. Scaling up an ambitious renewable energy target requires the evaluation of its feasibility supported by technical energy modelling. In cooperation with Fraunhofer ISE, future energy scenarios exhibiting sustainable development in the region were evaluated and modelled based on data collected between August and November 2020. The result showed that achieving 100% renewable energy for electricity, cooling/heating, cooking, and transportation in WNT is feasible by 2050.

https://renewablesroadmap.iclei.org/resource/west-nusatenggara-energy-modelling-report/#



By Rare, Fishing for Climate Resilience

Mangroves in Indonesia

Find out how Indonesia fights to preserve its rich coastal forests with Dr. Frida Sidik, a researcher at the Ministry of Marine Affairs and Fisheries.

Podcast: Mangroves in Indonesia



By ITDP, Reducing Emissions through Integration and Optimization of Public Transport in Indonesia)

Medan City Inclusive Planning Process Report

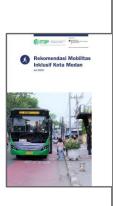
This document is a report on the results of a field review of the issues faced by vulnerable groups in Medan City when travelling by foot, cycling, and using public transportation. The following are included in this field review: Experience Survey, Technical Survey, Terminal Survey, and Area Survey. This report will be followed by a Recommendation on the Planning Process Towards Inclusive Mobility in Medan City.



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Medan City Inclusive Mobility Recommendations This book summarises the results of a review survey, input, and opinion involving the vulnerable residents of Medan City as part of a series of processes for the "Inclusive Mobility of Medan City". The method and initial findings of this document have been previously described in the Medan City Inclusive Planning Process Report. These findings, inputs, and opinions are then analysed and enriched by referring to the development plans of the City of Medan related to population mobility. The recommendations issued from this analysis cover various fields, such as Trans Metro Deli services, pedestrian facilities, bicycle facilities, regional planning and the delegation of authority is explained for each recommendation.



To confirm the analysis, 2 (two) Multi-Stakeholders Dialogues (MSD) were held with vulnerable residents of Medan City which resulted in the "Medan Consensus, City for All". This recommendation was submitted to the Medan City side through the Head of the Medan City Transportation Service, Mr. Iswar Lubis S.SiT.,M.T during the ceremony for the submission of "Medan City Inclusive Mobility Recommendations" and "Medan Consensus, a City for All" on 26 July 2022 at the Mayor of Medan Office.

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By GIZ, Clean, Affordable and Secure Energy for Southeast Asia (CASE)

Report:
"Supporting
National
Economic
Recovery
through power
Sector
Initiatives:
Accelerating
rooftop solar
photovoltaics
deployment for
Indonesia's
green recovery"

Two years into the pandemic, global economies, including Indonesia, are still battling the coronavirus. In dampening the impact and recovering the economy, governments have announced trillions of dollars of rescue and recovery measures, of which the latter are sometimes also associated with measures that facilitate sustainable, resilient, and environmentally positive transformation in the long term, and are often referred to as "green recovery". This report seeks to provide analysis and recommendations on green recovery measures that Indonesia can adopt to strengthen its post-pandemic economy, particularly through power sector initiatives, i.e., rooftop solar photovoltaics (PV), given their decreasing costs as well as their quick-to-deploy and labour-intensive nature.

https://caseforsea.org/post_knowledge/supporting-national-economic-recovery-through-power-sector-initiatives

Synthesis
Report: "DeRisking Facilities
for The
Development of
Indonesia's
Renewable
Power Sector"

Indonesia's abundant reserves of natural resources and the constraints of developing the renewable sector have contributed to the dominance of fossil fuels in the country's energy supply. This study suggests that, currently, Indonesia needs to prioritise policy de-risking instruments. Such instruments include (1) Improving renewable energy targets and policies' clarity, consistency, credibility, and coherence; (2) incentives and pricing policies reform; (3) effective and efficient permit and procurement processes; (4) project risk management quality; and (5) project feasibility and credibility. In conjunction, suitable financial de-risking instruments should also be developed to stregthen the renewable energy sector.

https://caseforsea.org/post_knowledge/de-risking-facilities-for-the-development-of-renewable-power-sector-in-indonesia/



By Yayasan Konservasi Indonesia, Mitigation and Adaptation through Conservation and Sustainable Livelihood on Indonesia's Peat and Mangrove Ecosystems

Klawalu's Mangrove Tourism Park Identification Book	This book was written by authors from the Environment Research Centre of the University of Papua, as well as supported by the West Papua Natural Resources Conservation Agency and Yayasan Konservasi Indonesia. There are 15 mangrove species from 11 genus and 8 families found in Klawalu Mangrove Tourism Park, with Rhizopora apiculate as the dominant species. Contact: Anderi Satya (asatya@konservasi-id.org)	IDENTIFIKASI MANGROVE TO THE STATE OF THE S
Carbon Stock in Mangrove Poster	The poster explains why mangrove is a Blue Carbon Ecosystem. Conserving mangrove forests is one of our opportunities in facing global climate change because they can absorb five times more carbon dioxide than tropical forests in high altitude. West Papua has 499,500 ha of mangrove forest that support the provincial government's low carbon development model. Contact: Anderi Satya (asatya@konservasi-id.org)	Manprove sebagai perryinpan karbon
Mangrove Protects from Flooding and Tsunami Poster	The poster shows that the sea is not only a source of livelihood but also a threat for the communities in West Papua; highwaves, flooding, tsunami, and erosion. Mangrove belts along the coast give stabilisation and protection from flooding. Mangroves support climate change mitigation and adaptation, especially for coastal communities. Contact: Anderi Satya (asatya@konservasi-id.org)	Margrove Printing & Saurani & Sauran
Mangrove Home of Flora and Fauna Poster	The poster points out that West Papua is a paradise of both terrestrial and maritime biodiversity. About 268 plant species are listed in South East Asian's mangrove vegetation and 42 tree and shrub species of these are true mangrove species. Contact: Anderi Satya (asatya@konservasi-id.org)	Mangrove umah bagi beregan non di suura.
Mangrove Provides Economic Value Poster	The poster explains that mangrove ecosystems can be a source of livelihood for local communities living in areas surrounding mangroves. Mangroves can serve as national tourism park areas, providing financial benefits for the community. There are a lot of plants that can be processed into foods, medicines, and crafted goods. Contact: Anderi Satya (asatya@konservasi-id.org)	Mangrove mambarikan keuritungan ekonomi

Protect and Conserve Mangrove Poster	The poster encourages mangrove rehabilitation, conservation, and sustainable management because of their many environmental, social, and economic benefits. In addition, mangroves are also important for climate change mitigation and adaptation. Contact: Anderi Satya (asatya@konservasi-id.org)	Selamatkan na tananan na tananan nangawa nangawa na tananan nangawa na
Klawalu National Tourist Park Profile Brochure	The brochure contains a map and the address of Klawalu National Tourist Park. In addition, there is short explanation why the mangrove ecosystem is important. Contact: Anderi Satya (asatya@konservasi-id.org)	Control of the contro

By Yayasan Konservasi Indonesia and Center for International Forestry Research, Mitigation and Adaptation through Conservation and Sustainable Livelihood on Indonesia's Peat and Mangrove Ecosystems

Coastal Zone Rehabilitation for Low Carbon Development	This Info Brief is one of the expected outputs from a webinar on "Coastal Zone Rehabilitation for Low Carbon Development" conducted on 31 March 2022 via Zoom. There are four main key messages discussed in this Info Brief. https://www.cifor.org/knowledge/publication/8615	Figure 1 Common
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