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### **Abbreviations**

Abbreviation	Indonesian	English
BAPPEDA	Badan Perencanaan Pembangunan Daerah	Regional Development Planning Agency
BAPPENAS	Badan Perencanaan Pembangunan Nasional	National Development Planning Agency
BKF	Badan Kebijakan Fiskal	Fiscal Policy Agency
BPDLH	Badan Pengelola Dana Lingkungan Hidup	Indonesia Environment Fund
DEN	Dewan Energi Nasional	National Energy Council
Dinas ESDM	Dinas Energi dan Sumber Daya Mineral	Energy and Mineral Resources Office
EBTKE	Direktorat Jenderal Energi Baru Terbarukan dan Konservasi Energi	Directorate General New Renewable Energy and Energy Conservation
DGE	-	Directorate General of Electricity
FCDO	-	United Kingdom Foreign Commonwealth and Development Office
GIZ	-	German Development Agency
GGGI		Global Green Growth Institute
GHG	-	Greenhouse gas
GoNZ	-	Government of New Zealand
Gol	-	Government of Indonesia
KEN	Kebijakan Energi Nasional	National Energy Policy
ICLEI		Local Governments for Sustainability
MEL	-	Monitoring, Evaluation and Learning
MENTARI	Menuju Transisi Energi Rendah Karbon Indonesia	Progress towards a Low Carbon Energy Transition in Indonesia
MFAT		New Zealand Ministry of Foreign Affairs and Trade
MoU		Memorandum of Understanding
NEP	Kebijakan Energi Nasional	National Energy Policy
NTB	Nusa Tengarra Barat	West Nusa Tenggara
OJK	Otoritas Jasa Keuangan	Financial Services Authority
PLN	Perusahaan Listrik Negara	State Electricity Company
PT SMI	PT Sarana Multi Infrastruktur	PT Sarana Multi Infrastruktur
RE		Renewable Energy
RE-ACT	-	Accelerating Transition to Renewable Energy in Indonesia
RPJMN	Rencana Pembangunan Jangka Menengah Nasional	National Medium-Term Development Plan
RPJPN	Rencana Pembangunan Jangka Panjang Nasional	National Long-Term Development Plan
RUEN	Rencana Umum energi Nasional	National Energy Development Plan
RUED	Rencana Umum energi Deerah	Regional Energy Development Plan
SINAR	-	Sustainable Energy for Indonesia's Advancing Resilience programme
TPC	-	Technical Project Committee
USAID	-	United States of America Agency for International Development

### **Executive summary**

### Introduction

The New Zealand Ministry of Foreign Affairs and Trade (MFAT) engaged Tetra Tech International Development (Tetra Tech) to conduct an independent mid-term review of the Renewable Energy – Accelerated Transition in Indonesia (RE-ACT) Activity.

RE-ACT is a five-year, USD 3.6 million Activity that aims to support Indonesia's Ministry of National Development Planning (Bappenas) and Ministry of Energy and Mineral Resources (MEMR/ESDM) in accelerating Indonesia's transition to renewable energy. The Activity began in October 2021 and is scheduled to end in February 2026. It is implemented through a Grant Funding Arrangement (GFA) with the Global Green Growth Institute (GGGI).

### Purpose and objectives

The primary purpose of this Review is to support adaptive management of RE-ACT to ensure it is well-positioned to achieve its intended goals and outcomes. The Review is guided by the following objectives:

- Assess the relevance and coherence of the Activity design and its alignment to the needs and priorities of the governments of Indonesia (both national and regional) and New Zealand, and other key partners.
- Evaluate the effectiveness of the Activity in progressing its outputs toward its intended outcomes, including how planning and decisionmaking has affected the achievement of outputs and outcomes.
- Develop considerations for future improvements to enable the Activity to achieve its intended outcomes within the remaining period of Activity implementation.

### Methodology

The Review adopted a mixed methods approach, including a document review, key informant interviews, group interviews, and focus group discussions. The Review engaged with stakeholders across different levels of engagement and with different experiences of RE-ACT to build a comprehensive understanding of RE-ACT's progress and challenges. Data collection, analysis, and reporting was carried out between June and October 2024.

### **Development context**

When RE-ACT was initiated, Indonesia ranked as the 10th largest greenhouse gas emitter globally. Despite significant potential in renewable energy, Indonesia remains heavily reliant on fossil fuels for electricity generation and the energy sector accounts for 30 per cent of the country's emissions. This poses significant challenges to achieving Indonesia's renewable energy and emissions reduction targets.

### Summary of key findings

### Relevance and coherence

RE-ACT aligns closely with the energy and climate commitments of both New Zealand and Indonesia. It is consistent with the New Zealand—Indonesia Statement of Partnership and contributes to Indonesia's Long-Term National Development Plan (RPJPN) and Medium-Term National Development Plan (RPJMN), both of which prioritise low-carbon development. It also contributes directly to operationalising Indonesia's National Energy Development Plan (RUEN) at regional levels through supporting the development of Provincial Development Plans (RUED) in Papua, West Papua and West Nusa Tenggara (NTB).

While broadly aligned with both governments' goals, the prioritisation of activities under RE-ACT revealed areas where expectations between MFAT and the Government of Indonesia (GoI) were misaligned. Notable areas where expectations differed include support for hydrogen and biofuel and developing local content requirements. MFAT's renewable energy objectives do not always align with Indonesia's broader push for new and renewable energy, which includes hydrogen and biofuels. This highlights the need for stronger communication of RE-ACT boundaries to ensure GoI counterparts have a clear understanding of what is in and out of its scope.

### **Effectiveness**

RE-ACT experienced a slow start due to recruitment challenges, staff turnover, and procurement delays. Moreover, activities that could reasonably be expected during the inception phase were either not carried out or were carried out inadequately. This has impeded progress and prompted MFAT to play a more active role in Activity management than envisaged under the GFA.

Since the appointment of a new Project Manager and the establishment of leads for key workstreams, however, activity has increased. Nevertheless, approximately 60 per cent of planned activities are either delayed or on hold, with only 15 per cent completed as intended. Most progress has been made in Workstream 1, which focuses on policy support, while Workstreams 2 and 3—related to stakeholder engagement and capacity building, and de-risking and financial instruments respectively — have seen more limited advancement.

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### **Workstream Progress**

### Workstream 1: Policy Framework and Implementation Support

At the national level, RE-ACT has conducted studies on bioenergy, hydrogen, and energy storage. Gol stakeholders commended the ability to build consensus on the National Hydrogen Roadmap through RE-ACT, and demonstrated how studies have informed the RPJMN. It is too early to assess whether this will advance renewable energy development. Support at the provincial level—focused on developing and revising Regional Energy Plans (RUEDs)—has been positively received but further support is needed at the regional level to enable provincial counterparts to move from planning to implementation.

### Workstream 2: Stakeholder Engagement and Capacity Development

Workstream 2 is the least defined, with inconsistent understandings among stakeholders of its objectives, modalities, and target groups. As a result, progress has been limited, with most stakeholder engagement and capacity building activities focusing on the objectives of Workstreams 1 and 3 rather than operating according to a distinct logic. The exception has been a workshop on carbon trading. However, other than this, very little has been achieved that can be isolated to this workstream alone. A capacity needs assessment is planned for 2024 that aims to address this, and it is hoped that this may provide a structure from which the workstream can progress.

### Workstream 3: De-risking Instruments and Financing Mechanisms

Progress in Workstream 3 has also been slow, largely due to staffing gaps and management challenges. The recent appointment of a Workstream Lead is expected to accelerate progress, with a priority being to update a 2019 study on de-risking instruments.

### **Partnerships and Governance**

Given its understanding of the renewable energy policy landscape in Indonesia, strong relationships and access to RE-ACT's primary Gol counterparts, GGGI remains well-positioned to implement the Activity. However, early management challenges and weaknesses in strategic planning have meant that the Activity has not always been managed to the standard expected under the GFA, requiring greater MFAT involvement than initially envisaged.

While governance arrangements with RE-ACT's key Gol partners are currently working as intended, this could be strengthened by engaging other influential stakeholders in Indonesia's energy context such as the State Electricity Company (PLN), the Financial Services Authority (OJK), Fiscal Policy Agency (BKF), the Directorate General of Electricity (DGE), and state-owned infrastructure financing body, PT Sarana Multi Infrastruktur (PT SMI).

### Monitoring, Evaluation and Learning (MEL)

The current MEL Framework and progress reporting are not generating the necessary evidence to fully assess progress and there is no functioning MEL Plan to guide data collection, analysis and use. This is impeding management and oversight functions and is cited as a source of frustration among key stakeholders. This partly reflects a lack of resourcing for MEL, with no dedicated M&E staffing for the Activity and limited M&E support available through national and regional specialists within GGGI.

The Programme Logic, while broadly consistent with RE-ACT's high-level objectives, over-emphasises RE-ACT's contribution to national-level targets and fails to fully articulate lower-level causal relationships that are key to understanding RE-ACT's progress and success. Key amongst this is assessing and understanding the relationship between the provision of technical assistance and its use in Gol's policies, practices and standards.

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### Future directions – key considerations

The key recommendations for MFAT and GGGI are presented below, alongside the findings that have informed each recommendation and their expected benefits.

#### **FINDING** RECOMMENDATION **BENEFIT** Workstream 2 (Stakeholder MFAT and GGGI to consider integrating Provides a clearer vison for **Engagement and Capacity** Workstream 2 into Workstreams 1 and 3 by stakeholder engagement and Building), lacks a guiding strategy. framing stakeholder engagement and capacity capacity building work and To date, the limited activities building as key approaches to be used reinforces Workstreams 1 and 3 within Workstream 2 are more alongside technical assistance to achieve the which are highly relevant to the closely aligned to the objectives of aims of Workstreams 1 and 3. needs and priorities of Gol. Workstreams 1 and 3. **FINDING RECOMMENDATION BENEFIT** The current Programme Logic and - GGGI to engage a MEL specialist to facilitate a A refreshed MEL approach will M&E approach provides an refresh of the Programme Logic and MEL empower RE-ACT partners with Framework as well as develop a insufficient basis for monitoring evidence to inform strategic progress and demonstrating corresponding MEL Plan that sets out roles decision-making and prioritisation of contribution to outcomes. and responsibilities and identifies a timeline activities for the remaining activity and methods for key MEL activities. period. **FINDING BENEFIT** RECOMMENDATION Activity selection processes do not -→ GGGI to build an analytical step into the Selection of more impactful process of activity selection that involves always identify how a proposed activities. identifying how activities will address specific activity will promote renewable Analysis on expected contribution to energy development or address barriers/accelerants and prioritise those with renewable energy development can identified barriers. the most potential impact to advance serve as a baseline for measuring renewable energy development. change over time. **FINDING** RECOMMENDATION **BENEFIT** MFAT to establish a standalone set of criteria Existing governance and A sharper focus will strengthen management arrangements are (or Menu of Services) to guide decisionalignment between activities and sensitive to the different visions of making and ensure GGGI more clearly RE-ACT's objectives. communicate what RE-ACT can fund (i.e. what activities should be funded Set criteria will more clearly under RE-ACT. This is leading to distinguishing what new and renewable energy communicate to new and existing RE-ACT can support, the types of assistance) burdensome governance partners (i.e. PLN and/or PT SMI) and cannot fund (i.e. for facilitating events or processes. what is in and out of scope, and focus group discussions that are not directly lead to more efficient decisionrelated to an approved task / project). making. **FINDING** RECOMMENDATION **BENEFIT** RE-ACT has limited or no GGGI and MFAT to explore appropriate A more holistic perspective on how opportunities to engage with PLN, the to address barriers to renewable engagement with some influential stakeholders in Indonesia's energy Directorate General of Electricity, the State energy development and the context that have the potential to Financial Authority (OJK) and Fiscal Policy potential to get buy-in from a Agency (BKF) and PT SMI to more holistically benefit RE-ACT objectives. broader array of stakeholders. target barriers to renewable energy development.

### 1 Introduction

The New Zealand Ministry of Foreign Affairs and Trade (MFAT) engaged Tetra Tech International Development (Tetra Tech) to undertake an independent mid-term review (the Review) of its Renewable Energy – Accelerated Transition in Indonesia (RE-ACT) Activity. The Review was undertaken from June to October 2024.

Implemented by the Global Green Growth Institute (GGGI), RE-ACT is a five-year, USD3.6 million Activity that commenced in October 2021 and is scheduled to conclude in February 2026. RE-ACT seeks to support the Indonesian Ministry of National Development Planning (Bappenas) and the Ministry of Energy and Mineral Resources (MEMR/ESDM) to accelerate Indonesia's transition to renewable energy.

This Review Report outlines the findings of the Review and provides considerations to inform future decision-making in line with the agreed review scope.

### 1.1 Purpose and objectives

The primary purpose of this Review is to support the adaptive management of RE-ACT so that it is positioned to achieve its intended goal and outcomes. While this Review includes summative assessments of progress to date, it is primarily forward-looking, offering options and considerations for adaptation within the remainder of the Activity.

Specifically, the Review seeks to:

- Assess the relevance and coherence of the Activity design and its alignment to the needs and priorities of the governments of Indonesia (both national and regional) and New Zealand, and other key partners.
- Evaluate the effectiveness of the Activity in progressing its outputs toward its intended objectives and outcomes, including how planning and decision-making has affected the achievement of outputs and outcomes.
- Develop considerations for future improvements to enable the Activity to achieve its intended outcomes within the remaining period of Activity implementation.

### 1.2 Guiding questions

The Review is guided by six overarching evaluative questions, which were developed collaboratively with MFAT during the inception phase of the Review to ensure alignment with MFAT's objectives. The key guiding questions are as follows:

 To what extent does the RE-ACT design respond to the needs and priorities of its main stakeholders?

- 2. To what extent are RE-ACT's responsiveness and adaptive management approaches effective in incorporating changes in the operating and implementing context?
- 3. How are RE-ACT activities aligned or harmonised with what other programmes/ partners are delivering in Indonesia?
- 4. To what extent has RE-ACT achieved or expected to achieve its intended outputs and outcomes?
- 5. How have RE-ACT's planning and decisionmaking arrangements affected partner engagement and overall achievement of outcomes?
- 6. What is recommended for the remaining period to support RE-ACT to achieve planned objectives and outcomes?

These high-level questions are supplemented by subquestions to guide a more in-depth exploration of themes as part of this Review. The full list of guiding questions is available in Annex D.

### 1.3 Scope and methodology

The Review employed a mixed methods approach, incorporating a document review, key informant interviews, group interviews and focus group discussions. Data collection, analysis and reporting took place between June and October 2024, over four phases:

### 1. Inception and document review (June)

- Collaborated with MFAT to agree the Review priorities and develop key review questions.
- Drafted and finalised the Review Plan.
- Undertook a detailed document review of activity documentation to inform consultations and analysis.

### 2. Consultation (June and July)

- In-country consultations in Jakarta and Lombok.
   Consultations included 15 Government of Indonesia (GoI) representatives, three from GGGI, two representatives from MFAT based in Jakarta, and four private sector organisations.
- Remote consultations with provincial stakeholders not visited during in-country consultations. This included four provincial government agencies in West Papua and Papua.
- Remote consultations with MFAT Activity Management team members based in Wellington.
- A total of 47 people were interviewed during the consultation period.

### 3. Analysis and sensemaking (July to September)

 Information from the consultations and document review were coded against predetermined and emergent themes. These were then cross tabulated and analysed using a range of qualitative analysis criteria, including frequency, consistency, confirmability (through triangulation), significance and saturation.  Emerging findings and questions were explored and tested through internal sensemaking workshops and through a sensemaking workshop with key MFAT stakeholders.

### 4. Reporting (September to October)

- Feedback from the sensemaking workshop with MFAT and additional analyses informed the Review Report.
- Consolidated feedback from MFAT informed final changes to the Final Review Report.

Further details on the evaluation approach and methodology can be found in Annex C.

### 2 Background

### 2.1 Development context

At the inception of RE-ACT in October 2021, Indonesia was the 10<sup>th</sup> largest emitter of greenhouse gases (GHG) globally and ranked 19<sup>th</sup> in per capita emissions. Despite vast potential in geothermal, hydropower, solar, biofuel, tidal, and wind energy, the country remains heavily reliant on fossil fuels for electricity generation. Energy generation accounts for 30 per cent of Indonesia's GHG emissions, creating a significant challenge to achieving its goals of a 23 per cent renewable electricity contribution by 2025 and reducing GHG emissions by 29 per cent unconditionally or up to 41 per cent with international assistance by 2030.

To meet these targets, Indonesia must accelerate renewable energy development, which has stagnated at around 13 per cent of the energy mix since 2010. The primary barrier preventing greater investment in renewable energy is a policy, planning, and regulatory framework that favours coal power and fails to adequately incentivise or address obstacles to renewable energy development.

Projected electricity demand is expected to increase by 80 per cent by 2030, potentially doubling GHG emissions from the electricity sector. Meeting this demand with new coal-fired plants risks locking Indonesia into a high-emissions pathway for decades to come.

To counter this, urgent action is needed to remove barriers to renewable energy development, allowing Indonesia to meet its GHG emission reduction commitments through policy and regulatory reforms. These changes would gradually reduce fossil fuel dependence and foster a more sustainable environment for renewable energy investment and development.

With sufficient support and a commitment to reform, the Gol can transition to a green growth pathway, creating new jobs and stepping into line with the Indonesia Renewable Energy Programme Outlook Paper endorsed by the ASEAN Four Year Plan (4YP) Governance Group in May 2021.

### 2.2 Activity approach and logic

In this context, MFAT and GGGI signed a Grant Funding Arrangement (GFA) in October 2021 to support MEMR (or MEMR/ESDM) and Bappenas to shift policy settings to promote:

- An accelerated contribution of renewable energy to the electricity supply mix.
- A more ambitious approach to national emissions reduction targets.

The GFA covers the five-year period from October 2021 to February 2026, with a budget ceiling of USD \$3,623,330.

To achieve these goals, the RE-ACT Business Case established a Programme Logic aimed at the contributing to the following long-term outcomes:

- Increased public and private sector investment in renewable energy.
- Reduced fossil fuel use, enabled by renewable energy substitution.
- Recognition by Gol of the economic value of more ambitious Nationally Determined Contribution (NDC) targets.

In 2023, this logic was revised to include output-level results across three workstreams. A simplified version of the updated Programme Logic is presented in Figure 1 below, with a full version in Annex A.

Figure 1: RE-ACT Programme Logic<sup>1</sup>

Goal	A faster growing contribution from renewable energy (RE) towards Indonesia's energy mix and a higher Government of Indonesia (GoI) NDC ambition			
Long-term outcomes	Increased rate of public and private sector investment in RE	Reduced use of fossil fuel compared to business-as-usual enabled by substitution from RE	Recognition by GoI of economic value from more ambitious Nationally Determined Contribution targets	
Medium-term outcomes	More favourable and coherent RE policy and regulatory framework is implemented	The economic costs of GHG emissions are recognised and accounted for in GoI decision-making	Increased opportunity and appetite for investment in RE	
Short-term outcomes	GoI recognises the need for, and commences a coherent evidence-based policy and regulatory reform process to accelerate RE	Strengthened institutional and human capacity and knowledge for enabling RE and improved alignment between key Gol stakeholders, and with the private sector	Increased availability of competitive RE project funding options and de-risking instruments	
	Workstream 1: Policy framework & implementation support	Workstream 2: Stakeholder engagement & capacity building	Workstream 3: De-risking instruments & financing mechanisms	
	Policy and regulatory options to attract RE investment	Training of key stakeholders to support workstreams 1 and 3	Options for encouraging investment and de-risking private sector investment	
Outputs	Policy and regulatory options to   accelerate off-grid RE investment   and use	Training of Gol stakeholders to support private sector engagement	Options for establishing credit guarantees and equity investment	
	Policy and regulatory options for increased mini-grid RE investment and use	Knowledge exchange to build shared understandings in support of domestic and international carbon trading	Promotion of preferred financial instruments to commercial banks	
	Support for Provincial General Energy Plan (RUED) development	Facilitation and coordination of engagement between key stakeholders to inform policies and regulations		

<sup>1</sup> The Programme Logic model illustrated here presents an abridged version of outputs a full version is found in Annex A

### 3 Relevance and coherence

This section examines alignment of the RE-ACT Activity design with the priorities of the governments of Indonesia and New Zealand. It also explores the Activity's value proposition within Indonesia's current renewable energy landscape and assesses the coherence of the programme's structure and activities in relation to its intended objectives.

### 3.1 Policy alignment

**RE-ACT** is grounded in shared partnership agreements between New Zealand and Indonesia.

The Activity aligns closely with the **New Zealand-Indonesia Statement of Partnership 2025-2029**<sup>2</sup>, which outlines the following priority areas:

- Accelerating contributions from the renewable energy sector towards green growth.
- Supporting Indonesia to deliver on its commitments to reduce greenhouse gas emissions through an accelerated and just transition from fossil fuels to clean energy.

Similarly, the **New Zealand-Republic of Indonesia Plan of Action 2025** outlines objectives directly related to RE-ACT, including:

- Addressing policy barriers to renewable energy and enhancing workforce capability in the renewable energy sector. Both sides agree to implement active cooperative arrangements, including the Cooperation in Renewable Energy and Energy Conservation Arrangement 2024 between MEMR/ESDM and MFAT. The Arrangement includes a focus on technical capacity building as well as policy and regulatory reform for renewable energy and energy conservation.
- Promoting increased investment in renewable energy to boost its share of the national energy mix
- Encouraging national and provincial policy and regulatory frameworks that accelerate renewable energy development and financing.

### RE-ACT remains relevant to the stated priorities and plans of the Government of Indonesia.

RE-ACT is firmly aligned to Indonesia's **Medium- Term National Development Plan (RPJMN)** which commits to a low carbon and climate-resilient development pathway. This is further validated by the recently published **Long-Term National Development Plan (RPJPN),** which incorporates low carbon development and climate resilience targets for 2025-2045.

Together, the National Energy Policy (KEN) and its implementation plan, the National Energy Plan (RUEN) identify targets and strategies for increasing the proportion of renewable energy in the energy mix. Achieving this requires bilateral and international support that is aligned with RE-ACT's objectives and the activities undertaken to reduce barriers to and increase investment in renewable energy.

The Activity's workstreams align with the priorities of its key Gol stakeholders, Bappenas and MEMR /ESDM, and are well-positioned to address regulatory barriers to renewable energy development. Stakeholders consulted during the Review confirmed the need for support in building knowledge and developing options to inform national renewable energy standards and regulations.

### RE-ACT remains relevant to New Zealand's strategic goals.

The RE-ACT design directly contributes to the **New Zealand ASEAN Four Year Plan (4YP) 2021-2025**, and in particular Medium-Term Outcome (MTO) 1 and Short-Term Outcome (STO) 3. MTO1 seeks to establish New Zealand as a trusted partner contributing to climate resilience, while STO3 aims to increase access to affordable, reliable, sustainable and modern energy.

New Zealand's International Cooperation for Effective Sustainable Development (ICESD) principles include provisions for facilitating access to policy and technical expertise to support transition to sustainable and inclusive development and seeking to reduce GHG emissions and address climate change.

Table 1 provides an overview of the most relevant policies, plans and statements in both New Zealand and Indonesia that relate to RE-ACT.

<sup>&</sup>lt;sup>2</sup> Builds on the achievements of the previous Joint Commitment for Development (JCfD) 2017-2024.

Table 1: Alignment to New Zealand and Indonesian plans and policies

	Policy/plan/strategy	Key areas of alignment
	New Zealand- Indonesia Statement of Partnership 2025-2029 <sup>3</sup>	<ul> <li>Contributes to accelerated green growth from renewable energy.</li> <li>Supports Indonesia to deliver on its GHG emissions reduction targets through promoting a just transition to clean energy.</li> <li>Addresses policy barriers to renewable energy and increases workforce capability on renewable energy.</li> </ul>
	MFAT's Strategic Intentions 2019-2023 & Strategic Priority Three of the Southeast Asia 20-Year Development Strategy	<ul> <li>Sets the goal to establish New Zealand as an active and integral partner in supporting regional integration, prosperity and stability.</li> </ul>
New Zealand	New Zealand-Republic of Indonesia Plan of Action 2025-2029 (Comprehensive Partnership)	<ul> <li>Both parties agree to cooperative arrangements, including the Cooperation in Renewable Energy and Energy Conservation Arrangement 2024 between MEMR/ESDM and MFAT. The Arrangement includes a focus on technical capacity building and policy and regulatory reform for renewable energy and energy conservation.</li> <li>Promotes increased investment in renewable energy to increase the proportion of renewable energy in the national energy mix.</li> <li>Encourages a regulatory and policy environment at national and provincial levels to accelerate renewable energy development.</li> </ul>
_	ASEAN Four Year Plan 2021-2025	<ul> <li>Short-term outcome 3 - Increased access to affordable, reliable, sustainable and modern energy.</li> <li>Support the transition away from fossil fuel use.</li> </ul>
	ASEAN-New Zealand Plan of Action 2021-2025	Reinforcing New Zealand's value proposition in the region through 'genuine partnership' and 'environmental leadership'
	International Cooperation for Effective Sustainable Development (ICESD)	<ul> <li>Provides targeted ODA for middle-income and transitioning countries to facilitate access to policy and technical expertise and support transition to sustainable and inclusive development.</li> <li>Seeks to reduce GHG emissions and address climate change.</li> <li>Demonstrates New Zealand's values in progressing on environmental challenges.</li> <li>As a part of the Southeast Asian region, Indonesia is a secondary geographic focus for New Zealand's ODA.</li> </ul>
	Long-Term National Development Plan 2025-2045 (RPJPN)	The RPJPN incorporates Low Carbon Development and climate resilience making emissions reduction a concrete target for sustainable development.
	Indonesia's Medium-Term National Development Plan 2020–2024 (RPJMN)	<ul> <li>Commits to a low carbon and climate-resilient development path, in which climate change adaptation and mitigation constitute an integrated and cross-cutting priority.</li> <li>Aims to enhance the environment and resilience to natural disaster and climate change impacts</li> </ul>
Indonesia	National Energy Policy (KEN)	<ul> <li>Emphasises the need to build Indonesia's energy security and energy reliance by using domestic energy sources.</li> <li>Sets a target of 23 per cent new and renewable energy in the energy mix by 2025 rising to 31 per cent in 2050.</li> </ul>
<u>ŭ</u>	National Energy Plan (RUEN)	<ul> <li>The plan shows that committed projects will be insufficient to achieve targets outlined in the KEN and therefore assistance is required to increase investment in renewable energy.</li> </ul>
	Enhanced Nationally Determined Contribution	<ul> <li>Targets a 29 per cent GHG emission reduction by 2030.</li> <li>Indonesia invites bilateral and international cooperation in NDC implementation that facilitates and expedites technology development and transfer, payment for performance, technical cooperation, and access to financial resources to support Indonesia's climate mitigation and adaptation efforts towards a climate resilient future.</li> </ul>

 $<sup>^{3}</sup>$  Replaced the Joint Commitment for Development Strategy

# 3.2 Internal coherence: Logical consistency within RE-ACT

The selection of activities reveals inconsistency between MFAT and Gol priorities and expectations of RE-ACT support.

As previously outlined, RE-ACT is aligned with the goals of both New Zealand and Indonesia. However, the process of prioritising and selecting new activities has highlighted areas where MFAT and GoI expectations diverge. Most notable examples relate to the promotion of hydrogen and biofuel, as well as the development of local content requirement regulations.

Regarding hydrogen and biofuels, MFAT was concerned that promoting these alternatives could contradict its renewable energy objectives. Hydrogen, for instance, is often produced using fossil fuels, such as Indonesia's considerable gas reserves, while biofuel production may contribute to deforestation. Meanwhile, these technologies are actively promoted as part of Indonesia's broader push for *new* and renewable energy. For example, a recent press release from Bappenas called for incentives and tax relief for hydrogen developers.<sup>4</sup>

Several respondents pointed to this difference in framing between the Gol's focus on *new* and renewable energy and RE-ACT's emphasis on renewable energy as a critical issue underscoring the differences in priorities and therefore expectations between the Gol and MFAT over what may fall within the scope of RE-ACT. This highlights a need for clearer definitions and stronger communication over what legitimately falls within and outside of RE-ACT's scope.

In both these cases, MFAT demonstrated significant flexibility in responding to GoI priorities, despite reservations about the extent to which these activities aligned with RE-ACT's focus on renewable as opposed to new energy (which largely relies on fossil fuels as feed stock).

In the case of local content requirements, MFAT has expressed concern that the scope of proposed work could increase rather than decrease barriers to renewable energy, as efforts to expand renewable energy development with local labour meet capacity constraints within the Indonesian context.

Conversely, Gol stakeholders view local content requirements as integral to developing local capacity and ultimately to the sustainability of renewable energy initiatives.

RE-ACT is partner-led and responsive to Gol priorities, but this responsiveness can come at the expense of internal coherence.

A key feature of RE-ACT is its adaptability to the priorities of Gol counterparts. This feature was highly valued by Gol stakeholders, as consistently noted during consultations.

"REACT is more flexible and more accommodating to the dynamic needs of [Gol partner agency]".

- Government Partner

However, the process guiding the prioritisation and selection of activities is not always transparent. Some stakeholders also perceived a lack of logical consistency between activities, making the Activity appear fragmented and its contribution towards intended outcomes diffuse.

### Synergies and complementarity could be better articulated within the Programme Logic.

While the Programme Logic outlines the primary components and objectives of RE-ACT and is broad enough to remain consistent with current and future priorities and needs, the causal pathways and relationships between the workstreams are underdeveloped.

The ways in which different components can work synergistically towards common goals, for example, is not clearly defined. For instance, stakeholders had different interpretations of the purpose of Workstream 2 and the specific focus of its stakeholder engagement and capacity development objectives. Additionally, some stakeholders felt that the Programme Logic did not adequately capture the immediate outcomes necessary to understand whether target groups were responding to outputs as envisaged, and as such it failed to provide a solid basis for tracking progress. This is particularly important from an adaptive management perspective, where immediate outcomes are monitored within the implementation period to inform ongoing implementation.

# 3.3 External coherence: RE-ACT's position within Indonesia's renewable energy landscape

At the national level, RE-ACT's responsiveness to Gol priorities distinguishes it from similar initiatives.

RE-ACT is one of many activities working to address policy barriers to renewable energy in Indonesia, such as initiatives funded by USAID, FCDO and GIZ,

<sup>4</sup> https://www.bappenas.go.id/index.php/en/berita/di-cop-28-bappenas-paparkan-strategi-wujudkan-transformasi-ekonomi-hijau-dan-prk-ylLjU

among others. The policy expertise and objectives of RE-ACT are largely mirrored by these other donor programmes. However, given the scale of the challenges in Indonesia as well as strongly stated (and observed by the Review team) donor coordination in this sector, this overlap is not seen as duplicative but rather complementary.

When asked about RE-ACT's distinct positioning and added value, GoI stakeholders consistently highlighted its non-prescriptive approach and its flexibility in funding activities that fell outside the scope of other donors' priorities. This enabled them to fill gaps in knowledge about potential new and renewable energy to inform the upcoming RPJMN.

Acceleration of RE and support to accelerate RE is very important to achieve Indonesia's targets. RE-ACT's offering is similar to other donors [...] but RE-ACT is unique because of its responsiveness".

- Government Partner

### Within its allocated provinces, RE-ACT occupies a distinct role.

At the provincial level, RE-ACT plays a distinct role in bringing stakeholders together and providing technical expertise to support the development of Regional Energy Development Plans (RUED). Although this role is unique within the province, it is not unique in a broader sense, as similar programmes provide equivalent support in other provinces based on the National Energy Council's (DEN) allocation of responsibilities for developing RUEDs across provinces to ensure comprehensive coverage and avoid duplication.

While the RUED covers all energy planning, not just renewable energy, regional stakeholders affirmed that RE-ACT's support had strengthened the inclusion of renewable energy. This was largely due to a perceived lack of understanding of renewable energy potential in the provinces, a gap that RE-ACT was well positioned to fill.

Given that multiple programmes and donors provide similar support across different provinces, there is an opportunity for leadership in facilitating crossprogramme engagement and sharing of lessons learnt. According to DEN stakeholders consulted for this review, such an arrangement does not currently exist, though it could be "very helpful".

# From a technical perspective, there is little that distinctly reflects New Zealand's expertise in REACT.

Noting New Zealand's reputation for expertise in specific areas of renewable energy (such as geothermal and wind), several Gol stakeholders questioned whether RE-ACT could better leverage New Zealand's technical strengths.

While acknowledging that RE-ACT is focussed on policy-level change and other MFAT-funded renewable energy activities in Indonesia are more

aligned with these areas of technical expertise, some stakeholders suggested there may be opportunities to better draw on New Zealand's experience in areas such as energy and carbon markets, and resource management. Doing so could strengthen the visibility of New Zealand's contributions and enhance the overall branding and recognition of the Activity as a New Zealand-supported initiative.

### 4 Effectiveness

This section assesses the extent to which RE-ACT has achieved or is on track to achieve its intended outputs and outcomes. It does so by examining progress within each of the three Activity workstreams and evaluating their alignment with and contribution to Activity outcomes. It also explores how RE-ACT's planning and decision-making arrangements have influenced progress and identifies factors that have either contributed to or hindered progress.

### 4.1 Progress towards outcomes

RE-ACT experienced a slow start and has faced recurring delays due to recruitment challenges, staff turnover, and prolonged procurement processes.

After the GFA was signed in October 2021, GGGI was unable to recruit a Project Manager for approximately six months. The primary reason for this delay was disruptions caused by COVID-19. Although the Activity was overseen (and backstopped) by existing GGGI staff during this period, their primary responsibilities lay elsewhere, which limited progress specific to RE-ACT.

It appears that key activities that could reasonably be expected during the Activity inception phase were not carried out or were carried out inadequately. This includes, carrying out strategic/formative analysis of barriers and policy gaps, developing, agreeing on and communicating workplans for each workstream and developing a functional MEL framework and plan.

Following the recruitment of a Project Manager, the Activity began to gather momentum. However, staff turnover (including of the Project Manager) and insufficient staffing across each workstream continued to impede progress. The lack of progress has also been exacerbated by procurement processes which key stakeholders perceive as unnecessarily time-consuming compared to those found in similar programmes.

Figure 2: Progress of activities in the RE-ACT workplan

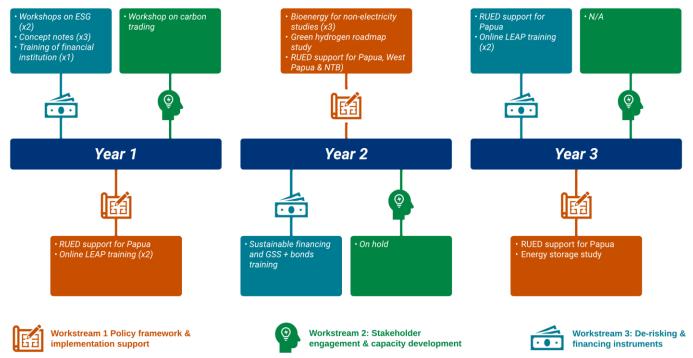


It is widely acknowledged among RE-ACT's primary partners that the Activity has not advanced to the level anticipated, and some stakeholders expressed frustration. With a new Project Manager in place and a part-time lead established for Workstream 3, there

has been a recent increase in Activity, and progress appears to be accelerating. Nevertheless, 60 per cent of RE-ACT's activities remain either delayed or onhold, while only 15 per cent have been completed and 25 per cent are on track to be completed as planned (see Figure 3). A detailed summary of planned, ongoing and completed activities is available in Annex B.

To date, most progress has been in made in Workstream 1 (Policy framework & implementation support), while little has been made on Workstream 2 (stakeholder engagement and capacity building) and Workstream 3 (De-risking and financial instruments). A summary of key activities completed under each workstream is shown in Figure 2 below and further detail of plans and progress within each workstream is outlined below and in Annex B.

Figure 3: Summary of <u>completed</u> activities by year and workstream<sup>5</sup>



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<sup>&</sup>lt;sup>5</sup> Note, engagement and capacity building activities undertaken directly in services of workstream 1 and 2 have been included in these workstreams rather than in workstream 2.

### Workstream 1: Policy framework & implementation support

Workstream 1 operates at two primary levels: activities designed to influence policy and regulatory frameworks at the national level; and activities at the regional level aimed at supporting provincial administrations in developing, implementing or revising their RUEDs.

At the national level, RE-ACT has completed studies and/or provided technical assistance on bioenergy for non-electricity use, hydrogen and energy storage, and is planning or is undertaking studies and technical assistance related to:

- Floating solar
- Wind power
- Hydroelectric
- Hydrogen
- Bioenergy
- Off-grid coal (to assess the scale of, and options to reduce reliance on coal).

While there is evidence that the technical analyses developed through RE-ACT may contribute to government planning, given the Activity's rate of progress, there is little concrete evidence that these will directly reduce barriers to renewable energy development. For example, stakeholders from Bappenas indicated that the bioenergy study facilitated by RE-ACT has been used to develop recommendations for Indonesia's long- and medium-term development plans (RPJPN and RPJMN). However, it is too early to determine whether these recommendations will be implemented and, if so, whether they will contribute to reducing barriers to renewable energy development.

Understanding the Activity's contribution to reducing barriers to renewable energy remains challenging, as activities are currently scattered across various areas and technologies rather than being concentrated on a smaller set of priority barriers. As a result, activities appear fragmented and do not systematically

address an identified barrier or set of barriers to renewable energy development.

At the provincial level, RE-ACT's support involves initiating and facilitating regional energy forums and providing technical assistance and training in areas contributing to the development or revision of RUEDs. The technical assistance and training cover:

- Needs assessment
- Data collection, including baseline data
- Energy modelling (LEAP)
- · Energy supply and demand
- Emissions calculation
- Alternative scenario development.

RE-ACT has supported RUED development in Papua and West Papua, and RUED revision in Nusa Tenggara Barat. The RE-ACT workplan includes plans to further support these provinces in addition to South Kalimantan.

Assistance on RUED development has been strongly appreciated in the provinces, with key informants acknowledging that the process would have taken significantly longer and resulted in lower quality outputs without RE-ACT's support. Stakeholders particularly appreciated RE-ACT's support for facilitating regional energy forums (see the case study on the next page).

For provincial stakeholders, the challenge now shifts to implementing these plans, with some informants suggesting the need to promote continuation of regional energy forums and to support provincial administrations in understanding the renewable energy potential in their regions to better equip them to promote its development and use. To support implementation, RE-ACT has facilitated post-RUED forums which are considered to have been useful. Some stakeholders reflected that they would likely face challenges with funding and/or coordination to continue to bring key stakeholders together at the provincial level without RE-ACT support.

### Case study: Support for RUED development

RE-ACT's engagement at the provincial level centres on developing and/or revising Regional Energy Plans (RUEDs). This support is directed by the National Energy Council, which assigns development partners to different provinces to ensure coverage and to avoid overlapping efforts. Key components of RE-ACT's support include the establishment (or reactivation) and facilitation of regional energy forums, as well as the provision of technical assistance and capacity building to guide provincial administrators through the necessary steps in RUED development.

### **Papua Province**

RE-ACT's engagement with Papua began when GGGI facilitated a training on RUED development, including energy modelling (LEAP), in mid-2022. Building on this training, RE-ACT supported data collection and analysis, providing further training and assisting in drafting the RUED later that year. However, changes to the administrative structure of Papua after drafting the RUED necessitated revisions before it could be approved as government regulation. With the assistance of RE-ACT, these revisions became an opportunity to broaden consultation and expose representatives from newly established administrative areas to the RUED process.

Although the revised RUED was finalised in December 2023, a new Presidential Pre-Regulation on the RUEN/RUED process meant that further revision was required. With RE-ACT support, the draft RUED was revisited in May 2023 and was ready for enactment by the Provincial House of Parliament. Respondents felt that

the support received strengthened the inclusion of renewable energy in the RUED as "awareness and expertise on renewable energy is limited in the province."

Further support has been requested to implement the RUED, specifically in the form of renewable resource market assessments to ensure provincial administrations understand and can promote renewable energy potential, as well as feasibility studies to advance potential projects (noting that feasibility studies are outside the scope of RE-ACT).

### **West Papua Province**

West Papua began to develop their RUED in 2022. However, as those responsible for the plan lacked a clear understanding of what RUED development involved, progress was minimal. RE-ACT's engagement, which began in 2023, catalysed progress by initiating an energy forum involving experts and stakeholders from across the energy sector to discuss energy issues. RE-ACT then guided provincial counterparts through the development process, including energy modelling, developing a RUED matrix, determining the role of new and renewable energy in the RUED and drafting the RUED. As a result, the RUED has now been signed and issued as an official provincial government regulation.

A second regional energy forum is planned, with a focus on moving from planning to implementation. Facilitated by RE-ACT, this forum will aim to identify partners and funding opportunities to enact the plan. To support this, provincial stakeholders consulted during this review expressed interest in RE-ACT's assistance in conducting feasibility studies (noting again, that this is outside the scope of RE-ACT).

### West Nusa Tenggara (or Nusa Tenggara Barat) Province

RE-ACT engagement with Nusa Tenggara Barat (NTB) has been limited to the reactivation of the regional energy forum in mid-2023. Although the forum had operated previously, it had become dormant, largely due to budgetary constraints. The reactivation of the forum was viewed positively, and representatives from NTB were eager to see its continuation. However, there has been little subsequent engagement from RE-ACT, and the future of the forum remains uncertain. NTB has high renewable energy ambitions, aiming to meet its emissions targets ten years ahead of Indonesia's NDC. As a result of this ambition, NTB is particularly proactive and is interested in prolonged and deeper engagement with GGGI through RE-ACT.

"Reactivation of Regional Energy Forum, facilitated by GGGI, is a very good step, however our concern is how to sustain this activity as we see it as an important gathering."

### **RE-ACT RUED support**

RE-ACT support for the RUED process is highly valued. While similar programmes provide comparable support in other provinces, within the provinces in which RE-ACT operates, the support plays a distinct role. This role involves bringing stakeholders together through energy forums, guiding partners through the RUED process, building technical capacity on renewable energy, and conducting contributory analyses. Combined, these activities accelerate renewable energy planning processes and have directly influenced regional plans. However, it remains to be seen how successfully these plans will be implemented in practice.

Key implementation constraints noted by RE-ACT's provincial partners include, limited human resource capacity, limited budgets for sustaining planning processes, and a lack of financing for renewable energy projects. In this context, all respondents from provincial administrations expressed interest in RE-ACT continuing its support beyond planning into implementation. Key support needs cited include, conducting feasibility studies, continuing to lead energy forums, updating energy use models and scenario planning, building capacity building for monitoring and updating plans, performing renewable resource market assessments, and identifying funding and financing opportunities.

### Workstream 2: Stakeholder engagement and capacity building

In terms of its overall aims, Workstream 2 is the least defined of the three workstreams, with its objectives, target groups and approach inconsistently understood.

Various engagement and capacity-building efforts have been undertaken, but most of these align more closely with workstreams 1 and 3 as they directly support the objectives of those workstreams and are often coupled with other forms of assistance within those workstreams. For example, training on energy modelling has been used as a precursor to RUED development, and training on sustainable financing

has been aimed at reducing barriers to renewable energy investment.

Although the Programme Logic identifies areas of engagement and capacity building distinct from the other two workstreams, in practice these efforts appear fragmented and lack an overarching rationale or strategy. A few stakeholders noted that perhaps this workstream was intended to focus on building the capacity of private sector partners, but this was not clear.

At this point in the Activity, workstream 2 can reasonably be expected to have defined its strategy and this is a clear weakness. RE-ACT's 2023-2024 workplan aims to address this by outlining a series of

activities, including a capacity building needs assessment for public sector engagement with the private sector, an approach to socialising emissions calculation methodology, and developing coordination mechanisms between the public and private sectors. However, little progress has been made. The lack of a Workstream Lead was noted as a key factor contributing to the Workstream's relative lack of progress.

### Workstream 3: De-risking instruments & financing mechanisms

Progress within Workstream 3 has been slow, but there is widespread recognition of the importance of developing and promoting accessible financing instruments for renewable energy development in Indonesia. Key barriers to renewable energy development include:

- Higher perceived risks associated with renewable energy projects.
- Perceived and actual complexity of renewable energy projects.
- Lack of a track record and limited collateral and equity from developers (as many are first time developers)

The lack of progress within this workstream to date appears to be more related to staffing gaps and management challenges than a lack of expertise, as GGGI is widely considered to have the necessary expertise to advance this work more effectively.

The recent appointment of a part-time Workstream Lead is key to progressing this area, along with the need for GGGI to update the de-risking instruments study initially conducted in 2019. This updated study should provide direction for the remainder of the Activity.

It has also been suggested that RE-ACT could broaden its stakeholder engagement with financial institutions at a national level by engaging more closely with the Central Bank, the Financial Services Authority, the Ministry of Finance, the Fiscal Policy Agency (BKF), and PT SMI (with whom GGGI already have an MoU). This would be necessary to address the barriers identified, and create the enabling environment required for provincial level authorities and banks to provide financing instruments for renewable energy development.

### **Case study: Financial instruments**

Workstream 3 aims to develop and promote de-risking instruments and financing mechanisms by building capacity and developing options for financial institutions at both national and provincial levels. With the enactment of provincial energy planning (RUED) in most Indonesian provinces, supporting the implementation of RUEDs by identifying viable financing strategies for renewable energy projects at the sub-national level is critical. Key to this is enhancing the capacity of local and provincial level financial institutions to understand and eventually manage a portfolio of renewable energy investments.

West Nusa Tenggara (NTB) Province is one of the main provinces supported by RE-ACT. To understand progress and explore RE-ACT's strategies for promoting financial instruments, the Review assessed RE-ACT's engagement with Syariah Bank in NTB. At the time of the Review, this engagement had been limited to two interactions - a Green Financing Workshop held in Bali on November 2023, and a visit by RE-ACT staff to the bank to explore the potential of linking the NTB energy programme with local banks. Although staff from the bank's Risk Management Division expressed interest in furthering this engagement and establishing a memorandum of understanding (MoU), no additional progress or communication had been established.

Syariah Banks have developed a reasonably strong portfolio of green and renewable energy investments in Indonesia. In the 2010s, many Syariah Banks financed micro and mini hydro projects, and more recently some have begun to finance solar PV projects. However, NTB Syariah Bank's experience managing green projects is currently very limited. There are three projects that they consider 'green' in their portfolio:

- 1) OKI Pulp and Paper, which utilises non-productive land for wood plantation to produce pulp.
- 2) Pertroflat's plan to manage natural gas resources.
- 3) A residential housing project that commits to planting trees for each unit sold.

Although the Central Bank provides incentives to provincial banks to support green projects through its Giro Reserve Requirement, these incentives are not perceived as attractive enough to influence the bank's behaviour significantly. The underlying issues contributing to bank's limited engagement in renewable energy financing include:

- 1) The bankability of projects, as renewable projects often involve advanced technology.
- 2) Limited understanding among the bank's staff regarding renewable energy technologies.
- 3) Regional banks' inability to offer competitive interest rates due to central regulation.
- 4) Insufficient government incentives to encourage renewable energy investment.
- 5) Limited availability of insurance for de-risking purposes.
- 6) Limited capital capacity, particularly compared to larger local bank such as Bank Jawa Barat or BJB which have established substantial green project portfolios.

Discussions with NTB Syariah Bank highlighted the need to strengthen local banks' capacity to understand the principles underpinning successful renewable projects and to assess their bankability. This could provide a useful entry point for RE-ACT. However, it is important for Workstream 3 to also broaden its focus beyond Syariah Banks to other financial institutions.

Discussions with other stakeholders, such as Indonesia's Chamber of Commerce (KADIN), support the need to engage with the Central Bank, the Financial Services Authority (OJK), the Ministry of Finance, and the Fiscal Policy Agency (BKJ) given that regional banks are centrally regulated and have limited exposure to sustainable financing initiatives. RE-ACT could also play a valuable facilitation role in linking provincial banks with other sources of fundings, including but not limited to the Indonesia Environment Fund (BPDLH) and SDG Indonesia One at PT SMI, which seek viable and feasible renewable energy or green projects to finance.

# **4.2 Effectiveness of targeting and activity selection**

### Strategic analysis is not adequately applied to activity selection.

A key feature of RE-ACT is its responsiveness to Gol requests. However, an expectation in the RE-ACT design is that this responsiveness also aligns with a strategic framework focusing on addressing significant barriers to renewable energy development.

With their understanding of the renewable energy landscape in Indonesia, most respondents have confidence that GGGI is well-positioned to filter GoI requests for support through an expert, strategic lens that prioritises the most impactful opportunities. At the very least, selected activities should have clearly defined causal links to identified renewable energy barriers and solutions. However, this does not always appear to be the case, with the analytical process for activity selection unclear and several informants questioning the value of certain selected activities in contributing to renewable energy objectives.

"If there's a new piece of work, we never receive any indication of analysis. We just get a list of things they're doing and when they plan to do them.".

- MFAT representative

Indeed, there have been several instances where MFAT has questioned preliminary selection of activities due to their perceived tenuous relationship to improved renewable energy development.

This suggests either the lack of a strategic analytical step between activity request and selection and/or an issue of communication and evidence building.

### The lack of focus influences performance monitoring and management.

The breadth and diversity of activities selected under RE-ACT creates challenges in both measuring and managing for results. This broad programmatic focus also affects the ability to measure, monitor and communicate results, with scattered outputs making contributions to higher-level changes difficult to pinpoint. Indeed, monitoring and understanding

progress and contributions to outcomes was consistently cited as a key activity weakness.

On the management side, the more complex a portfolio, the more diverse the skillset required to effectively manage it. Several respondents highlighted this dynamic when they acknowledged that the breadth of RE-ACT activities is not matched by the breadth of its technical expertise, given its relatively light staffing.

"GGGI are good at stakeholder facilitation [...]
administration and project management, but they do
not have technical expertise and understanding. They
could not review the outputs."
- Government Partner

This was considered as an influencing factor behind slow procurement timelines, recruitment challenges, and a lack of influence and leadership in strategic decision-making.

### 4.3 Effectiveness of partnerships

### GGGI remains well positioned in the Indonesian context to implement the activity.

Notwithstanding management challenges discussed above and in the next section, GGGI occupies a useful position in the Indonesian renewable energy landscape to implement RE-ACT given its broad understanding of the renewable energy context in Indonesia and well-established relationships.

"We have a unique position that no other organisation has [...] when we see a potential opening that will have impact, we will jump in".

- GGGI representative

Activity counterparts at the national level universally support GGGI's role and value their engagement. It is worth noting, however, that GoI stakeholders did not always draw a clear distinction between the work carried out through RE-ACT and GGGI's other engagements. At times, this made it difficult for the Review team to disentangle experiences of RE-ACT from other engagements and reinforces the need for

clear communication about RE-ACT and its distinct purpose and areas of focus.

Key features of the relationship cited during consultations include GGGI's flexibility (which reflects RE-ACTs non-prescriptive, partner-led approach), its regular and constructive communication, and its deep understanding of Indonesia's renewable energy context.

At the regional level, GGGI is regarded as a key driver and accelerator of renewable energy planning. However, reflecting inconsistent staffing and the breadth of activities falling under RE-ACT, some regional informants felt that relationships could benefit from more regular, sustained and consistent engagement.

### Expectations of the GGGI/MFAT partnership are not always aligned.

RE-ACT is based on a Grant Funding Arrangement (GFA) between MFAT and GGGI. From MFAT's perspective, a GFA is a high-trust contractual arrangement that transfers significant control over the direction and use of funds to the partner. This relationship is based on expectations that GFA partners are equipped both to execute the programme according to agreed strategic objectives and to meet programme management and accountability requirements.

In the case of RE-ACT, several stakeholders challenged whether this expectation is being met, with MFAT playing a significant and unintended role in activity selection, work planning and M&E.

Regarding activity selection, the perception among several stakeholders is that GGGI could play a more strategic role by analysing support requests and using its expertise more proactively to direct activity selection towards the most impactful interventions. It does not appear that this is the process currently being followed.

From GGGI's perspective, its effectiveness depends on its relationship with Gol counterparts, and this results in a potential reluctance to steer prioritisation away from activities identified by the Gol towards activities that maximise renewable energy impact. Indeed, the relationship between GGGI and the GoI has not always been strong, with an informant noting that several years ago, GGGI was "persona non grata" due to poor relations. GGGI expressed a desire to keep the GoI happy and pointed to their responsiveness to GoI requests as a pillar of their strong relationship. It therefore appears to be somewhat cautious with its relationships, and this caution may make GGGI more open to considering parallel government priorities such as advancing new energy, rather than solely focusing on advocating for renewable energy as expected in the GFA.

From a project management perspective, concerns have been raised about GGGI's work planning and monitoring arrangements. This has prompted MFAT to take an active role in guiding workplan

development, including developing templates and providing quality control in advance of Technical Project Committee (TPC) meetings.

### Relationships between New Zealand and the Gol.

A secondary benefit of RE-ACT referenced during consultations, is its potential to provide MFAT with a vehicle through which it can develop and strengthen its relationships with key GoI agencies and counterparts. The Activity largely serves this purpose by regularly bringing MFAT together with counterparts from Bappenas and MEMR/ESDM during TPC meetings and pre-TPC engagements.

These relationships are viewed positively with MFAT considered to be a flexible and responsive partner that enables investment in activities that fall outside the scope of what other donors provide.

### 4.4 Governance arrangements

# The Technical Project Committee (TPC) is now working as intended, but pre-TPC meetings are burdensome.

The governance structure of RE-ACT appears to be largely working as intended. RE-ACT's primary partners - MFAT, MEMR/ESDM and Bappenas - have actively engaged in TPC processes, helping to establish legitimacy and oversight over decision-making and work planning.

The TPC meets twice a year: once to review and approve the proposed workplan for the upcoming year, and a second time to review and provide updates on Activity progress. The substance of REACT decision-making is largely agreed upon in advance of these meetings through a series of preTPC engagements to ensure all parties agree on key decisions and avoid awkward situations where partners may disagree publicly. In this sense, TPC meetings are the formal mechanism through which decisions are presented and approved rather than the forum through which decisions are made.

Gol respondents suggested that pre-TPC meetings had become unnecessarily time-consuming, often involving significant back and forth over activity selection. It was suggested that a more clearly defined and communicated scope could reduce the need for this, as all stakeholders would be working from a common understanding of what can and cannot be supported through RE-ACT.

### The Project Advisory Group (PAG) was never formed.

The governance structure outlined in the RE-ACT Business Case includes a Project Advisory Group intended to provide strategic advice and technical guidance on project management. The Business Case states that the aim of the PAG is to leverage the experience and knowledge of a wider group of New Zealand partners (e.g. MFAT and embassy representatives, and NZ knowledge centres such as

universities and think tanks) as well as GGGI global and Indonesian experts.

GGGI never established this advisory group, and there is no record of the decision to not form the PAG, reflecting weaknesses in the Activity inception period. Respondents have differing views on what, if any, value such a group would now provide. It is unclear whether consulting these stakeholders either on an individual or group setting could have addressed some of the strategic gaps identified in the Review.

## 4.5 Monitoring, Evaluation & Learning

### The MEL Framework is not producing the evidence needed to fully understand progress.

Many stakeholders reported a lack of sufficient oversight over what is being produced through RE-ACT and how the deliverables are oriented towards and influencing targeted barriers to renewable energy.

While efforts have been made to improve MEL, the Activity does not have a dedicated MEL plan and there is little evidence that the MEL Framework is guiding data collection, analysis and use.

# The Programme Logic captures RE-ACT's main intent but does not provide a suitable basis for adaptive programme management.

The Programme Logic is oriented towards high-level and long-term national goals and plans. However, this leaves causal assumptions inherent in lower levels of the logic underdeveloped, and as such, does not direct monitoring and evaluation towards measuring and understanding these assumptions.

Key among these is the relationship between the *delivery* and *use* of the knowledge products (e.g. delivery of studies and policy options, and their use by GoI in policy formulation). Currently, this relationship is conflated at the output level and is inadequately examined.

Moreover, given RE-ACT's relatively modest scale and the complexity of factors influencing change in Indonesia's renewable energy landscape, identifying RE-ACT's contributions to high-level national targets will be difficult.

### Definitions of result levels in the Programme Logic are not consistently applied.

Including activities and sub-activities defined in RE-ACT's workplan, the results logic extends across seven result levels. However, these do not appear to be based on consistent use or understanding of result definitions. This lack of clarity extends to the MEL Framework where there is significant misalignment between results and indicators (i.e. across its horizontal logic).

### M&E appears to be under-resourced.

RE-ACT has no dedicated MEL staff and is reliant on support from a single MEL resource person who supports M&E across all of GGGI's programme in Indonesia, and support from technical advisers in Seoul. This is inadequate and inconsistent with best practice guidelines that usually suggest resourcing of between 3 and 7 per cent of a programme budget for MEL, depending on the Activity's complexity and evidence needs.

### 5 Future directions

This section builds on findings from the previous two sections to outline options and considerations to improve Activity implementation and ensure RE-ACT is positioned to achieve its intended outputs and outcomes during the second half of the Activity implementation period. It covers key areas related to Activity design, partnerships and management and operations.

# **5.1** Key Activity design considerations

### 1 Revise the Programme Logic

The current Programme Logic provides a reasonable overview of RE-ACT's aims and areas of work. However, its orientation towards high-level national results leaves lower-level results underdeveloped, making it difficult to determine RE-ACT's contributions to change. Additionally, workstreams appear siloed and the logic does not appear to be based around consistent definitions of result levels.

### Considerations for the future:

### **GGGI**

- Engage an MEL specialist to facilitate a refresh of the Programme Logic.
- The revised Programme Logic should bring result levels down to a more achievable level and should unpack the causal logic between the provision of technical and knowledge outputs and their use (see example in diagram below).

### **GGGI and MFAT**

- Develop the revised Programme Logic collaboratively with MFAT and GGGI stakeholders, ensuring it reflects design changes instigated as a result of this review.
- Base the revised Programme Logic on agreed standard definitions for result levels.
- Ensure the Programme Logic identifies synergies between workstreams



### Workstream 1: Policy framework & regulatory support at the national level

At the national level, deliverables under Workstream 1 are valued by key Gol stakeholders who play a lead role in identifying priority activities. However, given the range of areas these initiatives cover, work can appear fragmented. Further, links to the renewable energy barriers they are designed to address are not always clearly articulated.

### Considerations for the future:

#### **GGGI**

- Build an analytical step into the process of activity selection in which specific barriers/accelerants to renewable energy are identified and documented. This may also provide baseline data providing a basis for measuring change over time.
- Based on the analysis, ensure activity selection is targeted towards barriers/accelerants with the highest potential impact.

### Workstream 1: Policy framework & regulatory support at the regional level

At the provincial level, RE-ACT's support for the development of RUEDs is highly valued and critical for progress at the regional level. However, implementing and maintaining up-to-date RUEDs presents significant challenges, and questions remain regarding the sustainability of initiatives supported under RE-ACT.

### Considerations for the future:

#### GGGI

- Continue to engage at the provincial level as requested to ensure ongoing support.
- Consider how tools and instruments developed under Workstream 3 can support the implementation of RUEDs.
- Explore methods to promote sustainable RUED processes, such as advocating for integrating energy forums into provincial budgetary planning.

### **GGGI and MFAT**

 In partnership with MEMR/ESDM and the National Energy Council, consider organising a crossdonor/programme event to share lessons learned and best practices on RUED support processes.

### Workstream 2: Stakeholder engagement & capacity building

Little progress has been made in Workstream 2 and stakeholder engagement and capacity building initiatives lack a clear strategy that identifies the purpose of engagement, target groups and approaches used. Currently, most stakeholder engagement and capacity building activities align with the aims of Workstreams 1 and 3 rather than operating according to a distinct logic.

### Considerations for the future:

### **GGGI and MFAT**

Consider integrating Workstream 2 into Workstreams 1 and 3 by framing stakeholder engagement and capacity building as key approaches to be used alongside technical assistance to achieve the aims of Workstreams 1 and 3. This would concentrate activities on a narrower set of objectives making the Activity more efficient and logically coherent over the remainder of implementation. This judgement will be based on the extent to which GGGI and MFAT have confidence that the capacity assessment outlined in the RE-ACT workplan will provide a useful structure

to guide a strategic body of capacity development work beyond workstreams 1 and 3.

#### GGGI

If it is deemed valuable to retain Workstream 2 as a distinct workstream:

- Prioritise developing an overarching strategy for its operation, including identifying target groups (i.e. focusing on the private sector), themes, modalities, and purposes.
- Establish a Workstream Lead to accelerate progress, with a specific skillset in capacity development approaches, developing tailored trainings / short courses, and adult learning techniques.

### Workstream 3: De-risking and financial instruments

Progress has been limited under Workstream 3. However, this is accelerating since the appointment of a Workstream lead. While most work has taken place at the sub-national level, there is a need to engage more at the national level given that regional banks are centrally regulated. RE-ACT could also play an important facilitation role in linking provincial banks with other sources of fundings.

### Considerations for the future:

### **GGGI**

- Prioritise completion of de-risking study and use this to inform the design of future activities (incl. stakeholder mapping).
- Seek to broaden engagement with financial institutions at the national level, including the Financial Service Authority, the Fiscal Policy Agency (BKF), the Central Bank and the Ministry of Finance.
- Strengthen engagement with PT SMI to promote greater investment in RE by leveraging GGGI's existing MoU with PT SMI.

### **MFAT**

 Consider whether PLN and/or PT SMI could be brought into RE-ACT though participation in the TPC or an alternative advisory group.

### 6 Sharpening RE-ACT's strategic focus

A key feature of RE-ACT is its responsiveness to Gol priorities and requests. While this is an important strength, the downside is that as an overall Activity it can appear fragmented, lacking a consistent logic binding activities together to achieve common outcomes.

Further, this lack of focus has meant that RE-ACT is supporting activities that are not always strongly aligned with RE-ACT's original aims. This is exacerbated by a difference in framing between MFAT and GoI with the former framing the Activity in terms of renewable energy while the later empathising *new* and renewable energy. While the scope of RE-ACT is outlined in the GFA, this has not always been clearly understood or communicated to all GoI stakeholders.

#### Considerations for the future:

#### **MFAT**

- Establish a standalone set of criteria (or Menu of Services) to guide decision-making and ensure GGGI more clearly communicate what can and cannot be funded through RE-ACT (i.e. events or facilitating focus group discussions that are not directly related to an approved task). This will sharpen its focus and strengthen alignment with RE-ACT's objectives.
- The criteria should be flexible enough for priorities to be identified by GoI partners but limit areas that can become contentious or that do not deliver value for money. The provision of examples of what can be included or excluded will be helpful.

### **GGGI**

- Ensure RE-ACT's primary stakeholders are aware of and understand selection criteria.
- Use selection criteria to guide future activity prioritisation and selection.

# **5.1** Key partnerships and management considerations

### 1 Broadening partnerships

Given the Activity's focus on addressing barriers to and increasing investment in renewable energy, there has been a notable lack of engagement with some key influential bodies, including PLN, PT SMI, the Financial Services Authority (OJK), and Ministry of Finance.

### Considerations for the future:

### GGGI

- Seek ways to engage with PLN and the Directorate General of Electricity in targeting barriers to renewable energy development.
- Build on GGGI's MoU with PT SMI to explore how funding opportunities through PT SMI can be leveraged to achieve programme outcomes.

### MFAT

 Consider ways to engage PLN, PT SMI and/or the Ministry of Finance in the Activity in an advisory capacity.

### 2 Leveraging New Zealand expertise

The Activity has not made significant progress in areas where New Zealand has a reputation for having specialised expertise. Some stakeholders perceive that leveraging New Zealand more effectively could offer benefits in terms of, synergies with other MFAT programmes, efficiencies by utilising known experts, and more effectively branding the Activity as a New Zealand initiative.

### Considerations for the future:

### **GGGI and MFAT**

 Explore ways in which New Zealand can leverage its areas of speciality and competitive advantage.
 This may offer efficiencies and synergies through

- partnership with other MFAT Activities and can give the programme a more distinct identity.
- Strengthen communication about the areas where New Zealand's expertise can and is contributing to the Activity. This may be in areas related to energy and carbon markets and resource management, for example.

#### **GGGI**

 Prioritise activities in the workplan that align with New Zealand's expertise in areas such as energy and carbon markets, and resource management.

### 3 Activity governance

Pre-TPC meetings are unnecessarily burdensome as there is often significant back and forth over the extent to which activities fall within RE-ACT's scope. This is a downside of RE-ACT's flexibility that when coupled with weaknesses in communicating what is in and out of scope has created a lack of clarity over what will be acceptable to MFAT and what may not be supported

### Considerations for the future:

#### **MFAT**

 Reduce the burden of too many pre-TPC meetings by agreeing on a narrower and more defined focus for activities using a set of criteria (or Menu of Services) to define and clearly communicate what belongs in and out of scope.

### 4 Activity management

Progress has been slower than anticipated in large part due to a lack of consistent staffing. Expectations between MFAT and GGGI are not always aligned, particularly regarding activity prioritisation and selection and the Activity's strategic direction.

### Considerations for the future:

### GGGI

- Ensure each workstream has a dedicated lead.
- Develop a strategy for each workstream that outlines and actions that will address priority barriers to renewable energy development.

### 5 Funding arrangements

A Grant Funding Arrangement is a high-trust contractual arrangement that transfers significant control over the direction and use of funds to the partner. Management challenges experienced during the first half of the activity have called into question whether the GFA is the right mechanism to use for RE-ACT.

### Considerations for the future:

### **MFAT**

 Consider strengthening the assessment of potential partners for GFA through an organisational assessment that covers key management functions, including financial management, work planning, reporting, monitoring and evaluation and procurement.

### **5.2** Key operational considerations

### 1 Improving efficiency in procurement

Procurement processes are prolonged and have contributed to RE-ACT's slower than anticipated progress. This is perceived to be exacerbated by a lack of specialist technical expertise within RE-ACT for assessing the technical components of bids.

### Considerations for the future:

#### **GGGI**

 Consider bundling procurement of similar work packages to reduce procurement times and potentially attract more applicants. Achieving this would be assisted if the Activity scope was narrower and more sharply focussed.

### **GGGI and MFAT**

- Consider establishing a panel of pre-approved experts to reduce procurement timelines. This could be for RE-ACT and other relevant GGGI programming in Indonesia.
- Building on the revised Programme Logic, identify areas where technical expertise will be required and can be predicted, and work proactively to identify a range of Indonesian, and potentially NZ and international experts, who can be pre-approved to provide support when required.

### 2 Improving performance measurement and monitoring

Monitoring, evaluation and learning in RE-ACT is weak, and the Activity has not generated the level of evidence required to monitor performance and the achievement of outcomes. This is exacerbated by a lack of specialist MEL staff and insufficient support provided via the GGGI country team and international advisers.

### Considerations for the future:

### **GGGI**

- Establish a dedicated MEL position in RE-ACT for the remainder of the Activity.
- Key initial task of the MEL specialist will be to facilitate a refreshed Programme Logic, carry out a thorough review and refresh of the MEL Framework and develop a corresponding MEL Plan that sets out roles and responsibilities and identifies a timeline for key MEL activities.
- Create metrics and mechanisms for regular assessment of the use of knowledge products/ technical assistance (looking at, for example, adoption, integration of recommendations etc).

### **Annex A: RE-ACT Programme Logic**

### IMPACT:

A faster growing contribution from RE towards Indonesia's energy mix and a higher Government of Indonesia (GoI) NDC ambition

LTO2:

Reduced use of fossil fuel compared to BAU enabled

by substitution from RE

MTO2:

The economic costs of GHG emissions are recognised

and accounted for in Gol decision making

Strengthened institutional and human capacity and

knowledge for enabling RE and improved alignment

between key Gol stakeholders, and with the private sector

### LTO1:

Increased rate of public and private sector investment in RE

### MTO1:

More favorable and coherent RE policy and regulatory framework is implemented

#### STO1.

Gol recognises the need for, and commences a coherent evidence-based policy and regulatory reform process to accelerate RE

#### 01

RE policy/regulatory options to attract investment evaluated and integrated into Gol action

Provincial energy

plans (RUED) for

meeting RE targets

developed in 4

#### 02

RE policy/regulatory options to accelerate off-grid RE evaluated and integrated into Gol action

### 04

Policy options developed for increased RE use and investment in the mini-grid sector

#### ....

Key stakeholders are trained and have access to knowledge in relationship to the first and third shortterm outcome & the outputs

#### 07

Capacity building and knowledge exchange program between key Gol stakeholders to support carbon trading is developed and delivered

### 08

Key Gol stakeholders

have access to

knowledge and are

trained to for

sector engagement

Stakeholder consultation mechanisms with public and private sector are developed and used by MEMR

### LTO1:

Recognition by Gol of economic value from more ambitious NDC targets

#### MTO3:

Increased opportunity and appetite for investment in RE

#### STO3:

Increased availability of competitive RE project funding options and de-risking instruments

### 09

Develop priority options for encouraging investment and derisking private sector investment

#### 01

Explore creation of financial institutions to offer credit guarantees and equity investment for RE projects

# O11: Promote the use of preferred instruments by commercial banks and lenders

### **Annex B: Detailed summary of workstreams and outputs**

The following is information taken from the RE-ACT Work Plan document shared with the Review team by MFAT.

### Key stakeholders by Workstream

Workstreams	Key stakeholders
Policy framework and implementation support Linked to STO 1: Gol recognises the need for, and commences a coherence evidence-based policy and regulatory reform process to accelerate RE	<ul> <li>MEMR</li> <li>PLN</li> <li>Independent Power Producers (IPP)</li> <li>DEN</li> <li>Bappenas</li> <li>Provincial governments (Papua, West Papua, North, South, East, and Central Kalimantan, Nusa Tenggara Timur)</li> <li>Local communities</li> <li>NGO</li> <li>Development partners</li> </ul>
Stakeholder engagement and capacity development Linked to STO 2: Strengthened institutional and human capacity and knowledge for enabling RE and improved alignment between key Gol stakeholders, and with the private sector	<ul> <li>MEMR</li> <li>PLN</li> <li>MEMR/ESDM</li> <li>Universities</li> <li>NZMATES</li> <li>Climate Works Australia</li> <li>BPDLH</li> <li>Indonesian business entities</li> <li>New Zealand business entities</li> <li>IPP</li> <li>Provincial governments</li> <li>Local communities</li> </ul>
De-risking instruments and financing mechanisms designed through stakeholder engagement  Linked to STO 3: Increased availability of competitive RE project funding options and de-risking instruments	PT SMI Private sector actors

According to the RE-ACT Work Plan 2021-2026, the following activities have taken and will take place in order to achieve the intended outcomes.

### Workstream 1

OP 1.1: RE policy/regulatory options to attract investment evaluated and integrated into Gol action	OP 1.2: RE policy/regulatory options to accelerate off-grid RE evaluated and integrated into Gol action	OP 1.3: Provincial energy plans (RUED-P) for meeting RE targets developed in 4 provinces	OP 1.4: Policy options developed for increased RE use and investment in the mini-grid sector
Activity 1.1.1 Work with MEMR, PLN, and other key stakeholders to scope the needs and opportunities for planning activities in policy and regulatory frameworks for RE against the backdrop of national and international developments	Activity 1.2.1 Based on the major policy and institutional challenges in renewable energy off-grid sustainability that were identified at national, provincial and district level, prioritise policy options together with MEMR and key stakeholders.	Activity 1.3.1 Consult with the provincial governments of Papua, West Papua, North, South, East and Central Kalimantan as well as other development partners providing support for RUED-P development to agree on specific activities for each RUED-P	Activity 1.4.1 Develop a feed-in tariff (FIT) for dieselsolar PV hybrid systems.
Activity 1.1.2 Review national and regional options for the regulation of renewable energy included in Activity 1.1.1, summarising the main elements of current legislation and the regulatory choices available to lawmakers. Using cost-	Activity 1.2.2 Assess regulatory options for a strong maintenance framework to address major off-grid maintenance issues, including the design of incentives such as long-term contracts for successful off-grid component producers,	Activity 1.3.2 Depending on the request for support by Provincial Governments, support preparation and/or needs assessment, data collection, energy modelling, development of RUED programs and activities, and/or finalisation of the	Activity 1.4.2 Develop investment case studies using international and national examples (if the data is made available by PLN) of hybrid diesel-solar PV to help IPPs make investment decisions.

OP 1.1: RE policy/regulatory options to attract investment evaluated and integrated into Gol action	OP 1.2: RE policy/regulatory options to accelerate off-grid RE evaluated and integrated into Gol action	OP 1.3: Provincial energy plans (RUED-P) for meeting RE targets developed in 4 provinces	OP 1.4: Policy options developed for increased RE use and investment in the mini-grid sector
benefit analysis, assess policy and regulatory options and decide on the selection criteria for priority policies and regulations.	cooperatives, and private sectors; training of local technicians; and regulatory review to facilitate clarity of ownership of off-grid plants at village level in order to access nationals' village funds.	RUED-P in Papua, West Papua, North and South Kalimantan.	
Activity 1.1.3 Validate priority policies through broad-based stakeholder engagement. The validation exercise will be conducted through a focus group discussion (FGD) with key country stakeholders, including MEMR, PLN, IPPs, provincial governments, local communities, NGOs and development partners.	Activity 1.2.3 Integrate off- grid plants with rural economic development measures to ensure that improved access to electricity will create income opportunities, including through a comprehensive study of regulations that may need to be strengthened in this regard, such as special off-grid regulations.	Activity 1.3.3 Ensure lessons learned and best practices from the successful development of RUED-Ps in other provinces are shared with local governments supported through this project and used by them to improve their own RUED-Ps.	Activity 1.4.3 Support PLN to establish processes and procedures for power purchase agreements for hybrid systems and to raise awareness for them at local PLN subsidiaries in selected locations
Activity 1.1.4 Develop action plans for priority policies together with MEMR to guide adoption, dissemination, and implementation of these policies led by MEMR.	Activity 1.2.4 Work with government and local stakeholders to strengthen policy support for market-based instruments for small scale and commercial scale off-grid electricity.		
Activity 1.1.5 Ensure evaluation and refinement of the policy framework continues based on transparent and consultative processes led by MEMR.			

### Workstream 2

Output 2.1  Key stakeholders are trained and have access to knowledge in relationship to WS1 & 3 outputs	Output 2.2 Key Gol stakeholders have access to knowledge and are trained to for effective private sector engagement	Output 2.3  Capacity building and knowledge exchange program between key Gol stakeholders to support carbon trading is developed and delivered	Output 2.4 Stakeholder consultation mechanisms with public and private sector are developed and used by MEMR
Activity 2.1.1 Capacity needs assessment linked to specific activities of this project to identify capacity gaps and training needs amongst civil servants in MEMR, PLN and other key partner agencies	Activity 2.2.1 Improve the knowledge base upon which RE policies, regulations and plans are developed through knowledge sharing between GoI, especially MEMR, and private sector investors, using online and offline seminars, consultations, and training. Ideally, the knowledge sharing will take place leading up to the release of new policy, and when GoI seeks input from stakeholders to ongoing policy review.	Activity 2.3.1 Facilitate stakeholder dialogues to help Gol create consensus among stakeholders for the design and implementation of initiatives related to UNFCCC article 6. This activity will include organizing stakeholder consultations on specific topics and capacity building for agencies such as the BPDLH,	Activity 2.4.1 Identify main consultations processes and stakeholder coordination mechanisms used by MEMR to receive comments on draft policies and regulations from expert outside of the ministry.
Activity 2.1.2 Design of a capacity building and on-the-job training program with			Activity 2.4.2 Strengthen existing processes and

Output 2.1	Output 2.2	Output 2.3	Output 2.4
Key stakeholders are trained and have access to knowledge in relationship to WS1 & 3 outputs	Key Gol stakeholders have access to knowledge and are trained to for effective private sector engagement	Capacity building and knowledge exchange program between key Gol stakeholders to support carbon trading is developed and delivered	Stakeholder consultation mechanisms with public and private sector are developed and used by MEMR
online and offline training modules on priority policies selected under outcome 1			mechanisms for consultations with key stakeholders of MEMR to enhance the consistency of policies, such as IPP, PLN, provincial governments, local communities, and private sector actors
Activity 2.1.3 Together with partner organizations (universities, NZMATES, Climate Works Australia, etc.), organize training and hands-on, action-oriented learning sessions for planners and policymakers including technical training modules, on-the-job learning, and training of trainers within established institutions			Activity 2.4.3 Improve documentation of the policy design process, e.g., which research and data were used to assess policies' costs and benefits, what methodology was applied and what assumptions were made when the policy or regulation was drafted.
Activity 2.1.4 Improve MEMR and PLN's access to science-based information for planning and policymaking, especially to international policy examples, best practice and reference material on, for example, renewable energy financing mechanisms, by strengthening the capacity of national institutions, universities and think tanks.			Activity 2.4.4 Facilitate knowledge-sharing for policy development between MEMR, PLN and the private sector (including, e.g., local IPP) through round-table discussions, offline and online knowledge exchange events, and workshops
Activity 2.1.5 Organize South-South knowledge sharing to provide MEMR and PLN experts with insights, best practices, and lessons learned from peers.			

### Workstream 3

Output 3.1	Output 3.2	Output 3.3
Develop priority options for encouraging investment and de-risking private sector investment	Explore creation of financial institutions to offer credit guarantees and equity investment for RE projects	Promote the use of preferred instruments by commercial banks and lenders
Activity 3.1.1 Development of Priority Instruments for Investment. Activities will explore which tools are best and prioritize tools that can help de-risk financing to encourage lending for RE projects at commercial banks and other financiers.	Activity 3.2.1 Exploring Creation of Financial Institutions. Explore Gol interest and potential benefits of establishing dedicated entities to provide Credit Guarantees for RE projects and an Equity Investment Vehicle for RE projects.	Activity 3.3.1 Participatory Design with Private and Public Sector Investors. Support the promotion and use of these instruments by commercial banks and other key stakeholders such IPP.

### Annex C: Evaluation approach, methodology and limitations

### The evaluative approach

The approaches and principles adopted for this Review were intended to inform evidence-based and actionable findings and considerations to assist MFAT with future decision-making. These approaches are described below.

- Participatory and evaluation capacity-building approaches: The Review applied an inclusive and participatory approach to the review process, with a focus on engaging with, listening to, and learning from a broad range of stakeholders, encouraging their meaningful participation. Our local Renewable Energy Specialist brought specialised technical expertise, local knowledge and language skills which ensured the evaluation was rooted in local realities and conducted in a contextually appropriate manner. Additionally, the scope and key review questions were co-developed with the MFAT Activity Management team. The Review process was characterised by shared mutual learning, collaboration, and early sharing of key emerging themes across the Review team, MFAT, and key implementing partners to the extent that it did not hinder the independence or quality of the Review.
- **Programme theory:** The Review team critically reviewed RE-ACT's Programme Logic, Results Framework, and MERL Plan to broadly assess the extent to which the planned outputs have been achieved as well as whether the Activity is currently on the best trajectory to achieving its higher-level outcomes. The Review utilised the programme theory as a basis to assess if there is a need for changes in the Activity design.
- **Process and outcome perspectives:** This Review has both formative and summative aspects but primarily focused on the former to develop future directions for the Activity.
  - The summative aspects included an assessment of the activities / projects conducted to date to particularly focus on the results generated, both against intended and unintended outcomes generated for the assessment of effectiveness. The summative assessment also considered the alignment of RE-ACT's focus to date against prior strategies, policies and priorities of the GoNZ and Gol.
  - MFAT was particularly interested in the outcomes of this Review to inform future decision-making on priority areas and programming. With the future in mind, the Review conducted a formative assessment for RE-ACT to identify areas of support and focus, thematic priorities, partnership arrangements, implementation modalities and geographic areas that MFAT could focus on in the future. These areas also take into consideration the likely impact of changes in the operating and implementing context. The Review team sought to understand the current / future renewable energy priorities and assistance sought by GoI and document the strengths and limitations of the current modality for providing assistance.

### **Methods**

- **Mixed methods approach:** The Review utilised both qualitative and quantitative data collection and analysis methods throughout the Review to collect, analyse, synthesis and triangulate evidence. Adopting a mixed methods approach helped to mitigate some of the risks associated with the biased nature of key informant interviews based on respondents' interests in an activity and subjective assessments of progress. Additional triangulation between key informant interviews with different stakeholder groups further strengthened the Review's rigour. The Review was largely qualitative as we consulted with stakeholders through interviews and focus group discussions. Quantitative data collection and analysis took place largely in reviewing activity documentation and relevant stakeholder reports.
- **Simple illustrative case studies:** The Review team carried out basic case study analyses on RE-ACT's work on de-risking instruments and work to support development of General Provincial Energy Plans (RUED). These illustrative case studies spotlight how RE-ACT has undertaken work in practice.

### **Limitations**

The Review team experienced no major challenges in conducting the Review according to the Review Plan. However, the following limitations are noteworthy:

- Activity maturity: As a result of its slow start and intermittent progress (partially due to COVID-19), the
  Activity has not yet reached the level of maturity that was anticipated during Activity design. Consequently, it is
  too early to accurately assess several result areas, as the activity has simply not evolved to the point where
  these changes are observable. This limited the ability of the Review team to assess outcomes against the
  Programme Logic. Nevertheless, the Review team endeavoured to identify directionality of change and sought
  to assess the likelihood of results based on informant perceptions.
- Staff turnover within RE-ACT: RE-ACT has experienced frequent staff turnover. As a result, informants consulted did not always have a comprehensive understanding of the Activity history. To ensure important learning was not missed, the Review team carried out a thorough document review and sought to triangulate information wherever possible.

### **Annex D: Key review questions and sub-questions**

Criteria	Guiding questions		Sub-questions
	<ol> <li>To what extent does the REACT design respond to the needs and priorities of its main stakeholders?</li> <li>MFAT</li> <li>Government of Indonesia</li> <li>Banks and financial institutions</li> </ol>	<ul><li>a)</li><li>b)</li><li>c)</li><li>d)</li></ul>	Is the RE-ACT Theory of Change and MERL Framework appropriate to and consistent with the priorities of its main stakeholders?  Is RE-ACT's Theory of Change (ToC) comprehensive and based on a systemic analysis?  Are the activities carried out by RE-ACT and its outputs meeting the needs and priorities of its main stakeholders?  Does RE-ACT need to change in response to changes in the external environment?
Relevance and coherence	2. To what extent are RE-ACT's responsiveness and adaptive management approaches effective in incorporating changes in the operating and implementing context?	a) b) c)	Has RE-ACT been flexible and adaptive to respond appropriately and adequately to changing needs, priorities, policy and regulation, and the programmes of main stakeholders?  To what extent do RE-ACT work planning and regular review processes appropriately respond to the main stakeholders' changing needs and priorities based on emerging issues?  To what extent are RE-ACT's activities and engagement approaches conducive to programme coherence?
Releva		a) b)	What is RE-ACT's position amongst donors/actors working on green energy transition and investment in renewable energy?  Does RE-ACT have a distinctive niche in the Indonesian renewable
	How are RE-ACT activities aligned or harmonised with	,	energy space and what if anything is its unique value proposition?
	what other programmes/partners are	c)	What processes does RE-ACT follow to coordinate with other programmes/partners and how is duplication of efforts avoided?
	delivering in Indonesia?	d)	Does RE-ACT contribute to the achievement of other partners'/programmes' objectives?
		e)	Are there partnerships that RE-ACT should sustain or develop to more effectively achieve its outcomes?
		a)	Are RE-ACT's outcomes and outputs clear, practical, and feasible?
		b)	What progress has been made toward achieving RE-ACT outputs and outcomes?
		c)	Do stakeholders perceive the delivery of RE-ACT activities and outputs to be successful, timely and of appropriate quality?
ness	To what extent has RE-ACT achieved or expected to achieve its intended outputs	d)	Are the activities carried out by RE-ACT influencing national and provincial policies/regulations and programs on green energy transition and investment in renewable energy?
Effectiven	and outcomes?	e)	What are the main factors contributing to or constraining RE-ACT's achievement of intended outputs and outcomes?
ffec		f)	What opportunities exist to enhance progress towards intended results?
Ш		g)	To what extent is the RE-ACT strategy and approach in the planning and implementation of its activities effective in ensuring achievement of RE-ACT's results (outputs and outcomes)?
	5. How have RE-ACT's planning and decision-making	a)	Has RE-ACT established effective partnerships for delivering its activities?
	arrangements affected partner engagement and overall achievement of outcomes?	b)	What are the key opportunities for partners to engage with RE-ACT's work planning and implementation activities?
SL		a)	What are the lessons learned from the activity to date that could inform RE-ACT's future strategy and policy direction?
Future directions	What is recommended for the remaining period to support      ACT to achieve planted.	b)	Are there any changes needed to the current outputs, governance, and project management structure to support RE-ACT achieving its outcomes?
ture c	RE-ACT to achieve planned objectives and outcomes?	c)	What are the key considerations for future implementation of RE-ACT across its three primary workstreams?
п			What possible adjustments and improvements can be made to the REACT Theory of Change and MERL Framework?

### **Annex E: Number of consultations and informants**

Sta	keholder Organisation	Number of informants
1.	New Zealand's Ministry of Foreign Affairs and Trade (MFAT)	7
2.	Global Green Growth Institute (GGGI)	3
3.	Ministry of Energy and Mineral Resources (MEMR/ESDM)	6
4.	Ministry of National Development Planning (Bappenas)	4
5.	National Energy Council	5
6.	Indonesian Chamber of Commerce and Industry (KADIN)	3
7.	Energy and Mineral Resources Office of Papua	1
8.	Energy and Mineral Resources Agency NTB (MEMR/ESDM)	1
9.	InJourney Tourism Development Cooperation Nusantara Utilitas (ITDC NU)	3
10.	University of Mataram	1
11.	Provincial Development Planning Agency (BAPPEDA West Papua)	2
12.	Research and Innovation Agency (Balitbangda/BRIDA) of West Papua	1
13.	Syariah Bank (NTB)	10
тот	AL	47