# Climate and Development Outlook

# CD KN

### Stories of change from CDKN

### **Indonesia Special Edition**

## A CLIMATE COMPATIBLE DEVELOPMENT PROGRAMME IN INDONESIA

### By Fareeha Irfan Ovais

Indonesia is vast, spanning almost 5,000 km and comprising over 17,000 islands. The world's fourth most populous country faces many environmental challenges. Despite this, the country has taken an ambitious attitude to tackling climate change by investing in low-carbon alternatives, promoting sustainable land use and encouraging climate-resilient growth. This *Outlook* outlines Indonesia's path to climate compatible development and how Climate and Development Knowledge Network (CDKN) has played a small but meaningful role in supporting the country towards this goal.

CDKN has supported decision-makers in Indonesia to test and explore the concept of climate compatible development, particularly in the energy sector, by providing technical assistance, and knowledge and brokering support for a variety of climate change initiatives at provincial, district and city levels.

One of these areas has been to embed climate change mitigation into energy policies and programmes. From 2013 to 2014, CDKN provided support to a subnational renewable energy Nationally Appropriate Mitigation Action (NAMA) initiative in West Nusa Tenggara province. This led to the development of an investment-ready NAMA for on-grid independent power producers that would help contribute to national and regional climate action plans. Similarly, from 2014 to 2016, CDKN helped the Ministry of Energy and Mineral Resources (ESDM) develop a national-level NAMA on energy-efficient motors.

To further support the ESDM and help coordinate and prioritise climate mitigation actions in the energy sector, a CDKN project developed an innovative Common Accounting Framework for Energy (CAFE).

CDKN supported the public fund for channeling finance to achieve national climate change and development priorities, the Indonesia Climate Change Trust Fund (ICCTF). The project made

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#### Climate and Development Knowledge Network

Helping developing countries to design and deliver climate compatible development

## Indonesia's climate and development

Indonesia is experiencing economic transformation, with high rates of economic growth. However, this is also coupled with extensive deforestation and land use changes, and economic growth brings increasing demand for energy and transport systems. The government recognises that de-coupling continued economic growth from greenhouse gas emissions is important to combat climate change, and has committed to reduce emissions by 29% by its own efforts, and up to 41% with international support, against the business-as-usual scenario by 2030. To meet these targets, the government has put in place relevant legal and policy instruments, including the national action plan on greenhouse gas emission reduction, and a moratorium on the clearing of primary forests and conversion of peatlands.

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- NAMA investment plan for Indonesia's energy sector
- Securing water, energy and food security in Indonesia





PUTTING CLIMATE ISSUES AT THE HEART OF PLANNING IN

**INDONESIA'S OUTER ISLANDS** 

By **Mochamad Indrawan** CDKN Senior Strategic Advisor, Indonesia

The chance for quick wins in climate compatible development is increased greatly at the subnational level, especially when locally owned processes and peer-to-peer learning are facilitated. This was one important lesson learned by CDKN from its advocacy and knowledge brokering for mainstreaming climate change responses into development planning in the provinces and cities of Indonesia.

We built good momentum in West Nusa Tenggara, and then shadowed this approach in the neighbouring province of East Nusa Tenggara. The latter involved advocacy in the capital city of the province, Kupang.

The West Nusa Tenggara intervention sought to build local commitment and capacity for climate compatible development through meetings, dialogues and workshops from June to November 2016. The project built awareness for identifying strategic issues for the National Medium Term Development Plan 2015-2019 (RPJMN).

The province's new medium-term plan is due in 2018. Planning boards at provincial, district and municipality levels are responsible for this. Provincial planning boards were identified as central to the strategy – especially since they have good convening powers over the regions. The West Nusa Tenggara planning board was asked to facilitate and lead the dialogue activities. The districts and municipalities even provided in-kind contributions.

The project encouraged ownership by local actors in running the workshops, and writing policy briefs on energy security and mainstreaming climate compatible development into medium-term planning. These briefs were written in Bahasa Indonesia, and co-authored by local actors, to ensure effective dissemination at provincial, district and municipality levels. The overall impact will improve awareness, and ownership, to strengthen knowledge for mediumterm development planning that systematically considers climate change.

The next stage was to test the ideas with stakeholders from Kupang municipality, East Nusa Tenggara. Kupang city was a second-tier city analysed in a climate finance study by Germanwatch in collaboration with national organisations (Institute for Essential Services Reform, and Yayasan Pikul), supported by CDKN (see page 3). We held regular communications with Kupang City Planning Board and found common patterns: e.g. multistakeholder forums are important for advocacy that targets mayors and district heads, but also to mitigate against frequent staffing movement within and across agencies. There were also differences between East and West Nusa Tenggara in progress on tackling climate change (Kupang city did not even have a plan for greenhouse gas mitigation).

We concluded that concerted effort to work with local planners and integrating climate change with development are complementary and indispensable strategies. >> continued from page 1

recommendations to bring ICCTF's policies, procedures and operations in line with the requirements of international funding agencies. It also built staff capacity on accessing international climate finance.

The Fiscal Policy Agency of the Ministry of Finance is Indonesia's National Designated Authority (NDA) or focal point for the Green Climate Fund (GCF). To enhance climate finance readiness in the country, CDKN provided technical assistance and capacitybuilding to the Ministry of Finance. This included recommendations to bring the NDA's institutional set-up, policies and procedures into line with GCF requirements. Pippa Heylings, an independent evaluator of CDKN's impact in Indonesia, says, "CDKN's contribution in the field of climate finance readiness has been recognised as timely, of high quality and catalytic."

A research project assessed the climate finance needs for second-tier cities and analysed the extent to which existing sources meet those needs. The project developed recommendations for cities to access domestic and international climate finance.

Indonesia has the world's highest deforestation rate – the product of an unequal balance between the need to provide water, energy, food security and economic stability for a growing democracy, and (increasing) efforts to ensure environmental sustainability and contribute to climate mitigation. CDKN supported a research project to investigate how the unique institutional structures and political momentum behind REDD+ (reduced emissions from deforestation and forest degradation) implementation in

Indonesia could provide lessons and opportunities to improve cross-sector policy-making under a 'nexus approach' to reduce deforestation and support multiple-benefit outcomes at national and subnational scales, particularly in the Special Autonomous Province of Aceh.

We provide more details of the results and lessons learned from these initiatives in the pages of this *Outlook*. We hope you enjoy reading this edition, and join us on our website at www.cdkn.org/regions/indonesia or on twitter @cdknetwork to share your responses and your views.

## EXPLORING INNOVATIVE FINANCE FOR CLIMATE ACTION IN ASIAN CITIES

### By Lisa Junghans

Climate change and other sustainability challenges will remain key areas of work in cities across the world for decades. Small and medium-sized cities in developing countries will require particular attention because of their high population growth rates resulting in significant development challenges

and increased vulnerabilities to climate change. Their limited financial resources exacerbate the situation. To explore innovative ways of financing for local governments, CDKN has been funding a project consortium (led by Germanwatch) consisting of organisations from India, Indonesia and the Philippines. The project is being carried out in four medium-sized cities, including Kupang in Indonesia.

Policy papers have been published and presented at international conferences that examine different local and international financing options for cities. For local best practices, the authors assessed the potential of crowd-funding options, development charges and user fees in raising public revenues. On the international side, the authors looked at how the existing GCF investment framework and access modalities could allow funding to flow to cities directly. Partner organisations explored the national financing landscape for the cities by looking at domestic climate funds, transfer mechanisms and other innovative national set-ups. As part of this project, a number of stakeholder dialogues were conducted to identify city-specific priority sectors and existing gaps and needs in relation to climate change, and to match project concepts with suitable financing instruments.

Overall, the project has contributed to a better understanding of financing instruments available to cities among local decision-makers and stakeholders of urban climate finance. It has also confirmed the perception that there is a huge gap between the funding needed in small and medium-sized cities in developing countries to tackle climate change and the availability of financial instruments directly accessible by cities. The project helped to establish dialogues between relevant stakeholders within the cities to work together on climate change. In Kupang, a private sector company expressed great interest in providing corporate social responsibility funds for climate change projects in the city, having been unaware of the urgent need prior to the workshop. In addition, a journalist workshop to build local capacity on climate change was conducted and is likely to help increase demand for more local action on climate change.



"CDKN's progressive approach in facilitating multiple stakeholder processes and placing local actors and institutions at the centre of planning is well appreciated as an effective approach – and especially for climate change organisations planning to work in our province."

SAMSUDIN SAUD, XPERT ON DEVELOPMENT PLANNING, PROVINCIAL GOVERNMENT OF WEST NUSA TENGGARA



## NAMA INVESTMENT PLANS FOR INDONESIA'S ENERGY SECTOR

### By Xander van Tilburg

The Ministry of Energy and Mineral Resources (ESDM) plays an active role in supporting renewable energy and energy efficiency in Indonesia. CDKN supported the Energy Centre of the Netherlands (ECN) to develop a Common Accounting Framework for Energy (CAFE) for ESDM. With this tool, the ministry can track and provide consistent information on all its mitigation actions in the energy sector. Although developed specifically for the Indonesian context, the CAFE can be used, with modifications, in other countries, too. In parallel, the partners developed a NAMA proposal to make electric motor systems far more efficient than they are now.

Indonesia faces diverse challenges on its path to prosperity. Economic growth and rapid urbanisation put huge pressure on the Indonesian energy system – demand is expected to grow threefold by 2030, much of which will be met by coal, gas and oil. Keeping up with growing demand at low prices is not the only driver of Indonesian energy policy: the government has targets to diversify the energy mix by increasing the share of

renewable energy; it aims at nearly full electrification within a decade, and it has pledged to reduce its greenhouse gas emissions by 29–41% in 2030.

This parallel development of CAFE and the NAMA proposal had a clear advantage: while preparing the proposal, it became clear which benefits and designs were used to make a compelling case for the NAMA. This experience helped in the selection of relevant CAFE indicators. Similarly, populating the CAFE revealed the existing policy situation that the NAMA proposal builds on.

The first phase of the NAMA process focused on quantitative analysis to find potential emission reductions and cost savings. Some 60% of industrial and commercial power is used by electric motors, often of old or low-efficiency design. Analysis confirmed that efficient motors and variable-speed drives have the potential to deliver large energy savings and financial benefits for companies, and by reducing demand they lower emissions. The second phase of the NAMA process focused on identifying barriers, selecting appropriate instruments, and liaising with stakeholders including the Ministry of Industry and several private sector industry associations.

"There has been important support provided by CDKN to ICCTF, and even to BAPPENAS (Ministry of Planning), so that we have a better understanding of how we should manage a trust fund organisation. Keep up your good work."

**MEDRILZAM**,
MINISTRY OF PLANNING

The CAFE aims to provide a central place for knowledge on energy-related mitigation actions in Indonesia. The current version is populated with existing energy efficiency actions, and can be expanded stepwise to include renewable energy and new ideas with the potential to be developed into NAMAs.

Clean energy technologies are on the rise in Indonesia, driven by ambitious targets for renewable energy and emissions, but more importantly by lowering costs for renewables and uptake of profitable efficiency improvements. The government recognises that NAMAs can play a role in creating the right environment for private investment.

## Supporting Indonesia's readiness for new climate finance

By Juerg Klarer

The Fiscal Policy Agency of the Ministry of Finance in Indonesia was declared the National Designated Authority (NDA) or focal point for Green Climate Fund (GCF) in early 2016. As part of its objective of enhancing climate finance readiness in the country, CDKN supported AEquilibrium to strengthen the NDA and increase its capacity to access readiness funds from the GCF.

The project provided recommendations to bring the NDA institutional set-up, policies and procedures in line with GCF guidelines and best practices. In addition, the project provided capability-building training to NDA staff, recommendations for the NDA website and suggestions for the stakeholder engagement process.

"Facilitation by CDKN with the Institute for Essential Services Reform and Yayasan Pikul has not only helped increase knowledge of adaptation and mitigation within the Kupang City government, but it has also helped foster commitments for participatory budgeting involving government, private sector and civil society."

**ELVIANUS WAIRATA**, HEAD OF KUPANG CITY PLANNING AGENCY, 2010-2017

## SECURING WATER, ENERGY AND FOOD SECURITY IN INDONESIA

### By Helen Bellfield

Indonesia is on course to become one of the world's ten largest economies by 2025. Yet rapid economic development has gone hand-in-hand with environmental degradation, and this threatens to undermine these economic gains. Recognising the need for sustainable development, the Government of Indonesia's current medium-term development plan seeks to increase development without environmental degradation.

However, this transition to sustainable development requires a coherent policy framework and effective coordination across the different sectors and actors that rely on Indonesia's natural resources, as well as increased understanding of the role that natural ecosystems play in underpinning development goals, including water, energy and food security, and Indonesia's agricultural and forest economy.

To inform this transition, a CDKNfunded project, 'Leveraging Forests for Water, Energy and Food Security in Indonesia', implemented by the Global Canopy Programme and the Wildlife Conservation Society-Indonesia Program, has applied a water-energyfood (WEF) nexus framework in a series of studies both at the national level and subnationally in Aceh to explore some the challenges and opportunities for the national and provincial governments, as they work towards meeting both the development goals set out in the National Medium Term Development Plan 2015-2019 (RPJMN) and ambitious climate mitigation and adaptation targets.

The WEF nexus has emerged as an important conceptual framework for improving natural resource governance in the context of growing pressures from population growth, urbanisation, economic development and climate change. By accounting for the complex



inter-dependencies between water, energy and food systems, such an approach can help decision-makers identify, evaluate and manage resource trade-offs and synergies across different sectors and actors.

The project's key findings demonstrate the importance of this approach in identifying and evaluating key policy gaps and conflicts. For example, while the RPJMN recognises the role of forest conservation in watershed management, and thus in food and energy production, there remain clear trade-offs and inconsistencies between climate and development goals, particularly around the expansion of energy and agricultural production, and forest conservation. Furthermore, while climate policies successfully articulate a number of strategies to minimise potential trade-offs - for example, prioritising agricultural development on degraded land and no burning – many of these strategies are not reflected in land-use planning decisions made in other ministries and sectors.

In Aceh, a land suitability analysis using industry standards showed that under existing yields the province is not able to achieve its 2019 palm oil



production targets and maintain the integrity of the Leuser ecosystem due to limited land availability. However, by increasing yields to national averages, 2019 production targets can be met using 40,000 ha less land than is currently under palm oil production, reducing pressure on forests.

The challenge is to integrate WEF nexus thinking and the related evidence base into the development discourse and decisionmaking on natural resource management. A multi-stakeholder workshop with national government and representatives from Aceh, Central Kalimantan, Papua and West Papua was held to discuss and prioritise key actions coordination. While recognising the many challenges, discussions highlighted successful models to build on, including emerging green growth strategies and the One Map policy. Beyond Indonesia, the project will share and exchange knowledge on the application and integration of WEF nexus thinking with other tropical forest countries, focusing on the design and implementation of policies around the Sustainable Development Goals and Nationally Determined Contributions: individual contributions that each country should commit in order to meet the global objective for reducing greenhouse gases.

for improving cross-sector and multi-scale

The Climate and **Development Knowledge Network** 

(CDKN) aims to help decision-makers in developing countries design and deliver climate compatible development. We do this by providing demand-led research and technical assistance, and channeling the best available knowledge on climate change and development to support policy processes at the country and international levels. CDKN is managed by an alliance of five organisations that brings together a wide range of expertise and experience.

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