



MENTARI Brokerage Strand and Viability Gap Fund (VGF) Evaluation

Evaluation Report

Foreign, Commonwealth & Development Office

Date: 23 September 2025

Contents

About NIRAS International Consulting	iv
Acronyms	v
Executive Summary.....	xi
1. Introduction.....	1
1.1 Overview of the MENTARI Programme and the Brokerage Strand.....	1
1.2 Objectives of the Evaluation	1
1.3 Evaluation Scope	2
1.4 Evaluation Outputs and Users.....	2
1.5 Report Navigation.....	3
2. Methodology and Evaluation Framework.....	3
2.1 Evaluation Approach	4
2.2 Limitations.....	5
2.3 Implementation Timeline	7
2.4 Ethical Protocols.....	7
2.5 Evaluation Team.....	8
3. Evaluation Findings.....	9
3.1 Effectiveness	9
3.2 Impact	15
3.3 Relevance.....	17
3.4 Efficiency	19
3.5 Sustainability	25
3.6 Programme Learning	28
3.7 GEDSI Assessment.....	30
4. Conclusion, Lessons Learned, and Recommendations.....	37
4.1 Conclusions.....	37

4.2	Lessons Learned.....	38
4.3	Recommendations	40
Bibliography		45
Annex 1 Terms of Reference		46
Annex 2 Brokerage Strand and Viability Gap Fund (VGF) Overview		52
Annex 3 MENTARI Brokerage Strand Theory of Change.....		62
Annex 4 Key Evaluation Questions Matrix.....		67
Annex 5 Use and Influence Plan		75
Annex 6 KEQ and Findings		76
Annex 7 MENTARI Beneficiaries		79
Annex 8 Stakeholder Consultations		81
Annex 9 Documents Reviewed		82
Annex 10 Interview Questions based on Services Received.....		91

About NIRAS International Consulting



NIRAS COUNTRY OFFICES

Africa: Kenya, Ethiopia, Malawi, Mozambique, Tanzania, Uganda, Zambia

South America: Colombia

Asia: Cambodia, **Indonesia**, Nepal, Philippines, Taiwan, Vietnam

Europe: Belgium, Denmark, Finland, Germany, Norway, Poland, Serbia, Sweden, Ukraine, United Kingdom

Oceania: Australia



For more than 45 years, NIRAS International Consulting has been committed to designing and implementing complex development assistance projects across the world, changing people's lives, and promoting the most innovative and tailored solutions for sustainable development.

Today, we deliver technical assistance to over 100 countries annually – a project portfolio managed by 400 permanent staff with earnings before interest, taxes, and amortisation (EBITA) of approximately €15.6 million. Our network of external experts approaches 33,000 development professionals worldwide, with our 53 offices in 31 countries supporting long-term partnerships and building local capacity in the countries where we work. NIRAS development consulting services comprise technical assistance and project management covering the entire project cycle; from initial planning studies to appraisal and implementation, operation, management and monitoring and evaluation, information management, and research. Our international activities are executed in cooperation with local experts, national institutions, and agencies, supported by our international consultants and advisers.

As one of the leading development consultancy companies, we are building on more than 40 years of international experience and management of projects in more than 100 countries. NIRAS possesses well-founded experience from carrying out assignments for a wide range of clients and development partner organisations such as multilateral donors (e.g., World Bank, Asian Development Bank, European Commission, KfW, GIZ, SDC, DFAT, FCDO, UN), bilateral donors (e.g., Danida, MFA of Finland, SIDA, USAID), and governmental and local authority institutions.

Acronyms

ACRONYM	DEFINITION
ADB	Asian Development Bank
BEJ	British Embassy Jakarta
BIMS	Business Integrity Management System
BRE	Building Research Establishment
BUMDes	Village-Owned Enterprise
CAPEX	Capital Expenditure
CCBN	Collaboration, Capacity Building and Networking Strand
CCS	Carbon Capture and Storage
CIPP	Comprehensive Investment and Policy Plan
COD	Commercial Opening Date
COP	Conferences of the Parties
CSO	Civil Society Organisation
DD	Due Diligence
DESNZ	Department for Energy Security and Net Zero
DFAT	Department of Foreign Affairs and Trade
DFI	Development Finance Institution
DGE/DJK	Directorate General of Electricity
DGNREEC/ EBTKE	Directorate General of New, RE, and Energy Conservation
DRE	Decentralised Renewable Energy
DRP	Diesel Replacement Programme
DSCR	Debt Service Coverage Ratio
ECA	Economic Consulting Associates
ENDC	Enhanced Nationally Determined Contribution
EQUALS	Evaluation Quality Assurance and Learning Service
ER	Electrification Ratio
ESDD	Environmental and Social Due Diligence
ESG	Environmental, Social, and Governance
ESIA	Environmental and Social Impact Assessment
ESPP	Energy Sector Partnership Program
ETM	Energy Transition Mechanism
FCDO	Foreign, Commonwealth and Development Office
FDI	Foreign Direct Investment
FGD	Focus Group Discussion
FI	Financial Institution

ACRONYM	DEFINITION
FIDIC	<i>Fédération Internationale Des Ingénieurs-Conseils</i> (International Federation of Consulting Engineers)
FOLU	Forestry and Other Land Use
FS	Feasibility Study
GALS	Gender Action Learning for Sustainability
GAP	Gender Action Plan
GATRIK	<i>Direktorat Jenderal Ketenagalistrikan</i> (Directorate General of Electricity/DGE)
GCF	Green Climate Fund
GEDSI	Gender Equality, Disability, and Social Inclusion
GFANZ	Glasgow Financial Alliance for Net Zero
GHG	Greenhouse Gas
GOI	Government of Indonesia
GSI	Gender and Social Inclusion
GW	Gigawatt
HDF	Hydrogen Development Fund
HMG	His Majesty's Government
HSBC	Hongkong and Shanghai Banking Corporation
ICF	International Climate Finance
IPP	Independent Power Producer
IREP	Indonesia RE Programme
IRR	Internal Rate of Return
JETP	Just Energy Transition Partnership
KEQ	Key Evaluation Question
KIAT	<i>Kemitraan Indonesia Australia Untuk Infrastruktur</i> (Indonesia-Australia Infrastructure Partnership)
KII	Key Informant Interview
KPI	Key Performance Indicator
LARAP	Land Acquisition and Resettlement Action Plan
LCEIT	Low Carbon Energy and Infrastructure team
LTS-LCCR	Long-Term Strategy for Low Carbon and Climate Resilience
LULUCF	Land Use, Land-Use Change, and Forestry
MEMR	Ministry of Energy and Mineral Resources
MENTARI	<i>Menuju Transisi Energi Rendah Karbon Indonesia</i> (Towards Indonesia's Low Carbon Energy Transition)
MHPP	Mini Hydro Power Plant
MUFG	Mitsubishi UFJ Financial Group

ACRONYM	DEFINITION
MW	Megawatt
NDA	Non-Disclosure Agreement
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organisation
NTT	<i>Nusa Tenggara Timur</i> (East Nusa Tenggara)
OECD-DAC	Organization for Economic Cooperation and Development-Development Assistance Committee
OPEX	Operating Expenditure
PAM	Project Assessment Matrix
PLN	State-owned Electricity Company (<i>Perusahaan Listrik Negara</i>)
PPA	Power Purchase Agreement
PPP	Public-Private Partnership
Pre-FS	Pre-Feasibility Study
PT	<i>Perseroan Terbatas</i> (Indonesian Limited Liability Company)
PT SMI	PT Sarana Multi Infrastruktur
PV	Photovoltaic
QMS	Quality Management System
RAN GPI	<i>Rencana Aksi Nasional Gender dan Perubahan Iklim</i> (National Action Plan on Gender and Climate Change)
RE	Renewable Energy
RfP	Reference for Proposal
RUED	Regional General Energy Plans
RUEN	<i>Rencana Umum Energi Nasional</i> (National General Energy Plans)
RUKN	<i>Rencana Umum Ketenagalistrikan Nasional</i> (National Electricity Master Plan)
RUPTL	<i>Rencana Usaha Penyediaan Tenaga Listrik</i> (National Electricity Supply Business Plan)
SMI	Sarana Multi Infrastruktur
SOP	Standard Operating Procedure
TA	Technical Assistance
TL	Team Leader
ToC	Theory of Change
UK PACT	United Kingdom Partnering for Accelerated Climate Transitions
VERPA	Verified Emission Reduction Purchase Agreement
VfM	Value for Money
VGf	Viability Gap Funding
VRE	Variable Renewable Energy

Glossary

TERM	DEFINITION
Blended Finance	The strategic use of concessional donor resources (e.g., grants) alongside commercial finance (e.g., loans or equity) to mobilise private sector investment
Brokerage Strand	A MENTARI component that connects renewable energy project developers with investors through TA, matchmaking, and funding support.
Capacity Building	Support activities that improve skills, knowledge, and institutional capabilities of stakeholders involved in renewable energy projects.
Capital Expenditure (CAPEX)	The upfront investment cost required to construct renewable energy infrastructure
Credit Guarantee Scheme	A proposed financing instrument to reduce collateral requirements, thereby enabling smaller RE developers to access commercial loans
Debt Service Coverage Ratio (DSCR)	A financial metric indicating a project's capacity to generate sufficient income to service debt obligations`
Decentralised Renewable Energy (DRE)	Small-scale renewable energy systems that operate independently of the national grid, mainly used in remote areas.
Diesel Replacement Programme (DRP)	A programme led by PLN to replace diesel generators in remote areas with cleaner renewable energy alternatives.
Environmental and Social Due Diligence (ESDD)	A process of assessing compliance with environmental and social safeguards to ensure that projects meet international and national standards
Feasibility Study (FS)	A detailed technical and financial analysis to assess whether a renewable energy project is viable.
Foreign Direct Investment (FDI)	Cross-border private investment into Indonesian renewable energy projects, often mobilised through programmes like MENTARI
Independent Power Producers (IPP)	A private entity that develops, owns, and operates electricity generation facilities and sells electricity to the grid or directly to customers
Internal Rate of Return (IRR)	A profitability indicator used by investors to assess expected returns from a project.
Interest rate subsidy	A proposed support mechanism to reduce borrowing costs for RE developers, making loans more affordable

TERM	DEFINITION
Investment Leverage	The ratio of private capital mobilised to public/donor funding invested. For example, the VGF demonstrated leverage of more than ten times its grant value
Investment Readiness	The extent to which a project is prepared and appealing for potential investors, based on documents, risk profile, and planning.
Just Energy Transition Partnership (JETP)	A collaborative framework supporting Indonesia's shift from fossil fuels to renewable energy in a socially fair way.
Matchmaking	Facilitating connections between project developers and investors to enhance renewable energy investment opportunities.
Mini Hydro Power Plant (MHPP)	A small-scale hydroelectric system used for generating electricity in rural or off-grid communities.
Off-grid Electrification	Providing electricity access to areas not connected to the national grid using localised renewable energy systems.
Operating Expenditure (OPEX)	The ongoing costs of running and maintaining a renewable energy project
OPEX grant	Proposed financial support for covering early operational costs of renewable energy systems, particularly in rural or off-grid contexts
Power Purchase Agreement (PPA)	A long-term contract between an electricity generator (such as an Independent Power Producer) and a buyer (such as PLN), defining terms of electricity sales and tariffs
Pre-feasibility Study (Pre-FS)	An initial assessment to determine whether a project idea is worth pursuing further through a full feasibility study.
Project Assessment Matrix (PAM)	An internal tool used by MENTARI to evaluate and prioritise projects for TA, matchmaking, or financing support
Project Pipeline	A portfolio of RE projects identified, screened, and prioritised for potential investment, based on eligibility and readiness criteria
Public Private Partnership (PPP)	A contractual arrangement between government and private sector entities to jointly deliver infrastructure or energy projects, sharing risks and returns
Renewable Energy (RE)	Energy derived from natural sources that are continually replenished, such as solar, wind, and hydro.
Soft De-risking	Non-financial support such as technical assessments and planning that reduce investor concerns about project risks.

TERM	DEFINITION
Stakeholder Engagement	Involving all relevant actors in the planning and implementation of a project to ensure inclusion and transparency.
Technical Assistance (TA)	Specialist support provided to strengthen renewable energy projects, including feasibility studies and regulatory guidance.
Viability Gap Fund (VGF)	A grant mechanism designed to make renewable energy projects financially viable by covering part of the funding gap.

Executive Summary

Introduction

The MENTARI Programme, launched by the UK Foreign, Commonwealth & Development Office (FCDO) in 2020, is the UK's flagship initiative supporting Indonesia's transition to a low-carbon energy future. Its aim is to accelerate renewable energy (RE) development, mobilise investment, and expand clean energy access to 844,000 households by March 2024. The programme is delivered by a consortium led by Palladium International, with Hivos, PT Castlerock Consulting, and Economic Consulting Associates. MENTARI has four workstreams, with the Brokerage Strand playing a pivotal role in bridging project developers and investors through three mechanisms: Technical Assistance (TA), Matchmaking, and the Viability Gap Fund (VGF). FCDO commissioned NIRAS in January 2025 to conduct an independent evaluation of the Brokerage Strand and VGF effectiveness, value for money (VfM), and integration of gender equality, disability, and social inclusion (GEDSI).

This evaluation was undertaken in accordance with the methodology in the Inception Report, with no significant deviations from plan. It combined document review, stakeholder engagement, and data analysis to assess the performance and impact of the MENTARI Brokerage Strand and VGF, with specific attention to GEDSI using fourteen Key Evaluation Questions (KEQs) and a Process Evaluation approach based on the MENTARI Theory of Change (ToC). Analysis combined quantitative indicators, such as projects supported, investment mobilised, and value for money, with qualitative findings on financing barriers, success factors, and enabling policy contexts. Evidence was triangulated across documents, interviews, and quantitative records, with validation from multiple stakeholder perspectives.

Evaluation Findings

The evaluation assessed the programme's performance across five OECD-DAC criteria, programme learning and GEDSI. The findings are based on document reviews, stakeholder consultations, and project data analysis, structured around KEQs.

Criteria	Key Findings
Effective-ness	Finding 1: The effectiveness of support options from the Brokerage Strand varies between beneficiaries. The general consensus is that the TA has served project developers well in earlier phases of the projects, while the VGF could have bigger potential in increasing the financial feasibility of the project with better design.
	Finding 2: Overall, evidence indicates all three types of support can positively influence investor perceptions, but there is not a "one-size-fits-all" approach for meeting investor expectations and some have demanded higher quality outputs to inform decision making.
	Finding 3: The Brokerage Strand support helped to mitigate some degree of associated uncertainties and project risks, thus improving the level of investment readiness. High-quality project preparation documents function as crucial "soft derisking" to improve investors' confidence in both the technical quality and the integrity of the project pipeline. VGF had comparably a more direct and catalytic impact on investment readiness as it addressed a tangible financing barrier and enabled actual deal closure, as opposed to upstream preparation.
Impact	Finding 4: MENTARI's contribution to new business and financing models is tangible, particularly through the VGF's structure and early demonstrations like the RE projects with hybrid business models. However, replication remains nascent. Going forward, MENTARI could

Criteria	Key Findings
	enhance impact by codifying these models into actionable knowledge products and supporting follow-on replication efforts through technical or policy support mechanisms.
Relevance	Finding 5: The MENTARI Programme aligns with the efforts to increase access to reliable electricity through the development of RE projects and shifting the use of hard-to-found diesel in remote, underdeveloped, and off-grid areas.
	Finding 6: The Brokerage Strand has reportedly achieved value for money across its three support types, with the VGF demonstrating the highest investment leverage (>1:10), TA offering cost-efficient project readiness support, and matchmaking enabling high-return investor connections at low cost.
Efficiency	Finding 7: Compared to other donor programmes in Indonesia, MENTARI shows a stronger focus on mobilising private investment for small- to medium-scale RE. The cost effectiveness level is seemingly competitive considering leverage ratios and the areas where MENTARI is operating: high-risk, distributed energy markets underserved by larger energy infrastructure.
	Finding 8: While the VGF demonstrated the highest VfM due to its leverage and financial closure results, the limited sample size suggests it should be scaled, not singularly prioritised. A balanced approach remains appropriate, as TA plays a crucial upstream role and matchmaking adds value when paired with TA or VGF.
	Finding 9: The VGF met its objectives by making RE projects financially viable and attracting private investment, but its impact was limited to a small number of mini-hydro projects under one developer, highlighting challenges in identifying eligible candidates.
Sustainability	Finding 10: The £766 million brokerage target was appropriate and strategically grounded in Indonesia's national electricity plan (RUPTL), serving as a catalytic benchmark to promote decentralised RE (DRE) investments in large scale. Finding 11: MENTARI deployed financial, managerial, and technical resources effectively, with a responsive, expert-driven support model tailored to diverse project needs. However, sustainability could be further strengthened through more frequent coordination with GoI counterparts and improved alignment of TA quality with evolving investor expectations.
Pro-gramme Learning	Finding 12: MENTARI's Brokerage Strand contributed significantly to providing successful support cases in unlocking RE investment in Indonesia. The programme's success hinged on its layered support model, catalytic VGF, and context-sensitive TA. However, challenges in coordination, quality assurance, scalability, and GEDSI integration constrained its full potential.
GEDSI	Finding 13: The integration of GEDSI principles has been part of the MENTARI Programme since its inception. However, there is no evidence indicating that specific requirements or guidance on GEDSI integration had been provided within the Brokerage Strand, resulting in limited uptake. Finding 14: While GEDSI considerations were gradually incorporated, particularly in villages where women constituted the majority of the population, the requirements were not always understood by programme stakeholders leading to inconsistent application. Finding 15: The introduction of standardised, mandatory GEDSI requirements could have mitigated the challenges of inconsistent GEDSI application, particularly considering the varied interests, understanding and drivers of the stakeholders engaged by the Brokerage Strand. Finding 16: GEDSI is not included as a formal requirement in the VGF application process meaning there is limited GEDSI integration and significant room for improvement. However, the

Criteria	Key Findings
	nature of the projects is not necessarily well suited to achieving GEDSI results given the scale of the projects MENTARI seeks to enable.

Conclusions

MENTARI's support services of TA, matchmaking, and the VGF demonstrates the effectiveness of a layered approach in unlocking renewable energy (RE) investments in Indonesia. TA accelerates project readiness when timely and well-targeted; Matchmaking connects bankable projects with investors; and VGF addresses financing gaps for technically viable but commercially marginal projects. Together, these interventions create a reliable pathway from early-stage development to financial close.

The VGF proved the most impactful in direct leverage, unlocking over £11.45 million from less than £1.1 million in grants and enabling financial closure for three mini-hydro projects. TA facilitated the advancement of projects representing over £180 million in potential capital expenditure, including unlocking investment of the DRP programme phase I with a total investment value of £436 million, while matchmaking added value by connecting developers and financiers. However, TA effectiveness depends on quality, timeliness, and alignment with project milestones; weaknesses in these areas reduced credibility and investor confidence in some cases. Sustainability risks remain for early-stage TA, highlighting the need for robust screening and adaptive support strategies.

Institutionally, MENTARI strengthened RE mobilisation capacity within key stakeholders, influenced electrification policy, and supported off-grid and community-based systems. GEDSI integration was largely informal and voluntary, applied mainly where it added value, with stronger uptake in smaller community-based projects. More formal guidelines, clearer eligibility criteria, and practical tools could strengthen future mainstreaming. Coordination with the Directorate General of Electricity (DGE) was limited due to closer thematic alignment with EBTKE's mandate; greater structured engagement with DGE could enhance programme ownership and responsiveness.

Lessons Learned

The evaluation highlighted several important lessons for future programming:

- **Tailored TA:** TA is most effective when aligned with the specific stage and requirements of each project. Context-appropriate TA support accelerates development and investment readiness.
- **Quality Assurance:** Investor trust depends on the quality and timeliness of feasibility studies and TA outputs. Establishing clear quality standards and independent review processes is essential to ensuring alignment between the programme and its partners/beneficiaries.
- **Matchmaking Readiness:** Matchmaking should be reserved for projects that have achieved a minimum level of technical and financial readiness. This is expected to lead to more productive engagement with investors.
- **Catalytic Financing:** Small, targeted grants like the VGF can have a transformative effect on project bankability, unlocking private investment and enabling financial close. The use of such grants can be an important tool for accelerating technology deployment.
- **GEDSI Mainstreaming:** Achieving consistent GEDSI outcomes requires clear guidance, eligibility criteria, and practical tools introduced early in the project cycle. Relying on implicit assumptions leads to uneven results.

- **Government Coordination:** Regular, structured engagement with government counterparts should be a cornerstone of programme delivery. Good engagement strengthens programme ownership, improves communication, and reduces implementation delays.
- **Comprehensive Documentation:** Systematic recording of processes and outputs supports performance assessment, accountability, and continuous improvement. Gaps in documentation can lead to misrepresentation of the programme and its results.

Recommendations

The evaluation recommends several practical steps to sharpen the impact, coherence, and inclusiveness of the MENTARI Brokerage Strand, especially as decisions are made for future phases. First, to improve the **quality and reliability of technical support**, the report suggests introducing a formal review process. Independent expert validation of technical outputs like FS' can ensure these products meet investor expectations and reinforce project credibility. Closer coordination between TA providers and the match-making or VGF teams is encouraged, so projects move more seamlessly from preparation to financing.

Second, stronger **alignment with government stakeholders** is essential. While collaboration with EBTKE has been effective, broader engagement, particularly with the DGE, is needed to strengthen government ownership, improve communication, and reduce bottlenecks. A clearer mapping of institutional roles and more regular coordination forums are recommended.

The report notes that **GEDSI** has not been systematically applied. Future activities should include more specific and harmonised guidance, criteria, and tools to make sure inclusion is built into project and activity design from the start, rather than rolled out mid delivery.

Finally, the report notes that MENTARI could consider **alternative financing instruments** beyond the current VGF structure. While VGF has been effective in unlocking investment, especially for mini-hydro, expanding the toolset could better support different technologies or project sizes. The idea is not to replace VGF, but to evolve it in response to what the market needs.

In summary, the recommendations call for better technical quality control, tighter internal coordination, more structured government engagement, stronger inclusion practices, and flexibility in financing tools, all with the aim of making the next phase of MENTARI more focused, scalable, and impactful.

1. Introduction

1.1 Overview of the MENTARI Programme and the Brokerage Strand

The UK-Indonesia MENTARI Low Carbon Energy Partnership ("MENTARI") is the UK's primary programme of support to the Government of Indonesia (GoI) for the acceleration of Indonesia's low carbon energy transition from coal power and towards Renewable Energy (RE) to drive sustainable economic growth and provide universal and affordable clean energy to the poorest, most remote communities, managed by the UK's Foreign, Commonwealth and Development Office (FCDO). MENTARI was launched in January 2020 and is delivered by a consortium led by Palladium International with members of Yayasan Humanis dan Inovasi Sosial (Hivos), PT Castlerock Consulting (Castlerock) and Economic Consulting Associates (ECA), concluding in April 2026 with primary delivery ending in September 2025. The MENTARI programme-level impact targets are:

- a) Increased investments in quality low carbon energy projects in Indonesia: GBP 766 million by end of the programme (cumulative); and
- b) Increased access to reliable and affordable low carbon energy (including for women and marginalised groups) to inclusive economic growth: 844,000 additional households with access to low carbon electricity in Indonesia and RE capacity additions of 1.66 GW by March 2024.

There are four workstreams in MENTARI, which are:

- a) **Policy Strand** which aims to improve Indonesia's RE policies, regulations and guidelines to realise a more conducive business environment in the low carbon energy sector;
- b) **Brokerage Strand** which aims to increase investment in low carbon energy projects in Indonesia by bridging the gap between potential investors and viable project developers through Technical Assistance (TA), matchmaking, and Viability Gap Fund (VGF);
- c) **Demonstration Pilot Project Strand** which aims to demonstrate feasible and replicable low carbon energy systems that result in socio-economic benefits for the communities; and
- d) **Collaboration, Capacity Building and Networking Strand (CCBN)** which aims to support collaboration, networking, and capacity building of relevant stakeholders in the low carbon energy sector, including policy makers, investors, project developers, communities, and academia.

Up to April 2024, key activities and successes reported under the Brokerage Strand include:

- **Providing tailored TA** for 17 RE projects at different development stages to accelerate project bankability, including support via the preparation of pre-feasibility studies (pre-FS), feasibility studies (FS), market or grid studies, and environmental studies, among others;
- **Facilitating matchmaking** for 16 RE projects, resulting in four successful collaborations between project developers and investors through signing purchase and sales agreement; and
- **Offering VGF funding** for three mini-hydro projects located in Sumatera, West Nusatenggara, and Bali.

A detailed description of the MENTARI Brokerage Strand and VGF as well as the context of the Indonesian RE market in which it is operating can be found in Annex 2.

1.2 Objectives of the Evaluation

As recommended in the MENTARI Annual Reviews over the past two years, an evaluation of the Brokerage Strand as a whole and the VGF in particular is needed. This has been recommended due to the

complexity of the Brokerage Strand and its evolution since the programme began in 2019. While the VGF has led to notable early successes, its disbursement has faced challenges due to a range of factors which warrant further exploration. Unlike the other MENTARI strands, which have their own separate assessments outside the scope of this evaluation, the complexity of the Brokerage Strand warrants a standalone evaluation by an organisation independent of the MENTARI consortium.

In January 2025, the Programme Team at the British Embassy Jakarta (BEJ) contracted NIRAS to deliver an evaluation of the MENTARI Brokerage Strand and VGF, with the following objectives:

- a. To assess the **effectiveness and value for money** of TA, matchmaking and VGF.
- b. To provide an **evidence-based review** and set of recommendations on:
 - What type of brokerage activity have been most effective and are most appropriate for leveraging investment for RE in Indonesia?
 - What other activities, including those which may have been tested within Indonesia or other comparable markets, could MENTARI consider in future, in which may have high investment leveraging impact?
 - Are the right resources in place to deliver the objectives of the Brokerage Strand, and if the ambition of MENTARI's objectives was increased, what impact would this have on the level of resources needed?
 - To what extent have Gender Equality, Disability, and Social Inclusion (GEDSI)¹ considerations been integrated into the Brokerage Strand and the VGF?
 - What could have been done differently to enhance GEDSI mainstreaming in implementation?
- c. To highlight **best practices and lessons learned** from the MENTARI programme and propose future GEDSI strategies.

1.3 Evaluation Scope

Per the Terms of Reference (ToR) in Annex 1, the purpose of this evaluation is to assess the "progress and effectiveness of the MENTARI Brokerage Strand and VGF, considering the varied approaches that have been taken by this Strand between 2020-2023". As such, this evaluation covers the MENTARI programme period from January 2020, with data collected on programme results up to April 2024, the latest period for which annual results reporting was available. Programme results after this date are not included in this assessment but information obtained through primary data collection related to activities or additional results achieved after this date has been collected and may be referenced in the analysis where considered appropriate. The evaluation assesses the design, implementation, and results of the Brokerage Strand. It does not consider results achieved after the April 2024 cut-off date; internal financial audits; components implemented solely by third parties without accessible data; information from beneficiaries who were not interviewed; and information from other MENTARI strands, except to the extent that they are referenced in Brokerage Strand documentation.

1.4 Evaluation Outputs and Users

1.4.1.1 Outputs

The main outputs for this evaluation are this Evaluation Report, the Inception Report, a preliminary findings workshop, and two pager highlights/briefs for key findings. The timing of the evaluation outputs

¹ Also referred to in the Annex 1 Terms of Reference as Gender Equality and Social Inclusion (GESI) and Gender & Inclusion (G&I).

has been agreed with FCDO in order to inform the MENTARI Phase II Business Case decision-making process. As such, primary users (as listed below) are expected to have a high interest in the evaluation results and find them immediately useful, while tertiary users are expected to refer to the report to better understand MENTARI progress in the context of Phase II.

1.4.1.2 Users

The primary users of the evaluation are FCDO (the client) and the Palladium International consortium, particularly PT Castlerock Consulting staff. The evaluation serves both a learning and accountability function, as FCDO may use the findings to determine whether adjustments are needed for future programmes.

Secondary users include the Indonesian Ministry of Energy and Mineral Resources (MEMR) and PT SMI, as the findings may inform their policies and decisions related to financial support schemes and business models for RE electrification, and provide evidence for what approaches work and why.

Tertiary users include wider Indonesian low-carbon energy actors, including other FCDO delivery partners, international donors and GoI stakeholders, who may draw on the findings to inform their business approaches to RE projects in Indonesia. In a broader context, the general public can also access the evaluation findings, as the Final Evaluation Report will be published by FCDO to promote transparency and public learning.

A use and influence plan is provided in Annex 5. The evaluation team intends to engage FCDO in the months following the conclusion of this evaluation to understand how the outputs have been used and the extent to which the findings and recommendations have influenced programme decision making.

1.5 Report Navigation

This evaluation report is structured as follows:

1. **Section one** outlines the background and context of the MENTARI Programme, and describes the objective, scope, outputs, and users of the evaluation.
2. **Section two** details the methodology and evaluation framework including the evaluation questions limitations.
3. **Section three** presents the key evaluation findings against the OECD DAC criteria and evaluation questions.
4. **Section four** presents conclusions, lessons learned, and recommendations, drawing on the evaluation findings.
5. A number of technical annexes are then provided including the evaluation ToR, Brokerage Strand Theory of Change (ToC), the evaluation matrix, a use and influence plan, a list of Brokerage Strand beneficiaries, a summary of stakeholders consulted and documents reviewed for the evaluation, and a sample interview questionnaire.

2. Methodology and Evaluation Framework

The evaluation followed the methodology outlined in the Inception Report, with no significant deviations from the planned approach. The process combined document review, stakeholder consultation, and data analysis to assess the performance and impact of the MENTARI Brokerage Strand and VGF, with particular attention to GEDSI. In this section we present a summary of the approach and methodology used.

2.1 Evaluation Approach

2.1.1 Key Evaluation Questions

The ToR provided fourteen Key Evaluation Questions (KEQs): twelve focusing on the programme's approaches to achieving its brokered investment targets and two exploring GEDSI integration. The questions were mapped to five OECD-DAC criteria: effectiveness, impact, relevance, efficiency, and sustainability, with an additional "lessons learned" criteria. Following an initial review of programme documentation and clarification discussions with the Programme Team at BEJ, three KEQs were refined to ensure clarity and alignment with available evidence sources. These finalised KEQs became the central framework guiding all data collection, analysis, and synthesis activities, and are provided in full in Annex 4.

2.1.2 Evaluation Methodology

A **Process Evaluation** approach was adopted to assess the delivery of the Brokerage Strand and VGF and their respective performance. The MENTARI ToC (Annex 3) provided the analytical foundation against which processes, governance, and activities were examined, using the KEQs as the guiding framework for evidence synthesis. This approach fit the assignment's scope and timeframe, enabling focused inquiry without additional hypothesis building and ensuring the design reflected the delivery context. Our Process Evaluation approach consisted of four key steps (Figure 1): project initiation, data collection and review, data analysis and verification, and reporting.



Figure 1. Process Evaluation Approaches

Project Initiation. A kick-off meeting was held on 23 January 2025 to align NIRAS, the BEJ Programme Team, and the MENTARI Brokerage Strand delivery partners on objectives, expectations, deliverables, and timelines. Communication protocols were established (points of contact and fortnightly coordination), supporting smooth implementation throughout the evaluation.

Data Collection and Review. This process aimed to capture both quantitative and qualitative evidence on implementation, impact, and challenges. Secondary data collection began with a review of MENTARI documents provided by the BEJ Programme Team and Palladium International, including technical documents, internal reports, brokerage portfolio data, GEDSI action plans, and other relevant sources, which formed the basis for analysis. A portfolio review consolidated evidence on supported projects to identify achievements, updates, and trends in TA, Matchmaking, VGF utilisation, and GEDSI integration.

Stakeholder mapping was conducted to identify interview candidates and clarify linkages to the Brokerage Strand, while also assessing alignment and complementarity with government and development partner initiatives. In parallel, a targeted GEDSI integration review examined typologies, enabling factors, and the extent to which GEDSI was embedded across project design, implementation, and results, with gender and other vulnerability criteria disaggregated where feasible.

Primary evidence was collected through semi-structured key informant interviews (KIIs). A purposive sampling strategy was adopted given the short data collection period to ensure the selection of stakeholders capable of providing in-depth insights and relevant perspectives on MENTARI activities. 24 interviewees (20 men, four women) from 13 institutions were engaged online and in person. The sample

included: five project developers, four investors, one VGF financier, one delivery partner, and two programme owners. Interview protocols were developed during inception and adjusted as learning emerged from early interviews. The *Evernote* application was used solely for transcribing stakeholders' interviews from audio recordings into written notes. Ethical standards were applied throughout (informed consent and confidentiality). Annex 8 and Annex 10 contain the interviewee list and sample questionnaire respectively.

Data Analysis and Verification. Data analysis was iterative and began during data collection, allowing the evaluation team to surface emerging themes early and raise clarifications promptly with interviewees. Preliminary insights were tested against additional documents or interviews, and qualitative and quantitative evidence was cross-checked in real time so discrepancies could be investigated promptly. Qualitative evidence was synthesised against the KEQs to draw out key findings and trends, and to identify evidence gaps.

For the climate finance analysis, key indicators were assessed quantitatively including projects supported, investment mobilised, and value for money (VfM) metrics. Ratio analysis was used to assess the leverage of VGF funds against additional private capital mobilised.

For VfM, a 4E approach was followed to assess the economy (cost of inputs), efficiency (cost of output achievement), effectiveness (cost of outcome achievement) and equity (distribution of costs and benefits) of Brokerage Strand spending (noting the fifth E of cost-effectiveness was not used by the programme). The VfM analysis reviewed the programme-level and Brokerage Strand VfM reporting indicators and available data, and integrated relevant analysis in terms of results achievement (i.e. for efficiency and effectiveness assessments), GEDSI, financial leverage, and market benchmarks as well as qualitative perspectives shared by interviewees. The full budget data was not available for review, limiting the scope of the analysis.

GEDSI findings combined disaggregated participation and engagement data with thematic insights on challenges, good practices, stakeholder capacities, and outcomes. GEDSI was assessed as an integral component of brokerage activities rather than a standalone stream, enabling judgements about its contribution to results and implications for future programming.

All evidence collected was subject to triangulation and data verification protocols, primarily through cross-checking documents, interviews, and quantitative records, and using multiple different data sources to inform that cross-checking. Investment and financing data were compared with reports from PT SMI, PLN, and investors where available. Stakeholder accounts were triangulated across developers, investors, government agencies, financiers, delivery partners, and programme owners, as well as against secondary documentation. The strength of evidence was graded by distinguishing verifiable data from plausible perceptions.

Reporting. Preliminary findings were discussed at a workshop on 20 May 2025 with BEJ and delivery partners to validate results and refine conclusions. Final deliverables comprised this Final Evaluation Report, a two-page highlights brief on the Brokerage Strand, and a presentation of results to BEJ, delivery partners, and other stakeholders as agreed with the Programme Team at BEJ.

2.2 Limitations

Table 1 presents the key limitations identified in the evaluation approach and the mitigating actions used to address them.

Table 1 Limitations and Mitigation Approach

LIMITATIONS	MITIGATION APPROACH
Initial documents on project scope (Request for Proposal (RfP) and Agreement) were not available from the beginning of the evaluation, making it difficult to understand the actual scope of the project.	NIRAS received two documents from BEJ, titled <i>Evaluation Question 3</i> and <i>Evaluation Question and Statement Requirement</i> dated 28 April, three months after the kick-off meeting. As a result, NIRAS proposed to adjust the timeline of evaluation milestones to maintain the quality and to ensure proper evaluation methods after the agreement is obtained.
The project documentation and progress reports were inadequately maintained and remained unaudited, which hindered the ability to obtain accurate data for the analysis.	The following strategies have been adopted to mitigate the limitations caused by incomplete or unaudited project documentation and progress reports: 1. <i>Triangulation with other data sources</i>: Supplementing project documents with alternative data sources, such as KIIs, other documents from delivery partners, and reports from third-party stakeholders (e.g., PT SMI, PLN). 2. <i>Stakeholder validation</i>: Validating unclear or missing data through direct consultation with relevant stakeholders, including project developers, delivery partners, and programme owners, who can provide clarification or additional documentation. 3. <i>Document gaps transparently</i>: Clearly documenting any data gaps and limitations in the final analysis, and indicating where assumptions were made, to ensure transparency and maintain the credibility of the evaluation
Limited interviewee sampling which may not be representative of the diversity of perspectives within the Brokerage Strand. Specifically, interviews were not undertaken with community members or end-beneficiaries.	Stakeholder sampling for KIIs was purposive, with interviewees selected to provide a range of perspectives across project criteria including: project location; technology type; on-grid or off-grid status; and type of business entity (e.g., project developer, foreign investor, or state-owned company). Where insufficient primary data was available, gaps were addressed with secondary research. It was determined that there would be limited value in engaging community members or end-beneficiaries for this study, given the relatively early stage of projects supported and the need to prioritise other stakeholders in the limited data collection period.
The limited project timelines did not allow pre-testing interview questions.	The data collection window fell during the month of Ramadhan, which meant there was limited time between evaluation design and the KIIs. As such, pre-testing interview questions was not possible. To mitigate this, the evaluation team adopted an adaptive approach, adjusting the interview format as necessary (e.g., online or in-person, individual interviews or focus group discussions), as well as seeking further clarification after interviews where required.

2.3 Implementation Timeline

All deliverables were scheduled for completion within six months following the signing of the Agreement. However, the submission dates for several deliverables have been revised due to various operational considerations, as outlined in the table below.

Table 2 Timeline of Project Deliverables

NO	DESCRIPTION	SUBMISSION DATE	REASONS
Management Reports:			
1	Draft Inception Report	Plan: 21 Feb 2025 Actual: 25 Feb 2025	N/A
2	Final Inception Report	Plan: 21 Mar 2025 Actual: 1 May 2025	Additional time for responding the comments from the EQUALS team to the Inception Report
3	Bi-Weekly Progress Update	Every two weeks	N/A
Technical Reports:			
4	Draft Evaluation Report	Plan: 9 June 2025 Actual: 30 June 2025	Additional time for reviewing the data and analysis as a response to the input/comments during preliminary findings on 20 May 2025.
5	Final Evaluation Report	Plan: mid-September 2025	Additional time for responding the EQUALS and BEJ feedback.
6	Two Pager Highlights	TBD	To be prepared after Final Evaluation Report as needed.

2.4 Ethical Protocols

Our evaluation approach has been guided by the NIRAS Business Integrity Management System (BIMS) and Code of Conduct. The publicly available BIMS includes anti-bribery and corruption, whistleblowing and safeguarding information and training as a requirement for all contractors and staff. All NIRAS evaluation activities, including this assignment, align with and follow key HMG ethics standards, including the FCDO Ethical Guidance for Research, Evaluation and Monitoring Activities. The data collection also adhered fully the OECD DAC Quality Standards for Development Evaluation, UN Evaluation Group Ethical Guidelines and Integrating Human Rights and Gender Equality in Evaluation Guidelines. Our data collection approaches required informed consent be obtained before individuals provided data, that our analysis was inclusive of all relevant stakeholders, and that personal harm and unnecessary burden on respondents was avoided. The Contract Director and Evaluation Manager were all responsible for upholding and ensuring adherence to these ethical standards.

In terms of stakeholder engagement, we sought to ensure all processes were inclusive, transparent and aligned with the Do No Harm principle. Stakeholder engagement sought to be considerate of socio-economic characteristics including gender, age, disability, geographic location, socio-economic status and other demographic factors, recognising certain limitations in achieving this due to limited MENTARI stakeholders. No engagement with community members and other vulnerable groups was undertaken for this evaluation. Additionally, we were responsible for the safety and well-being of subcontracted

experts affected by the activities under this contract, including appropriate security arrangements. We were also responsible for the provision of suitable security arrangements for our domestic and business property.

The evaluation team confirms that no conflicts of interest have been identified throughout this evaluation process, which would influence the findings presented. The evaluation team confirms this evaluation has been undertaken independently and free from interference or influence. To the best of the evaluation team's knowledge, all data shared by interview participants was provided freely without influence from programme stakeholders.

Artificial Intelligence (AI) tools were used to support certain evaluation processes including the transcription of interviews, cataloguing of documents, and formatting or consolidating tasks within the report (i.e. generating an acronym list). Generative AI was not used in the drafting of the report, but has supported copy editing tasks.

2.5 Evaluation Team

The evaluation has been conducted by a small team (Figure 2) consisting of a Team Leader (TL), a GEDSI expert, a Climate Finance Specialist, an Evaluation Manager, a Contract Director, and a Senior Quality Assurance Advisor. The TL was in charge of overseeing and guiding effective implementation of the project, supported by the Evaluation Manager. The TL served as the primary point of contact with FCDO and programme delivery partners in regard to technical outputs. The Contract Director primarily focused on resource management, contractual obligations, performance management, and risk escalation, and acted as the primary point of contact for FCDO on contractual and performance issues. The evaluation team was supported by a Senior Quality Assurance Advisor, who oversaw the quality and integrity of the evaluation outputs, such as the inception and evaluation reports, in line with NIRAS quality management standards. Additionally, a UK-based Project Manager, provided support for financial reporting and forecasting.

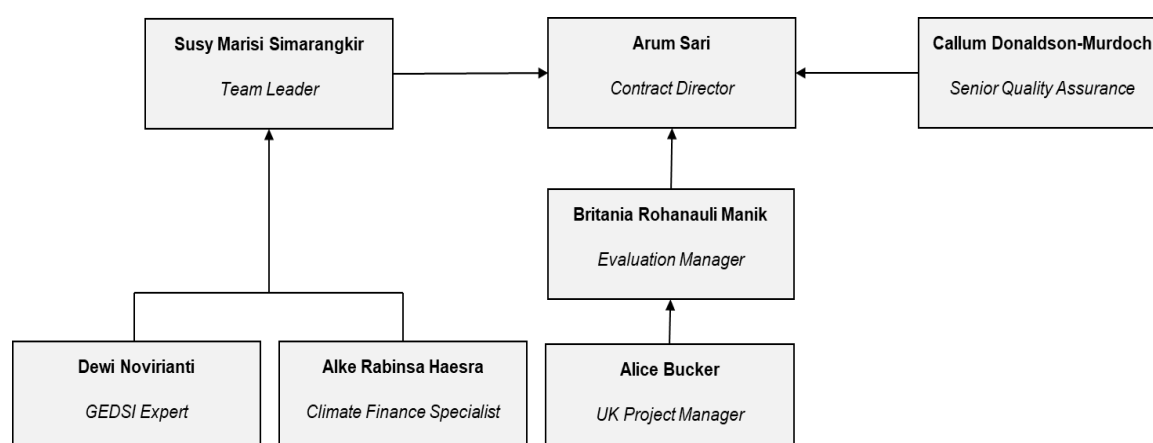


Figure 2. NIRAS Team Structure

3. Evaluation Findings

This section presents the main findings of the evaluation, structured around the OECD-DAC evaluation criteria, with additional consideration of FCDO priorities on lesson learned. The findings are based on triangulated evidence gathered through document reviews, stakeholder consultations, and quantitative and qualitative data analysis. They aim to provide an impartial and evidence-based assessment of the programme's performance, outcomes, and contribution to FCDO objectives.

3.1 Effectiveness

3.1.1 KEQ1. How effective have different types of support (TA, matchmaking services, and viability gap fund) been in improving the quality and bankability of supported projects?

Finding 1: The effectiveness of support options from the Brokerage Strand varies between beneficiaries. The general consensus is that the TA has served project developers well in earlier phases of the projects, while the VGF could have bigger potential in increasing the financial feasibility of the project with better design.

TA: MENTARI's TA aimed to accelerate project development at the early stages and improve investment readiness for RE initiatives. Support was provided not only to individual RE projects but also to government-led programmes, such as PLN's Diesel Replacement Programme (DRP) and village electrification efforts. The scope of TA provided included FS, grid analyses, pre-FS, land acquisition planning, and feedstock assessments.

The Brokerage Strand set a target to support at least 30 low-carbon energy projects through TA and brokering services². In 2023-2024, the delivery consortium reported providing TA to a total of 147 on-grid and off-grid RE projects. PLN's DRP received significant TA, including technical reviews of FS' for over 200 sites. From this, 94 sites were prioritised for project development - representing half of the total projects brokered by MENTARI - with support to bid and tariff development and technical inputs on safeguarding. TA was also extended to support the execution of competitive bidding, resulting in the selection of winning bidders for two distinct project clusters³.

Interview feedback from project developers highlights the crucial role of TA in enabling comprehensive analysis of technical, financial, and environmental viability in the early phases. These studies provided a solid foundation for subsequent project development, improving credibility with potential stakeholders and co-financiers. TA was considered most effective when closely aligned with the project's specific stage and needs. For example, pre-FS' for a PV project in Buton and feedstock assessments for a biomass initiative were specifically noted as representing the right support at the right time.

However, other interviewees described a perceived lack of consultation from MENTARI on scope adjustment and prioritised project location selection, which has implications on financial feasibility of the project. This mismatch reportedly undermined the potential impact of the collaboration with project developers, although the examples are limited.

² Final MENTARI Annual Review, 2021, page 19

³ MENTARI Annual Report 2023-2024, page 9

Figure 3 illustrates the progression of MENTARI-supported projects across various preparation stages.

Figure 3 Status of the MENTARI Projects

Projects halted or with no data before PPA	Projects in pre-PPA stage	Projects in progress to secure PPA	Projects with secured PPAs and other contracts	Projects at Financial Close
Sago Bark Biomass 1–10 MW/Hydro <1 MW/Hydro 1–10 MW/Hydro 1–10 MW/PV Maluku Rural Electrification Potential Microgrid Projects West Papua PV Project Food & Energy Nexus Solar Water Pumping Q4 plotting of existing off-grid Smart Minigrid with Metering & Mobile Payment Potential PV projects 10 MW Cibuni Geothermal 5 MW Central Geothermal 5 MW Biomass Diverse Biomass MHPP (3) Potential 2.5 MW fixed-bed Tidal Energy Potential rural electrification projects Utility Solar RE portfolio 2 × 100 kW/MHPP 2 × 2.50 mW/MHPP 3 × 2.8 mW/MHPP 4 × 10 MW/MHPP 4 × 7 MW/MHPP New PV projects Hybrid PV for private resort Hybrid PV for cold storage Teunom 3 MHPP Teunom 2 MHPP Expansion of a 15 MW/PV plant Pipeline of Solar PV/Rooftop for C&I Pipeline of Utility, Captive, and Hybrid PV 200 MW Wind & PV projects RE for community Solar PV Power Plant SEBKO PLN Diesel Replacement Phase II	120 MW Bali Banyuwangi Power Reserve 55 MW Wind West Java Hybrid Hydrogen/PV/Battery (2) Off-grid PV for Eastern Indonesia Islands – Off-grid PV for Eastern Indonesia Islands – Off-grid PV for Eastern Indonesia Islands – Potential 10 MW Floating Tidal Energy Plant 3 × 3.3 MW/MHPP Expansion of a 1 MW/PV plant 200 MW/PV in Hinegaya Mine PV-Mini Hydro Hybrid PLTS Sustainability bond Support Kemendesa on 21 villages as DAK	Banten Floating Solar PV Plant Hybrid Hydrogen PV/Battery 3x1 MW in Buton	BT 3 MHPP BT 4 MHPP Sisira MHPP PLN Diesel Replacement Phase I	Coconut Husk Biomass Diesel Conversion to Solar PV for VGF – Brantas Mahalona Energi, VGF – Brantas Prospek Pandanduri, VGF – Brantas Total Energi,

Matchmaking: By March 2024, the Brokerage Strand matchmaking service has reportedly facilitated 16 matchmaking meetings and enabled four productive collaborations, including engagements with major financiers (e.g. GFANZ members like MUFG, HSBC, Macquarie) by curating projects that match investor criteria.⁴

These matchmaking activities have led to several early-stage partnerships, but interviewees (project developers and investors) indicated that the effectiveness of this support required alignment with additional TA and/or VGF services to maximise impact and create an integrated approach. Based on the list of projects shared by the consortium, only the hydrogen projects in three locations and coconut husk biomass project in Maluku received both matchmaking and TA. All of these projects reported positive experiences and results under such integrated support.

It should also be recognised that there is some perceived overlap between the matchmaking and TA services. This is partially due to the nature of matchmaking itself in RE project development assistance. There are two outputs of the Brokerage Strand that can qualify as matchmaking activities: Output 2 (*Extension of marketing and due diligence services for existing public and private investors*) and Output 3 (*Continuous engagement with financiers and developers for matchmaking and improving understanding of regulatory environment and opportunities*). The MENTARI team claimed that both outputs have been achieved referring to the February 2020 baseline.

⁴ Brokerage – Annual Report (2023-2024) page 9

VGF: The VGF provides direct impact for projects that are technically and economically viable but have issues with financial feasibility, especially regarding debt capacity. The VGF has provided GBP 0.893 million in construction grants across three mini-hydro projects, reportedly contributing to the mobilisation of GBP 11.45 million in private investment⁵ (or GBP 10.3 million when adjusted for contribution estimates, an investment ratio of over 1:10) and enabling projects with poor debt service ratios (DSCR) to secure financing from PT SMI and sponsors. Two projects (in Bali and Lombok) reached Commercial Operation Date (COD) in April 2024, while the third (in West Sumatra) is under construction at the time of writing.⁶ Table 3 provides the list of projects that receive VGF support.

Table 3 List of RE Projects with VGF Support Type

Project Name	Project Owner	CapEx Value (million GBP)	Support Value (GBP)	Capex Value / Support Value
MHPP Brantas Mahalona – Titab Bali	BRE	1.35	202,214	6.67
MHPP Brantas Prospek Mandiri – Pandanduri, Lombok, West Nusatenggara	BRE	0.95	141,880	6.67
MHPP Brantas Total Energi – Batanghari, West Sumatra	BRE	9.15	549,298	16.67

Source: Investment Tracker, 2024

The VGF support for the three mini hydro projects mentioned above is considered effective and appropriate for addressing the key financing gaps faced by the project developer, BRE.⁷ Importantly, the integration of the VGF with PT SMI's loan products has allowed for a more coherent financing structure, enhancing project viability. This synergy between grants provided by VGF and concessional loan instruments by PT SMI was seen as a strategic advantage of the programme.

However, there were challenges related to the timing of VGF disbursement, such as the VGF having to be disbursed early by BEJ to allow the associated loan process to move forward. This situation reveals a mismatch in the timing and sequencing between grant disbursement and loan approval, which created delays and coordination issues. For typical energy innovative projects (e.g., hydrogen) or large-size variable RE projects, the VGF component is considered insufficient to meaningfully improve the project's bankability, primarily due to high capital expenditure (CAPEX). There is also issue on the limited scale of VGF relative to total project costs which can reportedly make it difficult to bridge the financial gap for commercial investors.

Overall, each mechanism under the Brokerage Strand has played an important role in supporting project feasibility, while each has its own drawbacks. The TA activities have enhanced the technical and financial credibility of supported projects, but must be provided at the right time and would benefit from greater coordination; the matchmaking services have successfully connected developers and investors in several

⁵ Brokerage Investment Tracker, 2024

⁶ Brokerage – Annual Report (2023-2024) page 10

⁷ Interview with project developer

cases but require combined support with TA and/or the VGF to ensure the achievement of results; and the VGF has enabled a small cluster of projects to secure additional financing but has faced issues of timing and matching its size to the scale of project needs. The perspective from stakeholders across the Brokerage Strand is that a consolidated and coordinated process is needed which brings together elements of each mechanism to achieve a greater set of results.

3.1.2 KEQ2. How have different types of support (TA, matchmaking, and VGF) influenced investor confidence in selected projects and in RE investment opportunities in Indonesia?

Finding 2: Overall, evidence indicates all three types of support can positively influence investor perceptions, but there is not a “one-size-fits-all” approach for meeting investor expectations and some have demanded higher quality outputs to inform decision making.

The MENTARI programme has reportedly helped boost investor confidence in Indonesia’s RE sector across all three supported mechanisms. Interviews with developers and investors confirmed that MENTARI’s involvement made projects more credible and attractive for financing, reduced risk concerns, and demonstrated that RE projects in Indonesia can be financially viable. Each mechanism has influenced these perspectives in different ways, with the TA activities arguably being the most impactful providing enhanced technical insights into the requirements, expectations and potential of the supported projects, enabling more evidence-based decision making by prospective investors.

One key area noted in interviews was technical studies, which investors rely on heavily when deciding to fund a project. However, some investors noted that certain FS’ were incomplete or not aligned with their expectations. This is understood to be because they were prepared before specific investors were engaged, and therefore specific investor expectations were not integrated in the scope of the FS (interview respondents chose not to provide further detail on the quality gaps, which could be explored as part of a future scoping exercise). This mismatch reduced confidence in a few cases and reportedly impacted perceived project bankability.

The matchmaking activities have reportedly contributed to this positive influence by pairing financiers with projects which are likely to align with their expectations and investment priorities, offering investors an opportunity to engage projects with which they already have some understanding and comfort. The VGF has supported investor perceptions by enabling supported projects to progress towards commercial readiness and overcome regulatory hurdles, such as MEMR Regulation No. 10/2017 which applied generic PPA guidelines across all energy types, offering limited clarity or flexibility for renewable energy projects. VGF-enabled projects benefited from more modern, renewable-specific PPA frameworks, and the VGF could address capital needs for longer investment horizons. In both cases, it should be acknowledged that perceived changes in investor perceptions are linked to the specifically supported projects, and are not necessarily reflective of wider behavioural change.

While investor confidence reportedly improved in some cases following the different types of project support, the MENTARI programme did not monitor this behavioural change with specific logframe indicators and so a consolidated and methodologically sound analysis of changes in investor perceptions has not been conducted. Some programme documentation points to the achievement of financial close as a proxy for investor perceptions improving, but it should be noted that financial close is impacted by a wide range of external factors and that this approach does not represent those investors who have

not been influenced by the MENTARI activities, nor does it speak to increased confidence of investors to engage in the market beyond the MENTARI supported projects.

As a result, while there is anecdotal evidence that the different Brokerage Strand mechanisms have influenced investor confidence positively for specific projects, there is insufficient evidence available at this stage to conclusively determine the relative importance of the MENTARI activities in achieving this, the comparative influence of each mechanism, and the reasons for investor confidence being unaffected where that has been observed.

3.1.3 KEQ3. To what extent has the support increased the likelihood of projects securing investment, both during and beyond the programme's lifetime?

Finding 3: The Brokerage Strand support helped to mitigate some degree of associated uncertainties and project risks, thus improving the level of investment readiness, especially within the underserved and riskier segments of Indonesia's RE market. High-quality project preparation documents function as crucial "soft derisking" to improve investors' confidence in both the technical quality and the integrity of the project pipeline, thus increasing the project's likelihood to secure investment. VGF had comparably a more direct and catalytic impact on investment readiness as it addressed a tangible financing barrier and enabled actual deal closure, as opposed to upstream preparation.

The MENTARI Annual Report 2023–2024 indicates that MENTARI support significantly increased the likelihood of RE projects securing investment. A reported combined forecast project value of GBP 927 million⁸ has been supported as of the end of Year 4 across the three mechanisms, covering 147 on-grid and off-grid RE projects⁹. It should be noted that the majority of these projects (94 sites) are under PLN's DRP which has been reportedly tendered and awarded in September 2023 (see Finding 1 above)¹⁰.

Based on the list of projects shared by the consortium, only five have reached financial close, while three have been cancelled and the rest are still in the process of project preparation. Based on the investment tracker shared by the consortium, several projects are significantly postponed, driven by issues such as investors withdrawing following due diligence. Of the five projects that have reached financial close, three involved VGF (Table 4). This arguably indicates the VGF is the more successful instrument in achieving financial close, but it must also be noted that the VGF is deployed at a later stage to bridge specific funding gaps.

Table 4 Summary of Investment Project Status

Project Status	#	Notes
Reached Financial Close	5	- TA: 1 Project of Diesel Conversion to Solar PV for village facilities in Kalimantan - Both TA and Matchmaking: 1 Coconut Husk Biomass project in Maluku. - VGF: 3 Micro Hydro projects in Bali, Sumatra, and Lombok.

⁸ This figure is based on the total project valuation for the projects which MENTARI has supported. In a majority of cases, this is a forecast figure based on expected value at project financial close and is subject to change as project valuations are realised.

⁹ Brokerage – Annual Report 2023-2024, page 6

¹⁰ Brokerage – Annual Report 2023-2024, page 9

Project Status	#	Notes
PPA (85% progress)	97	- TA: PLN Diesel Replacement Programme (DRP) Phase 1 representing 94 projects - Matchmaking: 3 Mini Hydro Projects in Sumatra
In Project Preparation Process (65%)	2	- TA support: 3x1 MW Solar PV project in Buton - Both TA and Matchmaking: 1 Project of Hybrid/Hydrogen Battery in Sumba
Postponed and Cancelled	3	Cancelled: 3 Project (4,5 MW MHPP in Buton, Banten Floating Solar PV Plant and Containerised PV in Maluku)

Sources: Investment Tracker, 2024

MENTARI's TA reportedly played an important role in bridging early-stage gaps for small and medium-sized RE developers, particularly those lacking internal capacity or access to commercial consultancy services. Support included FS', land assessments, grid analyses, and high-cost pre-investment activities such as gender action planning and environmental assessments - critical for meeting the requirements of development finance institutions and impact investors. Stakeholder interviews confirmed that MENTARI's involvement lent credibility to projects, especially for new market entrants or those operating in frontier regions like eastern Indonesia. This "soft de-risking" effect was noted to have improved investor confidence in both the technical quality and integrity of the project pipeline. FS' developed under the Brokerage Strand also reportedly enhanced project bankability, such as the Sumba solar mini-grid through BUMDes and Sumatra coconut husk biomass plant. For the Sumba solar PV, capacity building was provided to BUMDes for RE business in 21 potential villages in Sumba Barat, Sumba Tengah, and Sumba Timur. For the Sumatra biomass project, the coconut husk supply chains were mapped, feedstock sustainability validated, and a bankable PPA with PLN structured, securing USD 8 million from Clime Capital. Both TA activities de-risked projects, enabling private financing and replication in other regions.

Matchmaking has been used as both a separate approach and alongside TA by connecting developers with potential investors, particularly those unfamiliar with the Indonesian RE landscape. However, both TA and matchmaking had more preparatory than decisive impacts. Their effectiveness was and is highly dependent on project context and delivery quality. Delays or poorly scoped studies could undermine investor interest, and matchmaking was ineffective when projects lacked technical or commercial viability. Some projects failed to progress due to site-specific risks, permitting challenges, or unmet investor expectations. As noted above, investors noted that FS' varied in quality, sometimes requiring additional due diligence and reducing the likelihood of the project securing investment. While TA improved the bankability narrative, it did not always meet bankability standards, limiting its standalone value. To date, only two TA-supported projects have reached financial close, though more are expected to do so in the coming years.

In contrast to TA and matchmaking, the VGF had a direct impact on investment readiness. It addressed tangible financial barriers for technically viable projects that struggled to meet investor thresholds - particularly around DSCRs. All three VGF-supported projects reached or neared financial close, with two operational by 2024. Developers stated that without the VGF grant, they could not have met lender requirements or absorbed high upfront costs related to regulatory and ESG compliance. One developer explicitly noted that their mini-hydro project would not have achieved COD without VGF support.

Multiple stakeholders reinforced this distinction, with one investor describing the VGF as essential for meeting internal financial thresholds, and a developer acknowledged that while TA improved the

bankability narrative, it was the VGF that unlocked financing. Other investors highlighted that TA alone was insufficient without additional financial support.

In summary, TA and matchmaking created necessary conditions for investment, helping prepare projects and build investor confidence, but are often insufficient to address and mitigate the role of other factors in achieving financial close. The VGF appears to have directly enabled financial close, making it a cornerstone mechanism for unlocking private capital in high-capex, low-IRR contexts typical of Indonesia's small-scale RE market, but this is based on a limited sample of a single technology.

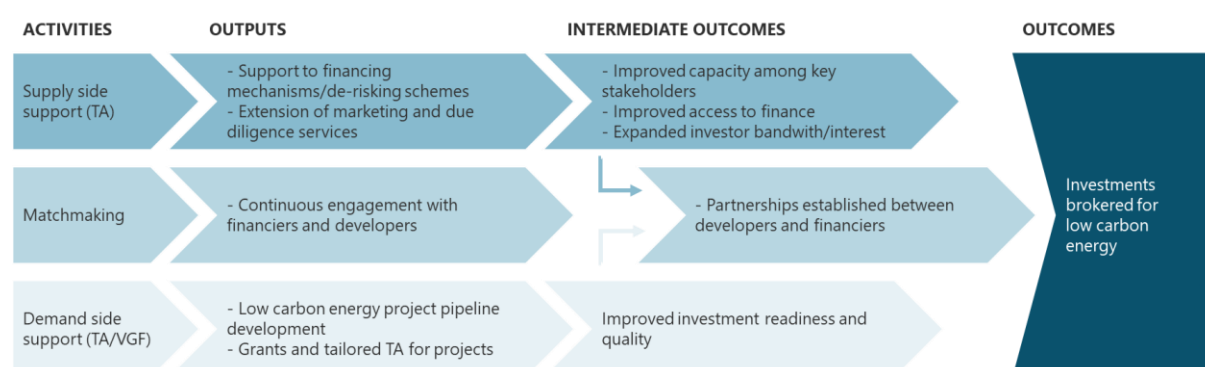
3.2 Impact

3.2.1 KEQ4: What has been the contribution of each type of activity in creating and sharing replicable business models and/or financing vehicles for RE, especially off-grid projects?

Finding 4: MENTARI's contribution to new business and financing models is tangible, particularly through the VGF's structure and early demonstrations like the RE projects with hybrid business models (e.g. coconut husk biomass project). However, replication remains nascent. While the VGF shows clearer structural replicability, context-specific models like biomass or hybrid mini-grids require tailored adaptation and clearer dissemination. Going forward, MENTARI could enhance impact by codifying these models into actionable knowledge products and supporting follow-on replication efforts through technical or policy support mechanisms.

The evaluation acknowledges that MENTARI has contributed to the development and early demonstration of several innovative business and financing models for RE in Indonesia, particularly for small-to-medium scale and off-grid applications. However, the extent to which these models are replicable, as distinct from being individually successful, varies significantly and remains a work in progress. The Brokerage Strand ToC (Annex 3) outlines three pathways to achieving the strand's outcome and contributing to programme impact, as summarised in Figure 4.

Figure 4 Key Brokerage Strand ToC Pathways



In terms of the supply side support, MENTARI-supported models, such as the coconut husk biomass hybrid system, have shown proof of concept in their specific local contexts. For instance, the coconut husk project integrates a RE system with carbon credit monetisation and local agricultural value chains, an approach well-suited to regions with biomass availability and limited grid access. This model reached advanced stages of development, and MENTARI's TA supported elements like FS' and community engagement. However, success in implementation does not automatically equate to replicability. These models often depend on highly localised variables, such as feedstock availability, local government buy-

in, and community readiness that are not uniformly present elsewhere. For replication, these factors need to be adapted carefully. In the coconut husk case, its broader viability hinges on the existence of similar agro-waste sources and strong carbon market access, which are not universally guaranteed across Indonesia.

The Brokerage Strand also provided various supports to PLN, with the TA to the DRP Phase 1 is considered successful by PLN, as beneficiary, and PLN has already started the development of DRP Phase 2 with additional project locations. The TA also supported the development of a green financing framework for the project including the preparation of green finance documentation, capacity building on ESG reporting standards, and assistance in aligning internal practices with international green finance principles operations.¹¹ PLN as recipient implied that these activities have improved the access of PLN's pipelines, including DRP, to new and available green financing resources. MENTARI also provided substantial support to PLN's Sustainability Bond, in improving the in-house technical capacity and developing internal SOP to issue the Sustainability Bond. All of these outputs have significant replicability potential both within and beyond the PLN portfolio. However, PLN has postponed the launch of the bond due to market uncertainty,¹² and there is no indication of wider dissemination of the green finance tools at this stage.

On the demand side, the VGF model is more structurally replicable. Its design, blending public grants with private capital to improve debt-equity ratios, has clear potential for scale-up. It directly addresses a systemic barrier in Indonesia's RE financing landscape: the inability of technically sound projects to meet bank lending thresholds due to limited collateral or sub-threshold IRRs. PT SMI, the implementing partner, has recognised this potential and is reportedly exploring replication of the model beyond MENTARI. However, as of this evaluation, it remains small in scale (three projects supported), and scaling would require further institutionalisation, potentially through integration with national financing instruments or dedicated green windows.

Interviews with stakeholders, including PT SMI, project developers, and a few financiers, suggest a mixed perception of replicability.

- For the VGF, there was a strong interest among both developers and financial institutions to replicate the model and PT SMI is reportedly integrating lessons learned into their broader green finance strategy.
- In the case of innovative and other hybrid models (e.g. coconut husk), stakeholders found them "innovative" and "contextually smart," but some expressed doubts about commercial viability in other geographies without concessional finance or cross-subsidisation.
- No clear evidence was found that other developers had already copied or scaled these models independently, but there were indications of "inspiration," with some interviewees saying they are now exploring similar multi-benefit business models that combine clean energy and livelihoods.

As of the evaluation cut-off, MENTARI's dissemination of business model learnings appeared limited. While internal reporting and stakeholder briefings captured technical and financial project details, there was no structured public knowledge product or replication guide available for broader uptake. Some lessons were shared during matchmaking events or thematic webinars, but these were not formally captured as toolkits or case studies. This represents a missed opportunity to amplify the programme's

demonstration effect, particularly in promoting innovative models to other developers, local governments, or financiers. A few interviewees specifically noted the need for clearer documentation of “what worked and why,” especially for off-grid or village-scale systems where peer learning is most relevant.

MENTARI’s contribution to new business and financing models is tangible, particularly through the VGF’s structure and early demonstrations like the coconut husk biomass project, and it is evident that progress is being made along all three core pathways, although the matchmaking pathway is largely viewed as supportive or complementary to the supply and demand side support. However, replication remains nascent. While the VGF shows clearer structural replicability, context-specific models like biomass or hybrid mini-grids require tailored adaptation and clearer dissemination. Going forward, MENTARI could enhance impact by codifying these models into actionable knowledge products and supporting follow-on replication efforts through technical or policy support mechanisms. MENTARI has produced brokerage lessons and consolidated TA summaries; future work could also translate these into short, public replication guides with templates and checklists for PT SMI, MEMR and developers

3.3 Relevance

3.3.1 KEQ 5. How do the activities supported under the MENTARI Brokerage Strand align with the needs and priorities of RE electrification development in Indonesia?

Finding 5: The MENTARI Programme aligns with the efforts to increase access to reliable electricity through the development of RE projects and shifting the use of hard-to-found diesel in remote, underdeveloped, and off-grid areas.

In the Law of the Republic of Indonesia Number 30 Year 2009 concerning Electricity, PLN has been mandated to achieve 100% national electrification, initially targeted by December 2024. By 2023, PLN claimed it has reached the ratio of 99.79% of electrification (Table 5). One of the flagship electrification programmes initiated by PLN is the DRP, aiming to phase out isolated diesel power plants across Indonesia by replacing them with cleaner, more efficient RE sources, particularly solar PV and hybrid systems, to reduce emissions and operational costs. The DRP represents a significant portion of the Brokerage Strand portfolio, which highlights MENTARI’s relevance to national electrification goals as well as the direct relevance of the support it offers to PLN’s own objectives and initiatives. Other projects supported by the Brokerage Strand are RE and energy access projects that support power decarbonisation and greater electrification in Indonesia, again aligned to the stated national objectives.

Table 5 Electrification Ratio in Indonesia (2019-2023)

Year	Number of Households	Electrified Households	Electrification Ratio (%)
2019	72,713,606	71,903,458	98.89
2020	75,078,681	74,481,755	99.2
2021	77,859,915	77,430,767	99.45
2022	80,231,650	79,937,650	99.63
2023	82,939,019	82,761,287	99.79

Sources: DGE, MEMR (2023)

Although the average national electrification already reached >99.79%, several provinces in remote areas are still lacking electrification due to geographic and economic barriers. These are the focus areas where the support from MENTARI is targeted – where the programme's objective in improving energy access equity in rural and underdeveloped areas is well aligned with PLN's national KPIs in closing the electrification gap in by increasing RE share in the region where the electrification remains low (e.g. Nusa Tenggara Timur and Maluku as per Table 6).

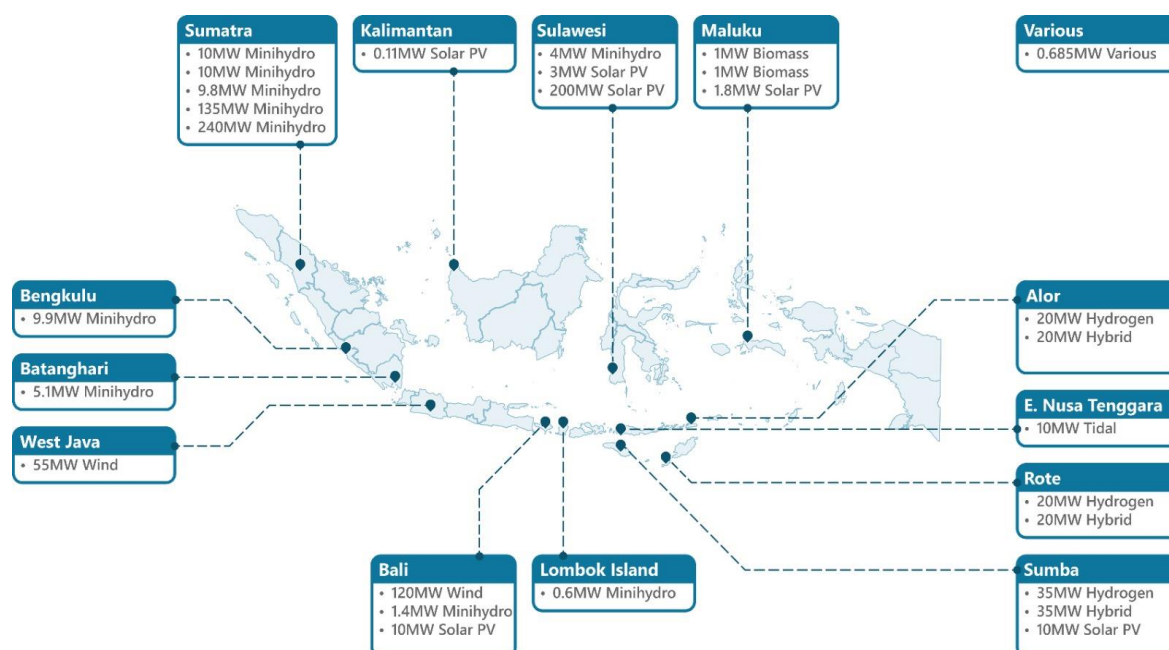
Table 6 Regions with Electrification Ratio below 100% (2023)

Province/Region	Number of Households	Electrification Ratio (%)	% of House Electrified by PLN	% of House Electrified by of Non-PLN
East Jawa	12,484,404	99.63	99.2%	0.1%
West Nusa Tenggara	1,822,577	99.99	99.8%	0.2%
East Nusa Tenggara	1,202,710	98.84	91.7%	8.3%
West Kalimantan	1,470,737	95.84	94.8%	5.4%
Central Kalimantan	757,231	97.15	94.9%	2.9%
Maluku	443,938	97.16	95.1%	2.1%
Central Papua	242,769	94.19	49.3%	44.9%
South Papua	121,481	98.96	75.5%	23.5%
Papua Highlands	235,597	83.2	14.1%	79.5%

Sources: DGE, MEMR 2023

In addition, several TA-supported and matchmaking projects outside the DRP umbrella also targeted off-grid or underdeveloped areas, especially in Eastern Indonesia. These projects often focus on mini-grids, biomass, and solar-hybrid systems aimed at communities without stable PLN grid connections, aiming to serve communities without reliable access to the national grid. These projects were often designed in partnership with local stakeholders, including village-owned enterprises (BUMDes) and regional governments. These initiatives complemented national efforts to expand renewable-based energy access beyond Java-Bali (per Figure 5), consistent with the aims of the National General Energy Plan/Rencana Umum Energi Nasional (RUEN).

Figure 5 Location of MENTARI Brokerage Strand Support



3.4 Efficiency

3.4.1 KEQ7. What is the value for money of different types of support provided by MENTARI in delivering programme objectives?

Finding 6: The Brokerage Strand has reportedly achieved value for money across its three support types, with the VGF demonstrating the highest investment leverage (>1:10), TA offering cost-efficient project readiness support, and matchmaking enabling high-return investor connections at low cost.

The Brokerage Strand has reportedly achieved good value for money (VfM) in its delivery. While the evaluation team has not had access to detailed programme financial data, it has been supplied with VfM reporting, for which the Brokerage Strand has four indicators:

1. Average value of investment brokered (in GBP) per GBP spent on brokerage support;
2. Average cost (in GBP) per RE project brokered (cumulative);
3. Average value (in GBP) of the off-grid demonstration system per direct beneficiary; and
4. Ratio: Value (in GBP) of pipeline projects/investment opportunities supported compared to the input (in GBP) of the Brokerage team and outreach (cumulative) to developers.

Values have been provided for these indicators (Table 7) but targets and baselines have not. As such, the evaluation team has not been able to use these indicators to assess VfM and has instead relied on annual qualitative reporting and primary data. As an FCDO programme, MENTARI follows the 4E approach, reporting against economy, efficiency, effectiveness and equity (note cost-effectiveness is not explicitly referenced).

Table 7 Selected Value of Money Indicator for Brokerage Strand

VfM of Brokerage Strand	Source/remarks	Y2 2021	Y3 2022	Y4 2023
Average value of investment brokered (in GBP) per GBP spent on brokerage support	Benchmark	£3,495.85	£1,435.74	£1,157.30
Average cost (in GBP) per RE project brokered (cumulative)	Stand-alone ratio	£10,716.01	£18,942.43	£5,448.99
Average value (in GBP) of the off-grid demonstration system per direct beneficiary	Cumulative	£2,807.86	£2,923.00	£3,147.81
Ratio: Value (in GBP) of pipeline projects/investment opportunities supported compared to the input (in GBP) of the Brokerage team and outreach (cumulative) to developers	Trend of ratio over time	£6,001.83	£6,946.50	£3,338.18

Economy: the programme reports delivering a higher number of activities than originally planned within the same budget envelope. It also notes the VGF operates an economical model with minimum contribution thresholds to reduce unnecessary financing. No data is available on the cost breakdown between different mechanisms, or the inputs used to deliver them such as expert fees or capital expenditure. Anecdotal evidence from KIIs indicates relatively low input costs have been maintained, allowing for an increase in activity. Based on the available data, the evaluation team cannot fully assess economy at this stage, but notes that no evidence has been found to indicate that poor economy results are being achieved.

Efficiency: in terms of efficiency, the programme's output targets have largely been exceeded, although it should be noted that individual cost metrics per output are not available for review. The programme reports that flexibility and adaptive management have enabled responsive budgeting which in turn has resulted in more efficient resource usage, capitalising on emerging priorities or areas where momentum has been generated. It is noted that the flexible deployment of resources has at times overstretch consortium partners, having a temporary negative impact on efficiency but this has, overall, not been a significant issue in the context of the Brokerage Strand's delivery. Stakeholders also note that the match-making activities reflect reasonable efficiency with low input requirements for potentially highly valuable relationships or agreements in return. In terms of the VGF, the programme reporting raises a question as to whether alternative financing models could have been explored, outside the PT SMI pipeline. Based on output achievement and the lack of any evidence of major inefficiencies, it does appear the Brokerage Strand has performed well under the efficiency criteria.

Effectiveness: the programme appears to have performed well against the effectiveness criteria, with the value of its outcomes (or expected outcomes) exceeding the value of its inputs. In the case of the VGF, the programme has achieved a 10:1 ratio for finance mobilised through relatively small financing commitments. While the figure remains largely speculative, the total value of the projects supported far exceeds the cost of the Brokerage Strand. The analysis presented under Finding 7 below also indicates that the Brokerage Strand has achieved a better cost per MW installed than comparable programmes. It should be acknowledged that the nature of the Brokerage Strand's delivery means there is not necessarily a direct cost/benefit ratio for its activities, particularly for TA and matchmaking where many activities may achieve no direct return in the event of project failure or non-progression due to external factors. On the other hand, while financial value may not be generated by each TA activity, other types

of value in terms of capacity building or knowledge development for the market are likely to be generated, but these results are not systematically tracked and therefore cannot be assessed in this analysis. The value generated by these activities should be reviewed as part of the programme's final reporting to understand the total cost of TA and matchmaking activities compared to the total perceived value generated by them, with further analysis of the portion of activities delivered which can be positively linked to the achievement of outcome results.

Equity: lastly, the Brokerage Strand has integrated GEDSI results within its targets and has delivered TA activities specifically targeting these results. It has also sought to engage underserved regions, distributing benefits among more rural populations who may otherwise not gain access. A MENTARI level GEDSI indicator is provided which reports 42% of individuals involved in facilitated discussions were women, but it is unclear how this proportion relates to the Brokerage Strand specifically. As noted further in Section 3.7 below, the Brokerage Strand has performed well on equity issues, but there is still room for improvement.

In summary, the Brokerage Strand does seem to have achieved VfM, or at least has not reflected poor VfM, based on the evidence available. There is insufficient granularity in reporting to enable a mechanism level comparison, but the VGF does appear to perform particularly well in terms of effectiveness.

3.4.2 KEQ8. How do MENTARI's strategies compare in terms of cost-effectiveness to other proven approaches in Indonesia and similar markets, including those utilised by other delivery partners?

Finding 7: Compared to other donor programmes in Indonesia, MENTARI shows a stronger focus on mobilising private investment for small- to medium-scale RE. The cost effectiveness level is seemingly competitive considering leverage ratios and the areas where MENTARI is operating: high-risk, distributed energy markets underserved by larger energy infrastructure.

In assessing the cost-effectiveness of the Brokerage Strand in comparison with other delivery partners, the cost of investment and funding mobilisation has been assessed. Despite different levels of engagement, size and technology of these delivery partners, the common ground is to support RE investment in Indonesia. A leverage ratio is used which was calculated by comparing the amount of investment mobilised to the value of the intervention services provided.

Table 8 presents a comparative overview of donor-supported energy programmes in Indonesia, including MENTARI, KIAT, ADB, and the GCF, across several categories such as energy focus, policy support, private sector engagement, and financing structures. The leverage ratios are derived from programme reporting and, where not available, have been estimated based on intervention costs, capacity installed, and project size. The targeted technologies and policy supports are set by the respective donors based on respective objectives. It should be noted that, while these programmes are operating in similar sectors, the specific scale, mechanisms and focus areas can differ significantly, as well as the risk appetites and institutional frameworks provided by the related donors, which have not been fully analysed as part of this evaluation. As such, the following should be viewed as a high level snapshot for comparison purposes with the understanding that more contextualised analysis of each listed programme may yield different results and perspectives.

Table 8 MENTARI with Other Bilateral Programmes

Programme	Energy-Specific Work	Policy Support	Private Sector Engagement	Geographic Focus	Average Cost per MW ratio (USD)	Leverage	Key Mechanism
MENTARI	Solar, wind, bioenergy, off-grid electrification	RE policies	High (direct investor engagement)	National (rural/re-mote focus)	50,000–100,000	1:10 (VGF)	Focus on small-scale projects and high TA efficiency. Blended finance, strong investor outreach
ADB (Sustainable and Reliable Energy Access Programme - Western and Central Java)	Grid modernisation, large-scale solar/wind, geothermal	Energy sector reforms	High (project financing)	Java, Sumatra, Sulawesi	300,000–500,000	1:10–1:15	Utility-scale projects (grid upgrades, geothermal); higher capital intensity. Sovereign guarantees, syndicated loans
KIAT - Infrastructure Funding and Financing Facility	Mini-grids, energy efficiency (secondary focus)	Infrastructure PPP frameworks	Limited (focus on public sector)	National (location depends on projects)	150,000–200,000	1:3	Broader infrastructure scope (energy + transport/water). Limited RE focus; more public-sector-heavy
GCF - Indonesia Geothermal Resource Risk Mitigation Project	Geothermal de-risking, solar PV, climate resilience	NDC-aligned projects	Moderate (blended finance)	National (project-based)	250,000–400,000	1:07–1:10	High-risk projects (e.g., geothermal drilling); concessional grants required Grants + risk-sharing instruments.

Based on available data, MENTARI appears to be more cost-effective than comparable donor programmes in Indonesia, particularly in supporting small to medium scale RE projects and in mobilising private sector investment. MENTARI's average cost per MW, which ranges from USD 50,000 to 100,000, is lower than the costs reported by other programmes. This is largely due to MENTARI's emphasis on early-stage TA, matchmaking, and catalytic financing through the VGF for distributed, smaller-scale projects rather than large, capital-intensive infrastructure. The MENTARI model focuses on cost-efficient

enabling activities such as FS', blended finance structuring, and investor engagement instead of directly financing large construction projects.

In terms of leverage ratio, MENTARI also performs competitively by achieving a ratio of one to ten for VGF support. These results should be viewed in the context that MENTARI operates in riskier and more remote markets, where private investment interest is generally lower and transaction costs are higher.

However, it's important to contextualise these results. ADB and GCF primarily support utility-scale or high-risk infrastructure (e.g., geothermal drilling, grid modernisation), where capital costs and timelines are inherently longer. Their engagement strategies rely on sovereign guarantees or concessional lending, which differ structurally from MENTARI's more agile, developer-facing approach. MENTARI's high cost-effectiveness stems from its strategic use of relatively modest grants and TA to unlock downstream investment, often in previously overlooked market segments (e.g., off-grid RE, hybrid community systems). Its approach also stands out for its high degree of direct engagement with private developers and investors, something KIAT and GCF tend to do more indirectly.

In summary, while each programme serves different niches, MENTARI demonstrates higher cost-effectiveness in enabling RE investment at the distributed scale, making it a valuable complement to large-scale infrastructure finance led by other development partners. Based on the investment ratio, the MENTARI programme is more cost-effective due to its support in project preparation studies and VGF to address gaps in capex needs, enabling higher levels of leverage. This is also considering that other development partners are involved in debt instruments, involving higher funding to the projects.

3.4.3 KEQ11. After comparing value for money of different type of supports, would it have been better to focus on certain type of support? If yes, which one and why? If no, why?

Finding 8: While the VGF demonstrated the highest value for money due to its leverage and financial closure results, the limited sample size suggests it should be scaled, not singularly prioritised. A balanced approach remains appropriate, as TA plays a crucial upstream role, especially in underserved areas, and matchmaking, though less impactful on its own, adds value when paired with TA or VGF

The primary conclusion drawn from the VfM assessment of MENTARI's support types is that the VGF offers the highest VfM under this programme, providing good financial leverage by unlocking more than 10 times its value in private investment, particularly for small-to-medium RE projects that are technically feasible but need a fiscal support to increase its financial feasibility. This conclusion is to be taken with one major note that the sample size for VGF implementation is quite limited during this programme. Regardless, interviews with PT SMI and VGF beneficiaries indicated strong role of this instrument in creating a more cohesive financing structure and thus improving the project bankability, that will not happen in the absence of VGF. In addition, the rate of VGF's success once disbursed is high due to its mechanics that are integrated with the financial agreement with financiers and the provision of PPA.

The TA from MENTARI also demonstrates VfM by enhancing project readiness at a relatively low cost, especially in underserved areas, and should remain in the support menu for the next iteration of MENTARI. The provision of TA in earlier phase of a project, for instance in the form of FS', appears to provide significant leverage for stakeholders to move to the next step of the project. However, as the TA activities are typically provided at an earlier phase of project development where the risk of failure or non-progression remains high even with TA support, it is important to acknowledge that TA costs may not always

achieve a return on the investment. Matchmaking is less expensive and aids in connecting investors with developers. However, as indicated in KILs with investors, the matchmaking process can be very fluid and contextual, and its effectiveness can be limited unless it is paired with TA and/or VGF support. Both TA and matchmaking also have much longer results timeframes, with only two projects reaching financial close which weren't aided by the VGF.

Overall, it can be argued that the VGF performed better than other components on pure VfM terms, but the important takeaway from the Brokerage Strand should be the need for a layered approach to RE project support, offering a combination of services to maximise the potential impact. As such, there is no one support mechanism which should be prioritised above the others.

3.4.4 KEQ12. After analysing the VFM particularly on VGF, has the scheme successfully achieved the intended objectives?

Finding 9: The VGF met its objectives by making RE projects financially viable and attracting private investment, but its impact was limited to a small number of mini-hydro projects under one developer, highlighting challenges in identifying eligible candidates.

The MENTARI VGF, launched at an initial size of £2.7 million, is designed to reduce upfront capital costs for infrastructure projects by providing grants prior to financial close. This support makes economically viable projects financially feasible, while also attracting private sector investment and ensuring private partners remain invested in the risks of delivery and operation. In 2022, MENTARI entered into an agreement with PT SMI to host the VGF facility. Several criteria were established for VGF-eligible projects:

- Projects must be RE, excluding geothermal, biomass, and Waste to Energy (municipal waste).
- The maximum VGF for any project is £750,000, or up to 20% of total capital expenditure (CAPEX).
- Projects must not be bankable (below cost of funds), or must be located in remote areas or use new technologies.
- A PPA with PLN must be secured.

The VGF successfully achieved its objectives by mobilising PT SMI financing for RE projects: a total investment grant of GBP 1.1 million (or 0.893 million after tax) unlocked GBP 11.45 million in unadjusted private investment. VGF clauses were integrated into the financial closing with PT SMI in March 2023, with funds disbursed in August 2023 and the project reaching commercial operation in May 2024. This demonstrates the timely impact of the VGF in overcoming non-bankability issues - such as high costs associated with remote sites - that would otherwise make projects ineligible for PT SMI investment.

However, it should be noted that all successfully supported projects were mini-hydro developments, managed under three special purpose vehicles within a single holding group (Brantas Energi). This highlights the challenge of identifying VGF candidates that met the eligibility criteria - especially concerning size and financial feasibility - within the programme period.

3.5 Sustainability

3.5.1 KEQ9. Was the single programme target of £766m for investment brokerage appropriate for fostering long-term sustainability and promoting a balanced focus on various project scales?

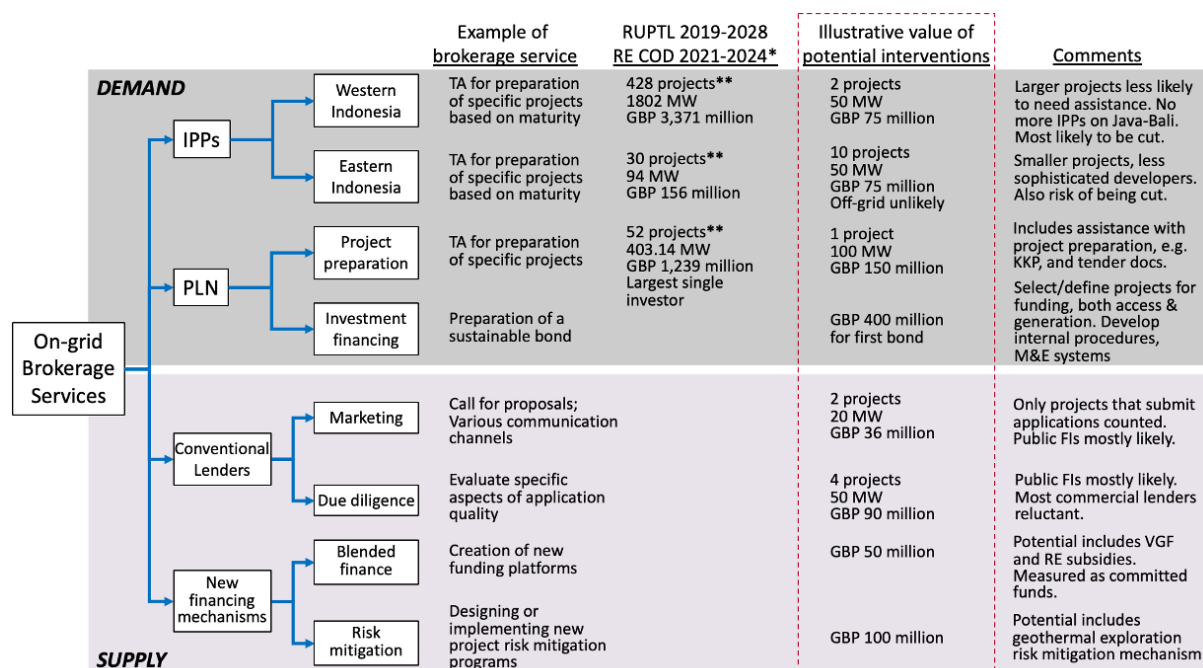
Finding 10: The £766 million brokerage target was appropriate and strategically grounded in Indonesia's national electricity plan (RUPTL), serving as a catalytic benchmark to promote decentralised RE (DRE) investments in large scale. MENTARI has demonstrated balanced support across project scales (in small and medium size category) and different geographies - providing a sustainable model blended finance model for DRE development in the country.

Impact Indicator 2 of the MENTARI programme is set at £766 million of investment (national and FDI, public and private) to be brokered for RE projects in Indonesia¹³. This impact indicator states that the investment is to be defined and disaggregated by the size of the investment, type of business, GEDSI, rural/urban, etc., but does not specify the target for each categorisation. This investment target of £766 million was primarily developed by assessing the RUPTL 2019-2028: the team assessed the number of RE projects planned to start with a COD between 2021-2024 for both PLN and IPP projects all across Indonesia, and then calculated the potential value of on-grid brokerage service that could be provided (Figure 6). In addition, the team developed an illustration of potential off-grid brokerage services, which originally focused on Eastern Indonesia¹⁴.

¹³ Brokerage Target Update, March 2024.

¹⁴ Brokerage Target Proposal, April 2020.

Figure 6 Example of Calculation of Potential Intervention by On-grid Brokerage Service



The Brokerage Strand also calculated the probability-weighted capital cost of projects, financial schemes/facilities/mechanisms and green bonds in the intervention short-list which generates the GBP 766 million investment value as per Table 9.

Table 9 Calculation of Probability-Weighted Capital Cost for MENTARI Intervention

Project name	Project description			Unadjusted Capital Cost (in GBP)	Probability	Probability weighted Capital Cost (in GBP)
	Location	Type	Size			
Smart Energy	Eastern Indonesia	In- On-grid	10 MW	15 million	80%	12 million
Em-Power Network	Eastern Indonesia	In- Off-grid	5 MW	5 million	90%	4.5 million
Financing scheme/facility/mechanism A	Indonesia	On/Off grid	n/a	100 million	50%	50 million
Green bond	Indonesia	On/Off grid	n/a	200 million	50%	100 million
Diesel Replacement Programme	Indonesia	On/off grid	n/a	436 million	50%	218 million

Project name	Project description			Unadjusted Capital Cost (in GBP)	Probability	Probability weighted Capital Cost (in GBP)
	Location	Type	Size			
TOTAL				>2 billion	n/a	766 million

The suitability of this investment brokerage goal is evident in its linkage to the country's strategic development plan for electricity (RUPTL) instead of developing a separate target independent of GoI objectives. This target aims to showcase the viability of attracting substantial RE investments in Indonesia via blended finance strategies for specific types of IPP and PLN projects, which are also targeted to promote inclusivity and equitable growth throughout the RE sector (focusing on smaller projects outside Java-Bali grid).

As of Year 4, MENTARI had already exceeded this target, reaching a forecast of £927 million of unrealised value brokered in cumulative investments,¹⁵ suggesting the target is achievable and grounded in actual pipeline momentum. MENTARI also supported convening to the GoI and project development partners to explore the viability of scaling up RE investment through blended finance models. In addition, the programme ensures balanced support between large-scale infrastructure (e.g., projects relevant to PLN and JETP) and decentralised energy projects, which are vital for Indonesia's archipelagic context. This is apparent in MENTARI's support to PLN's DRP, which MENTARI integrated into JETP's Comprehensive Investment and Policy Plan (CIPP). PLN was provided market sounding support, bidding package refinement, and tariff approval facilitation to ensure that DRP meets the market standards, secures investments, and while still benefits local communities. Based on these results, the impact level target of £766 million does appear to have been appropriate.

It should also be highlighted that PT SMI and MENTARI signed an MoU in late 2024 to design a Trust Fund to pool donor and concessional finance, building directly on VGF lessons. The enabling regulation work for this fund was underway at the time of writing this report, but due to sensitivities was not available for the evaluation team to review. If established successfully, this Trust Fund could serve as an important vehicle for sustaining and scaling the work of the VGF and other renewable financing initiatives.

3.5.2 KEQ10. How adequate are the financial, managerial, and specialist resources that have been employed to achieve the objectives of Brokerage Strand in terms of ensuring sustainable outcomes?

Finding 11: MENTARI deployed financial, managerial, and technical resources effectively, with a responsive, expert-driven support model tailored to diverse project needs. However, sustainability could be further strengthened through more frequent coordination with GoI counterparts and improved alignment of TA quality with evolving investor expectations

Managerial processes are found to be generally effective as the MENTARI management team has shown the ability to balance stakeholder needs to ensure effective support delivery, considering that the MENTARI consortium team, project developers, PLN, UK FCDO, and PT SMI all operate under different

¹⁵ Brokerage – Annual Report (2023-2024), Page 3

administrative procedures, timelines, and priorities. For instance, when the VGF facility faced competing pressures and the UK FCDO required quick disbursement, the team was able to respond quickly in a way that complied with the administrative processes. Evidence indicates that the Brokerage Strand's specialist and expert resources were both diverse and effectively deployed, ensuring technical credibility and sustainable outcomes for supported projects. A key tool was the Project Assessment Matrix (PAM), which allowed the team to efficiently identify pipeline projects eligible for TA. This pipeline functions as a dynamic "live" document, updated regularly as new projects are brought forward and evaluated through the Brokerage Funnel to determine the specific TA and brokering support required for each case. MENTARI offered a broad TA support menu, including FS', resettlement action plan assistance, grid and topology studies, modelling expertise, and PPA drafting - demonstrating comprehensive and robust expert support to maximise project success and operational sustainability.

Nonetheless, KIs revealed that developers and investors often have distinct requirements, especially regarding the quality and depth of project preparation documents. Stakeholders emphasised the importance of enhanced coordination and communication during the scoping and design of TA support, to ensure that reporting standards are met and sufficient detail is provided.

Importantly, the interplay between the three support types reinforces the need for a layered intervention strategy. Projects that benefitted from both TA and VGF show the highest likelihood of success, indicating that sequencing and integration, rather than treating each support type in isolation, may offer the most effective approach for future programme iterations.

Not all GoI stakeholders engaged with MENTARI equally. An interviewee from the Directorate General of Electricity (DGE) stated that in several cases DGE did not participate actively in the process, such as the selection of RE projects, discussions on the remaining utilisation of VGF funds, and others. There was, however, a noted goal for higher coordination between MENTARI and DGE to improve the programme ownership by the GoI counterparts and to ensure responsiveness in communication. The DGE suggested to have more frequent meetings, ideally every two to three months, to enable closer coordination and timely updates across stakeholders.

The DGE also conveyed that the coverage areas of the Brokerage Strand do not align with the main role of the DGE, which is primarily responsible for regulating and overseeing the electricity sector as a whole, including power generation, transmission, distribution, and electrification, regardless of the energy source. Its focus lies in ensuring a reliable electricity supply, managing power infrastructure development, and enforcing sectoral regulations. Given this division, initiatives under the MENTARI Brokerage Strand that deal directly with RE development and innovation typically fall within the scope of the Directorate General of New, Renewable Energy, and Energy Conservation (EBTKE), while those concerning broader electricity sector planning and regulation, including grid integration and electrification, relate more closely to the role of the DGE.

3.6 Programme Learning

3.6.1 KEQ6. After answering KEQ1-KEQ5, what have been the key success contributors and key challenges in delivering support to RE projects in Indonesia from MENTARI programme?

Finding 12: MENTARI's Brokerage Strand contributed significantly to providing successful support cases in unlocking RE investment in Indonesia for underserved segments of the market. The programme's success hinged on its layered support model, catalytic VGF, and context-

sensitive TA. However, challenges in coordination, quality assurance, VGF scalability, and GEDSI integration constrained its full potential.

The evaluation of KEQs 1–5 provides insights that reflect both the operational effectiveness of the programme and the structural barriers that shaped delivery outcomes, highlighting where MENTARI added the most value, and where targeted improvements could enhance future impact.

1. Layered and Complementary Support Design

MENTARI's three-pronged support model enabled projects to move from early-stage development towards financial close. Each mechanism addressed different barriers:

- TA helped improve project documentation (e.g., FS, land assessments) and project bankability;
- Matchmaking facilitated engagement between investors and developers; and
- VGF bridged financial gaps in otherwise viable but commercially marginal projects.

The model was most effective when interventions were sequenced and integrated, such as when projects receiving TA also accessed matchmaking or VGF. This layering approach is particularly appropriate for Indonesia's smaller-scale RE ecosystem, which features high perceived risks, limited developer capacity, and underdeveloped financial intermediation.

2. High Leverage and Demonstrated Impact of VGF

The VGF implementation under MENTARI provides a success case in leveraging investment grants to mobilise private capital 10x larger in small/medium sized RE projects. Two out of three VGF-supported mini-hydro projects reached commercial operation within a year of financial close, demonstrating the timeliness and catalytic potential of this de-risking instrument. This success is critical in Indonesia's financing context, where even technically feasible projects often fall short of debt service coverage ratios or are excluded due to size or geographic remoteness.

3. Context-Aligned TA in Higher-Risk Areas:

TA was most impactful when tailored to project needs and timing such as pre-feasibility support for solar PV or feedstock analysis for biomass in early-stage projects. Projects in underserved geographies (e.g. Eastern Indonesia) particularly benefited from TA that would otherwise be inaccessible due to developer resource constraints. This demonstrated MENTARI's additionality: it filled a market gap that neither commercial developers nor banks were positioned to address.

4. Strategic Institutional Partnerships

MENTARI worked with PLN, PT SMI, and subnational actors, integrating support with national priorities like the DRP. It also contributed to institutional learning (e.g., PT SMI's adoption of VGF mechanisms) thus strengthening the enabling environment and laying foundations for scale-up. On the other hand, some key challenges emerged during the evaluation process, which constrained Brokerage Strand from achieving bigger impact during the programme period, per below.

4a. Inconsistent Quality and Timeliness of TA Outputs

Several stakeholders, especially investors, reported that FS' and TA deliverables did not meet the standards required for investment decisions (per Finding 2 above), leading to lost opportunities or redundant due diligence. In some cases, TA was delivered too late in the project cycle or was insufficiently scoped,

reducing its practical utility. This eroded confidence and points to a lack of robust quality assurance and coordination across delivery partners. It is therefore clear that consistent output quality and timely delivery are important drivers for stakeholder buy-in and engagement.

4b. Limited Scalability of the Current VGF Model

Although effective, the VGF was only accessed by three projects, all from the same developer group (Brantas Energi). This suggests:

- The eligibility criteria (e.g., PPA with PLN, IRR thresholds) were restrictive;
- Outreach to a broader pool of developers or technology types (e.g., solar hybrids, biomass) was insufficient; and
- The funding cap of £750,000/project was inadequate for larger or newer technologies with higher capex needs.

The current case of VGF's strong performance may not be replicable immediately for different size and type of RE project and this requires a fine tuning and learning curve to make the instrument applicable in a wider range of project topology. The support the consortium provided to PT SMI to design a Trust Fund contributes towards scalability, but the design work was ongoing at the time of writing.

4c. GEDSI Integration Remained Peripheral:

Across KEQs 1–5, GEDSI was weakly embedded. While some projects (e.g., off-grid initiatives) incorporated GEDSI elements, this was driven more by individual or donor preference than by programme requirements. Most developers received no structured guidance or incentive to integrate GEDSI considerations, limiting broader systemic inclusion.

4d. Sustainability Risks in Early-Stage TA Investments:

TA was occasionally delivered to projects that were later deemed to not be financial viable or failed to progress due to unresolved regulatory, technical, or commercial barriers. Examples include a floating solar PV project in Banten and a remote PV project in Maluku. These instances highlight the inherent risk of early-stage development and the need for stronger screening and adaptive support strategies.

3.7 GEDSI Assessment

3.7.1 Management and Coordination Recommendations

Recommendation #	1	Audience	Delivery Partners
Related Findings	1, 2, 3	Priority	High

Establish a formal technical review process involving independent experts to ensure that feasibility studies and other TA outputs are of consistent, high quality and aligned with investor standards. There is mixed feedback from the stakeholders, especially from the investor side where the project preparation documents supported by MENTARI do not meet the investors' standards. A small panel of industry experts, both national and international, could be assembled to provide this senior, strategic review support. The delivery partners should also consider the development of TA checklists to ensure a standardised quality procedure is employed. These checklists should integrate key criteria related to data quality standards, investor standards and expectations, and UK Government delivery requirements.

Recommendation #	2	Audience	Delivery Partners, VGF Implementer Partner (PT SMI)
Related Findings	4, 6, 9, 11	Priority	Medium

Enhance coordination between TA providers and the Brokerage team to ensure that TA-supported projects are directly fed into matchmaking and VGF pipelines, increasing the likelihood of financing. The beneficiaries that received both matchmaking and TA are two companies in four project locations. There are also projects under matchmaking activities that are stopped or refocused. Disjointed support across TA, matchmaking, and VGF resulted in missed opportunities and stalled projects. TA providers could be more actively involved in matchmaking and/or VGF discussions. Partners could also consider integrated TA provider feedback and perspectives in the design of future matchmaking and VGF activities to ensure they respond to the needs of supported companies and there is a clear system of support to promote rapid progression.

Recommendation #	3	Audience	Programme Owner, Delivery Partners
Related Findings	9	Priority	High

From the start of programme implementation, develop a clear and detailed mapping of each MEMR directorate's mandate, including their specific roles and responsibilities. The DGE indicated that the Brokerage Strand's focus on RE project development does not align with DGE's primary mandate, which is centred on regulating and overseeing the electricity sector as a whole. The more appropriate counterpart for RE initiatives is the EBTKE. Misalignment of this kind can lead to limited engagement from key government stakeholders. For future programmes in the energy sector, activities should be mapped and divided in relation with the main tasks of each Directorate General of Indonesia MEMR to enhance coordination and buy-in. A cross-Directorate Steering Committee could be developed to support programme governance and coordination.

Alongside this, establishing a standardised system for documenting engagement processes and recording consistent information for all activities, incorporating updates to stakeholder roles and responsibilities as the programme evolves should be explored. All records should be organised so they are both controlled and easily accessible to the relevant MEMR stakeholders. By putting these measures in place, the programme will be able to assess performance more accurately, maintain strong accountability, and make the best use of managerial and coordination resources.

Recommendation #	4	Audience	Programme Owner, Delivery Partners
Related Findings	9	Priority	High

Establish more structured and regular coordination mechanisms to align Brokerage Strand activities with Gol expectations. Related to Recommendation 3, DGE expressed the aspiration for more frequent and structured coordination with MENTARI to improve programme ownership and ensure timely communication. DGE specifically suggested regular meetings every two to three months to strengthen collaboration and responsiveness. The lack of consistent coordination mechanisms likely contributed to limited government participation in key programme processes. Developing formal, periodic coordination schedules (monthly or bimonthly) with government counterparts, as suggested by DGE, could mitigate this challenge, help maintain consistent communication, improve responsiveness, and enhance national ownership of programme results and activities.

Recommendation #	5	Audience	Programme Owner, Delivery Partners
-------------------------	---	-----------------	------------------------------------

Related Findings	9	Priority	Medium
------------------	---	----------	--------

Improve how stakeholder engagement is documented and monitored. The evaluation team had difficulty accessing Brokerage Strand documents, such as stakeholder engagement tracking and technical proposals used in the agreement between FCDO and the delivery partners, which limited the evaluation’s ability to verify the quality, effectiveness, and clarity of the stakeholder engagement. Setting up a clear system to track all coordination activities, such as meeting notes, communication logs, and outcomes, would be beneficial for continuity and adaptive programme management. This will help the programme review whether engagement efforts have been effective and if resources have been used appropriately.

3.7.2 KEQ13. Has GEDSI been integrated into the Brokerage Strand and the VGF? Are there any specific GEDSI guidelines or directions provided by FCDO or the delivery partners?

Finding 13: The integration of GEDSI principles has been part of the MENTARI Programme since its inception. However, there is no evidence indicating that specific requirements or guidance on GEDSI integration had been provided within the Brokerage Strand, resulting in limited up-take.

During the initial phases of the programme, when it was still known as the Indonesia RE Programme (IREP), there was a clear intention to meaningfully integrate GEDSI considerations. A review covering the period from November 2018 to October 2019 highlighted this intent, noting that gender and social inclusion were thoughtfully embedded into the programme’s design. This was demonstrated through the inclusion of GEDSI as a central criterion in bidder requirements and procurement evaluations. These early efforts were acknowledged and praised.¹⁶ However, at that stage, the integration of GEDSI was not extended to the Brokerage Strand. As of the 2024 Annual Review, GEDSI elements within the MENTARI Programme are mainly embedded in the Demonstration Strand, through the incorporation of goals such as the creation of six new jobs, especially in technical roles, and the promotion of women-led businesses.¹⁷

In the Brokerage Strand, some stakeholders incorporated gender-related considerations based on their own internal policies. For example, one investor (Investor A) reported that, while they were aware GEDSI formed part of the programme, no dedicated explanation or guidance had been provided by FCDO regarding GEDSI or its relevance as a programme requirement. Although GEDSI aspects were reflected during project implementation, primarily through community engagement and support for local businesses, these were not formally framed as mandatory components. GEDSI was mentioned, but not positioned as a core programme condition. This may reflect an implicit assumption that GEDSI considerations are naturally embedded in RE initiatives targeting remote and vulnerable populations, rather than being explicitly highlighted or promoted as a central objective.¹⁸ Nonetheless, this suggests that FCDO has not made a concerted effort to emphasise or operationalise GEDSI requirements in a structured or consistent manner.

Technical challenges in integrating GEDSI persist, particularly in collecting gender-disaggregated data and conducting GEDSI impact assessments at the project level. Developer B, for example, faced

¹⁶ IREP Annual Review – Summary Sheet (2020).

¹⁷ MENTARI Annual Review (2024).

¹⁸ Interview with Investor A.

difficulties due to the lack of official data at project sites. The team often had to rely on secondary sources unrelated to MENTARI-supported activities or on limited third-party data collected by local authorities at the district or village level. As a result, they had to collect primary data independently and encountered practical challenges in doing so. For instance, initial mixed-gender community meetings limited women's participation, and only through follow-up sessions dedicated to women were more relevant GEDSI insights captured. In addition, stakeholders reported difficulties in promoting gender-inclusive recruitment, particularly for technical roles such as engineering, due to the limited pool of qualified female candidates at the local level (this was also reported by Developer B).¹⁹ Going forward, FCDO could consider addressing these gaps by providing more targeted support on practical data collection methods and offering guidance or capacity building to enhance gender-inclusive recruitment efforts in remote areas.

At the time of this report, the FCDO has issued a Checklist for GEDSI across Economic Development Programmes, serving as tailored guidance to enhance progress toward the FCDO's gender and inclusion commitments. This checklist supports the integration of GEDSI across the entire economic development portfolio and is structured to address key stages of programme delivery, including business case development and programme design, mobilisation and procurement, implementation, MEL, as well as programme completion. In addition, the ICF GEDSI Guidance, jointly developed by FCDO, DESNZ, and DEFRA, offers a unified framework to support GEDSI integration within International Climate Finance (ICF) programming and delivery. This guidance establishes minimum standards and ambitions for GEDSI, ensuring that all new ICF programmes are designed to be at least "GEDSI empowering." Together, these new tools represent significant opportunities for strengthening GEDSI integration across FCDO programming moving forward, particularly within the MENTARI Programme.

Finding 14: While GEDSI considerations were gradually incorporated, particularly in villages where women constituted the majority of the population, the requirements were not always understood by programme stakeholders leading to inconsistent application.

Developer B collaborated with local NGOs to develop inclusive approaches aimed at empowering local women. This initiative followed initial GEDSI guidance provided by the MENTARI programme team during a gender awareness training. As part of the training, a toolkit was distributed to assist developers in conducting GEDSI assessments and in preparing relevant action plans. This initiative was subsequently continued by a local NGO. Once completed, the process is expected to result in a GEDSI Action Plan, which will serve as a reference for the planning for the implementing partner and the broader community development planning.²⁰

However, in the case of Developer C, the additional GEDSI requirements caused some initial confusion. As the project progressed, MENTARI informed Developer C that a GEDSI component would be introduced. At that time, Developer C found the guidance unclear, particularly regarding whether the GEDSI element was mandatory or the extent to which it needed to be implemented. Upon further engagement with the local context, Developer C observed that most women in the project area lacked independent sources of livelihood and were fully dependent on their spouses' income. Developer C also noted that climate change, specifically increased flooding, had a disproportionately negative impact on women. These realisations informed their project modelling, with a vision to support more resilient village

¹⁹ Interview with Developer B.

²⁰ Interview with Developer B.

communities by preparing relevant infrastructure that responds to the specific needs of women.²¹ This assessment, however, was not directly linked to the guidance provided.

While these are only two examples, they highlight the challenge of limited guidance on GEDSI for the Brokerage Strand developers, who have ultimately applied different and inconsistent approaches to GEDSI integration which reduces the programme's ability to assess whether GEDSI activities and processes are effective and achieving co-benefits in line with FCDO expectations.

3.7.3 KEQ14. What actions should be taken to improve the integration of GEDSI in the implementation of the brokerage strand and VGF?

Finding 15: The introduction of standardised, mandatory GEDSI requirements could have mitigated the challenges of inconsistent GEDSI application, particularly considering the varied interests, understanding and drivers of the stakeholders engaged by the Brokerage Strand.

The MENTARI programme provided non-formal support through gender awareness training and toolkits, which were generally well-received by developers who chose to engage. However, in some cases, this support drew criticism; Developer A pointed out that local consultants were primarily focused on acting as intermediaries for engagements with community leaders, a role they viewed as insufficient. In such instances, the assigned GEDSI team would also step in to engage directly with local stakeholders with minimum context given to the developer. Developer A reported that they gained a basic understanding of GEDSI-related considerations in the project context through their interactions with the consultant engaged by the MENTARI programme. However, this understanding did not extend beyond surface-level awareness. That developer also expressed challenges in fully grasping GEDSI concepts, citing the predominantly technical background of their staff, which further complicated the integration and implementation of GEDSI principles in their operations.²²

In contrast, Developer D demonstrated a significantly more advanced implementation of GEDSI, integrating it into various aspects of their operations. This includes obtaining relevant certifications, conducting assessments, and launching broader initiatives such as a "Sustainability Academy" that incorporates GEDSI within a wider ESG curriculum. Developer D emphasised, however, that these efforts stemmed primarily from their own initiative rather than external support (such as MENTARI or FCDO guidance). In their view, FCDO adopted a passive stance and provided little to no assistance, despite Developer D's proactive approach.²³ These contrasting experiences suggest that the MENTARI programme's support for GEDSI integration was uneven and lacked systematic follow-through, resulting in differing levels of uptake and application among stakeholders.

Although these stakeholders were introduced to the concept of GEDSI, they did not receive specific guidance or formal directives from the programme on how, or even if, they should integrate GEDSI into their projects.²⁴ For example, the grant agreement between PT SMI and the MENTARI programme does not specifically require the implementation of a gender assessment.²⁵ As a result, the adoption of GEDSI practices was entirely voluntary, leaving it up to financiers, investors, and developers to decide whether to incorporate GEDSI principles into their matchmaking decisions, without any obligation or external

²¹ Interview with Developer C.

²² Interview with Developer A.

²³ Interview with Developer D.

²⁴ Interview with Programme Team at BEJ.

²⁵ Interview with PT SMI.

pressure to do so. This approach is rooted in the understanding that integrating GEDSI into the Brokerage Strand presents unique challenges, unlike other strands such as the demonstration strand, which allows for more proactive GEDSI implementation due to direct management by MENTARI.²⁶ In contrast, the Brokerage Strand is largely dependent on the interests and requests of external stakeholders, making structured GEDSI integration more complex.

These external stakeholders being private companies further complicates this issue. As elaborated previously, Developer B demonstrated a strong GEDSI orientation, influenced by European regulations and established best practices; in contrast, Developer A showed emerging awareness, though its overall commitment remains limited. This variation is compounded by the absence of formal guidance from FCDO to encourage GEDSI implementation. As a result, motivation to adopt GEDSI principles has largely been driven by commercial considerations, such as bankability or reputational gain, rather than a commitment to social inclusion.

According to interviews with the Brokerage Strand Consortium, GEDSI is often presented as an optional feature to enhance project outcomes.²⁷ This framing has led to inconsistent uptake, with many developers prioritising technical aspects over GEDSI-related measures. While international developers may recognise the strategic benefits of GEDSI, it is generally treated as secondary to core project concerns. Similarly, many local and smaller developers view GEDSI as an added burden rather than a value-adding component. To address this, FCDO could consider introducing clearer incentives, guidance, or performance-linked support to encourage genuine GEDSI integration beyond commercial motivations, as described in Recommendations 6, 7 and 8 below. This could help shift perceptions and foster more consistent, meaningful uptake across diverse stakeholders.

Finding 16: GEDSI is not included as a formal requirement in the VGF application process, nor is it used as a criterion for project selection or eligibility, meaning there is limited GEDSI integration and significant room for improvement. However, the nature of the projects is not necessarily well suited to achieving GEDSI results given the scale of the projects MENTARI seeks to enable in contrast to current GEDSI guidance which is oriented towards off-grid developments.

There is no formal requirement in the VGF documentation to include GEDSI considerations for triggering VGF support. While it is appropriate to incorporate GEDSI, it is important to note that the primary use of VGF funds is for construction, with no explicit GEDSI requirements mandated. This is because limiting VGF support to projects with GEDSI components is not in line with the “spirit” of the VGF, as it is demand-driven and responsive to private sector needs.²⁸ Accordingly, FCDO has clarified that the programme does not limit support solely to projects that integrate GEDSI elements.²⁹ GEDSI integration is largely demand-driven and depends on the interest of external stakeholders.³⁰ While the team actively promotes the inclusion of GEDSI considerations, they do not have the authority to require it where there is no interest from project developers due to varying levels of awareness and perceived value.

²⁶ Interview with Brokerage Strand Consortium.

²⁷ *Ibid.*

²⁸ Interview with Programme Team at BEJ.

²⁹ *Ibid.*

³⁰ Interview with Brokerage Strand Consortium.

This is further confirmed by PT SMI, which stated that the VGF-funded projects under its management did not undergo a gender assessment, as the grant agreement between PT SMI and MENTARI does not explicitly mandate it, highlighting a gap in the framework. Similarly, PT SMI did not encourage the adoption of a GAP for these projects, as the institution only began implementing GAP initiatives in 2024, while the projects were financed in 2023.³¹ Although no formal gender measures were required or implemented, PT SMI did conduct a baseline gender analysis as part of its Environmental and Social Due Diligence (ESDD) process.³² This included preliminary assessments of gender aspects such as the number of male and female workers and the gendered impact on affected communities. However, this analysis remained at the initial assessment stage and did not lead to formal gender integration in the project implementation.

There are constraints that limit the ability to conduct in-depth GEDSI impact measurement for VGF-funded projects. Currently, three hydropower projects are funded under the VGF mechanism, generating a combined total of 7 megawatts of clean energy, with funding contributions covering 50–60% of total project costs.³³ However, due to limited resources, no GEDSI impact assessments have been conducted for these projects, despite a clear interest in measuring their impact, particularly in terms of the number of households powered and the new economic opportunities created through access to clean energy.³⁴ This represents a missed opportunity to capture the broader socio-economic impacts of VGF-funded projects. For context, a 95 kilowatt demonstration project has been able to power 200 homes, suggesting that the VGF projects, with much larger capacity, could potentially benefit significantly more households.

In addition to the challenges of measuring the impacts of VGF-funded projects, another issue is the integration of GEDSI considerations into on-grid projects, as most existing GEDSI guidelines are tailored toward off-grid initiatives. This is largely because on-grid projects tend to prioritise financial viability and large-scale energy generation, often at the expense of social inclusion objectives. Existing GEDSI assessment methodologies and guidelines are largely designed for off-grid or community-based projects, which have fundamentally different operational structures compared to on-grid projects³⁵. Imposing additional GEDSI requirements, particularly for SMI-funded projects, could significantly constrain the project pipeline, especially for larger, on-grid initiatives where technical and financial metrics are prioritised over GEDSI considerations.³⁶ In contrast, GEDSI requirements are more easily applied to off-grid projects, which tend to be smaller in scale, more community-focused, and generally have lower financial value, making them more adaptable for targeted social interventions.³⁷ However, for on-grid projects, electricity distribution is managed entirely by PLN, leaving developers with no control over where the electricity is distributed.³⁸ This lack of oversight complicates efforts to monitor and measure GEDSI impacts, as the connection between energy access and community-level benefits becomes harder to trace.

Another point raised is the argument that additional GEDSI conditions could actually limit project opportunities. This is because GEDSI requirements, such as supporting local communities, might steer projects toward smaller-scale off-grid initiatives, which are less compatible with PT SMI loans and involve

³¹ Interview with PT SMI.

³² *Ibid.*

³³ Interview with Programme Team at BEJ.

³⁴ *Ibid.*

³⁵ Interview with Developer B.

³⁶ Interview with Brokerage Strand Consortium.

³⁷ *Ibid.*

³⁸ Interview with Developer B.

more complex due diligence processes.³⁹ In contrast, the MENTARI programme's primary goal is to mobilise investments in RE projects with high implementation potential within the programme's timeframe. This comes with strict criteria related to project location and impact, technology restrictions (e.g., exclusion of biofuels, challenges with geothermal, issues with waste-to-energy), and environmental and social due diligence aligned with PT SMI standards and BEJ/FCDO requirements.

4. Conclusion, Lessons Learned, and Recommendations

4.1 Conclusions

The execution of MENTARI's TA, matchmaking and VGF illustrates that a strategically layered methodology is crucial for unlocking RE investments in emerging markets such as Indonesia. Each support modality fulfils a distinct role in the project development cycle: TA accelerates project preparedness when well-targeted and timely; matchmaking builds visibility and access to finance networks; and the VGF can directly bridge financial feasibility gaps for otherwise viable projects. A key takeaway from the findings presented in this report is that no single intervention is effective in isolation; rather, the integration of TA, matchmaking, and de-risking mechanisms like VGF establishes a strong pipeline-to-investment pathway.

Critically, through its capacity building TA, MENTARI (through its Brokerage Strand) seems to be having an impact on the institutional development of RE mobilisation in Indonesia. It strengthens the capacity of key stakeholders like PLN, PT SMI, and BUMDes, influences national electrification policies, and reinforces inclusive energy access through support for off-grid and village-based systems. In doing so, MENTARI not only advances Indonesia's clean energy ambitions but also sets a precedent for replicable, inclusive, and investment-driven energy transition programming across the region. Projects receiving context-sensitive support progress faster and achieve stronger investment readiness whereas delayed or poor-quality outputs limit the credibility and usefulness of some TA interventions, occasionally eroding investor confidence. Going forward, quality assurance and closer alignment with project milestones are essential to fully realise TA's catalytic function, especially in underserved geographies.

The programme also delivers reasonable VfM, with targeted interventions generating outsized impacts. The VGF mobilises more than ten times its grant value in private capital, and TA facilitates the progression of projects representing significant potential capital expenditure. Matchmaking adds additional value by bridging project developers and investors, particularly when paired with TA and de-risking instruments. This layered support model creates a reliable pathway from early-stage project development to financial closure, demonstrating that donor funding, when strategically deployed, can meaningfully catalyse private sector engagement.

However, the Brokerage Strand also highlights a number of challenges which other TA programmes can learn from. Where technical outputs do not meet the standards required for investment decisions, there are potential lost opportunities or redundant due diligence. In some cases, TA has been delivered too late in the project cycle or is insufficiently scoped, reducing its practical utility. This investor erodes confidence and points to a lack of robust quality assurance and coordination across delivery partners.

It must also be acknowledged that while investor perceptions may change in the context of supported projects, this is not necessarily reflective of a wider market change. Sustainability risks in early-stage TA investments remain prevalent and there is a need for stronger screening and adaptive

³⁹ Interview with PT SMI.

support strategies. TA is occasionally delivered to projects that are later deemed non-bankable or fail to progress due to unresolved regulatory, technical, or commercial barriers. These instances highlight the inherent risk of early-stage development for many RE projects in Indonesia, and a key hurdle for changing investor behaviour.

Furthermore, the integration of GEDSI within the Brokerage Strand, including TA, Matchmaking, and VGF, has overall been informal and voluntary. As a result, GEDSI is not consistently mainstreamed and is only integrated by certain stakeholders who have their own GEDSI policies or procedures. Therefore, to better mainstream GEDSI in its implementation, the Brokerage Strand could adopt more formal and systematic approaches by embedding clear GEDSI-related eligibility criteria across all activities. In addition, aspects that remain challenging for stakeholders, such as data collection and outcome monitoring, also need to be addressed.

In the end, the evaluation reveals a gap in alignment and coordination between the MENTARI Brokerage Strand and the DGE. While DGE did not actively participate in key processes such as project selection and VGF fund discussions, there is a clear aspiration from DGE for more frequent and structured coordination with MENTARI to enhance programme ownership and responsiveness. Additionally, the thematic focus of the Brokerage Strand appears to align more closely with the mandate EBTKE rather than DGE's core responsibilities in regulating the electricity sector broadly. This misalignment may have contributed to limited DGE engagement throughout the programme.

4.2 Lessons Learned

The following table outlines the key lessons learned during the evaluation process, along with the respective types of support to which each lesson applies. This structured approach ensures that insights are clearly attributed and can be effectively applied to improve future initiatives and decision-making processes. These lessons are intended to be generalised reflections identified through the evaluation, distinct from the findings under the Programme Learning category (Section 4.6) which respond to specific learning points as requested by FCDO. It should be recognised that this evaluation focusses on one strand of a larger programme, and that the scope of this evaluation is ultimately limited in terms of data collection. As such, the following lessons are drawn from the available evidence and intended to be generalisable, but should be reviewed in the context of other programmatic learning and knowledge.

Table 10 Brokerage Strand Lessons Learned Identified

No.	Lessons Learned	Finding	Mechanism
1	TA is likely to yield the greatest impact when tailored to the specific stage and requirements of the supported project. Evidence from the Brokerage Strand indicates that projects receiving context-appropriate support -such as the Pre-FS for the PV project in Buton and the feedstock assessment for biomass initiatives - progressed quickly toward investment readiness. This suggests that aligning TA with project maturity and distinct needs enhances effectiveness and accelerates development outcomes.	3, 10, 11	TA
2	When undertaking feasibility studies, it is important that investor expectations of quality and timing are met to ensure investor trust can be maintained. In the MENTARI context, several stakeholders noted that TA outputs must be technically sound and designed	2, 3, 4	TA

No.	Lessons Learned	Finding	Mechanism
	with practicality in mind to maximise their utility. Developing clear expectations for the quality standards of such outputs at the outset of a programme, leveraging stakeholder engagement and perspectives of prospective audiences, is expected to mitigate this challenge.		
3	Matchmaking works best when projects have completed essential development steps. The findings above highlight that investment and financial actors in this space have limited time and are often relationship oriented; projects that are not technically or financially prepared for investment entering the matchmaking process risks wasting investor time and damaging investor relationships. When developing similar matchmaking processes, establishing clear minimum standards of technical and financial readiness, preferably through investor consultation, is expected to enhance the process and minimise these risks.	3, 4	Matchmaking
4	Small but targeted financing can have potentially significant results in terms of derisking projects and reducing bankability constraints. Early findings on the VGF above demonstrate that where specific project needs are identified and supported with low risk capital, it can enable the clearing of critical roadblocks which can have a potentially transformative effect for the individual project.	1, 3, 12	VGF
5	For GEDSI results to be achieved, clear and consistent guidance must be provided to set stakeholder expectations, harmonise processes and embed GEDSI considerations at the start of processes. It is not sufficient to rely on implicit assumptions that GEDSI results will be achieved simply through the engagement of vulnerable communities as programme participants. This type of implicit approach fails to account for societal realities and leads to uneven results distributions. In the MENTARI Brokerage Strand, GEDSI was not treated as a core requirement, and stakeholders were not given clear guidance or expectations. This resulted in inconsistent integration, with some partners relying solely on their internal policies rather than program-driven direction.	13, 14	TA, Matchmaking, VGF
6	Women-only sessions and collaboration with local NGOs have proved effective in capturing meaningful GEDSI insights and driving inclusive implementation. GEDSI training and toolkits also helped partners develop actionable plans aligned with local contexts. This highlights learning for other programmes and initiatives that achieving GEDSI results requires integration of diverse perspectives and data points to support the development of tailored, beneficiary oriented tools and processes.	14	TA, Matchmaking, VGF
7	When delivering in remote contexts, particularly in scientific or engineering fields such as the energy sector, there is a need for targeted	13	TA, Matchmaking, VGF

No.	Lessons Learned	Finding	Mechanism
	capacity building and inclusive recruitment processes to ensure gender balanced recruitment.		
8	MEMR has an important role in the MENTARI Brokerage Strand as the regulator and policy leader for Indonesia's energy transition. Its involvement helps ensure that the investments and project support from the UK government through MENTARI fit national priorities, comply with the law, and can be carried out effectively in the field. Therefore, programme alignment with the mandates of MEMR directorates is critical. Effective engagement requires a clear mapping of each directorate's mandate to ensure that programme activities directly correspond to their roles and responsibilities and can be supported effectively and efficiently.	9	MENTARI Programme
9	Regular and well-structured coordination mechanisms with key government counterparts should be established from the outset of the programme to facilitate cohesion. For large programmes with multiple workstreams and diverse stakeholders, proactive and scheduled engagement, such as bi-monthly or quarterly meetings, should be formalised in the workplan. These sessions should be used not only to share strategic updates but also to review progress, address challenges, and agree on next steps in a timely manner. A consistent coordination schedule will strengthen government ownership, improve communication across all relevant stakeholders, prevent unnecessary delays, and ensure that activities are implemented efficiently and in alignment with programme objectives	9	MENTARI Programme
10	Comprehensive documentation is essential for accurately assessing performance. If engagement processes are not recorded in a systematic way, it becomes difficult to determine whether the management and coordination resources provided were sufficient. Keeping consistent and complete information for each activity allows results to be compared, helps identify what worked well and what needs improvement, and ensures accountability to all stakeholders. This level of detail also provides a reliable basis for making informed decisions and improving future activities, while enabling respective stakeholders to easily access controlled information relevant to their roles.	9	MENTARI Programme

4.3 Recommendations

The following Section presents the recommendations derived from relevant findings and clearly indicating the type of support to which each recommendation applies. Each recommendation is also assigned a priority level based on whether it needs to be implemented immediately, or whether it is a consideration for future Brokerage Strand or MENTARI decision-making. Lastly, each recommendation has an audience, indicating who the owner of the recommendation is expected to be; where Delivery Partners are referenced as the audience this should be understood as both the current Delivery Partners (until

the conclusion of MENTARI Phase 1) and subsequent Delivery Partners working on future iterations of MENTARI or UK-supported energy transition programmes in Indonesia.

4.3.1 GEDSI Recommendations

Recommendation #	6	Audience	Programme Owner, Delivery Partners
Related Findings	13, 14	Priority	Medium

To mainstream GEDSI more effectively within the Brokerage Strand, the programme should embed clear eligibility criteria related to social inclusion across all activities and provide technical guidance on GEDSI data collection and impact monitoring, as stakeholders often face challenges in these areas. While most stakeholders are willing to integrate GEDSI, their motivation tends to be shaped by reputational or bankability considerations rather than a deep commitment to inclusion, highlighting the need for increased awareness of GEDSI's broader value. Consistent and structured guidance, including regular GEDSI-focused sessions and peer learning opportunities - especially featuring lessons from successful developers - could enhance understanding, foster genuine buy-in, and ensure more consistent application across projects. At the same time, continued targeted support and encouragement are necessary to address uneven awareness and concerns among developers, some of whom view GEDSI requirements as restrictive; a balance of structured and tailored approaches will help secure broader engagement. It is acknowledged that it is too late for this recommendation to be picked up by the current phase of MENTARI, but this recommendation should be carried forward both to subsequent MENTARI programmes and wider energy initiatives supported by UK Government funding in Indonesia.

Recommendation #	7	Audience	Programme Owner, Delivery Partners
Related Findings	13, 14	Priority	Medium

To strengthen GEDSI mainstreaming in future brokerage and VGF programmes, the following steps should be formalised and taken into account by developers and other MENTARI programme stakeholders. The steps are outlined as follows, from actions to be taken during programme inception to later stage ongoing support actions:

- Conduct a preliminary GEDSI assessment:** At the proposal submission stage, requests for proposals or other similar procurement processes should require applicants to include an initial GEDSI assessment as part of the requirements. This preliminary assessment should identify potential GEDSI-related risks and opportunities within the project's context, based on socio-economic data and an analysis of existing GEDSI barriers. It should also describe how the proposed project could influence existing baseline condition.
- Develop a preliminary GEDSI action plan:** Based on the initial GEDSI assessment, candidates should prepare a preliminary GEDSI Action Plan. This plan should detail measures to mitigate identified risks, as well as interventions to maximise benefits for GEDSI target groups within the community. The plan should also set out clear, measurable indicators for tracking GEDSI outcomes throughout project implementation.
- Integrate GEDSI obligations into agreements:** GEDSI requirements should be formalised in contractual agreements between the MENTARI programme and project developers. These clauses should outline the developer's responsibility to reinforce GEDSI integration, ensure delivery of the agreed Action Plan, and commit to reporting progress against the defined indicators.
- GEDSI implementation throughout the project:** During project implementation, developers shall implement the agreed GEDSI Action Plan. At this stage, the MENTARI programme will have a central

role in facilitating communication and monitoring progress, enabling the provision of TA in the event that technical challenges are encountered.

- e. **Monitor, Report, and Review Progress:** Regular monitoring and reporting from the project developers should be required to assess progress against the GEDSI Action Plan. Reports should use the agreed indicators and be submitted at defined intervals.

Recommendation #	8	Audience	Programme Owner (FCDO/BEJ)
Related Findings	13, 14	Priority	Medium

FCDO needs to take a more systematic approach to mainstreaming GEDSI, beginning with the formalisation of its expectations to guide consistent implementation. Many of the challenges faced by project developers stemmed from how GEDSI was communicated, whether by BEJ, FCDO or other stakeholders involved in MENTARI. The lack of clarity and emphasis during initial stages contributed to inconsistent implementation. To address this, BEJ/FCDO could: (i) clearly establish GEDSI-related expectations during project planning and communicate their importance early on in close collaboration with Delivery Partners; (ii) develop specific guidance outlining GEDSI requirements, which could be embedded in or appended to legal documentation (e.g., agreements); and (iii) reinforce these requirements through ongoing technical support and follow-up mechanisms during implementation.

Additionally, TA should be further improved by establishing mechanisms that enable consistent follow-through, using structured programmes and tailored frameworks adapted to each project's context. Comprehensive support must go beyond basic information sharing and occasional follow-ups; regular, scheduled consultations are necessary to sustain engagement. To strengthen this support, BEJ may consider: (i) delivering dedicated training through workshops and mentoring, with a relevant curriculum to equip implementers with the necessary skills to integrate GEDSI; (ii) setting clear benchmarks for accountability through periodic interviews (e.g. every six months) based on a defined rubric, enabling progress tracking and constructive feedback; and (iii) developing interactive online learning tools to enhance engagement and minimise drop-offs among project developers.

4.3.2 Alternative Approaches to MENTARI Support

Recommendation #	9	Audience	Programme Owner, Delivery Partners, and VGF Beneficiaries
Related Findings	7, 10, 12	Priority	Medium

There are different approaches that MENTARI could consider to increase the impact of the support to RE projects. These include the integrated approach of TA and matchmaking as well as the alternative financing instruments beyond VGF that are useful to improve bankability of the small and medium scale RE projects. Based on the list of recommendations mentioned above, the alternative financing instruments which could be considered are explored further below.

1. Credit Guarantee

A credit guarantee for RE projects is a financial risk mitigation tool that protects lenders from potential losses if the project developer fails to repay a loan. By covering a portion of the default risk (typically 50–80%), credit guarantees enhance the creditworthiness of RE projects—especially small or first-time developers—making it easier to secure financing from commercial banks. This mechanism is particularly suitable for Indonesian market, where perceived risks and limited collateral often restrict access to debt

financing for clean energy infrastructure. While there are options on risk coverage of a guarantee, below is the example of how a credit guarantee could address collateral issues by small-scale developers⁴⁰.

Figure 7 Credit Guarantee Mechanism

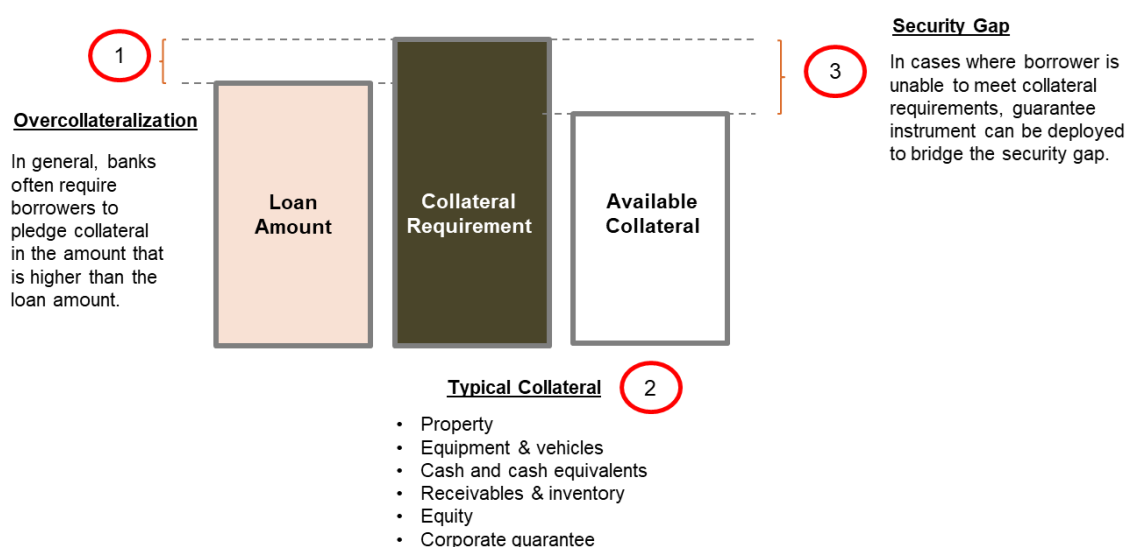


Figure 7 demonstrates how a credit guarantee mechanism can alleviate collateral constraints that often prevent small-scale RE developers from obtaining loans. In typical financing arrangements, banks frequently demand collateral that surpasses the loan amount - sometimes by 125% or more - to mitigate perceived risks associated with the project. For small developers, this collateral requirement can be overwhelming, especially for first-time or community-based projects that do not possess hard assets. Consequently, even when a project is both technically and commercially viable, financing becomes unattainable due to inadequate collateral.

A credit guarantee facility intervenes by partially covering the lender's risk, thereby decreasing the collateral needed from the developer. For instance, if the guarantee covers 50–80% of the loan value, the bank's requirement for additional security is considerably diminished. This is illustrated in the diagram, where the gap between the collateral demanded and what the developer can offer is bridged by the guarantee. The guarantee thus enhances the project's "bankability" without necessitating the developer to pledge further assets, allowing them to obtain financing and move forward with implementation. This mechanism is particularly effective in promoting distributed RE in Indonesia, where local developers encounter structural financing obstacles despite a strong demand for clean, decentralised power solutions.

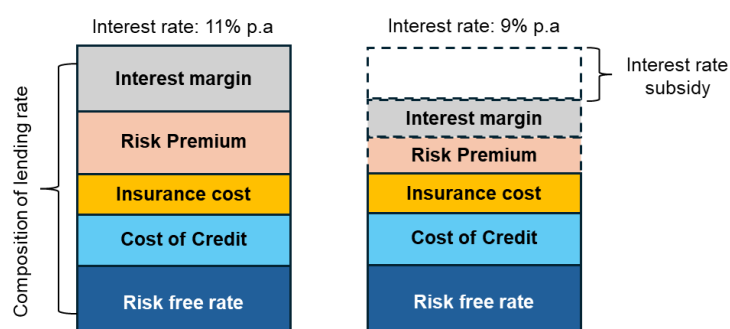
2. Interest Rate Subsidy

An interest rate subsidy can effectively address one of the key investment barriers for small-scale RE projects in Indonesia: the high cost of financing. Many local developers face elevated interest rates (often >10% annually) from commercial banks due to perceived risks, lack of credit history, and the absence of large-scale collateral. These high borrowing costs make project economics unviable - especially for

⁴⁰ Climate Policy Initiative, 2019. Developing a Guarantee Instrument to Catalyze Renewable Energy Investments in Indonesia

small solar, micro-hydro, or bioenergy systems in rural or remote areas, where returns are modest and margins are tight. Figure 8 shows how the interest rate subsidy works.

Figure 8 Interest Rate Subsidy Mechanism



By providing an interest rate subsidy, the government or a donor programme (such as MENTARI or PT SMI) would cover part of the interest expense, thereby lowering the effective cost of capital for the developer. In Indonesia, such a mechanism would complement existing efforts like the VGF or credit guarantees, by directly improving cash flow and unlocking private sector lending for smaller, under-served RE developers—particularly those targeting energy access or rural electrification goals.

3. Opex Grant

An OPEX grant is an alternative financing mechanism designed to cover part of the operational expenditure (OPEX)—such as maintenance, staffing, and system management—of a RE project, particularly during its early years of operation. Unlike capital expenditure (CAPEX) grants that fund upfront construction costs, an OPEX grant ensures longer-term financial sustainability by stabilising the project's cash flow once it is operational. This is especially valuable for off-grid, rural, and small-scale RE systems in Indonesia, where tariff-based revenue alone is often insufficient to fully cover costs, due to affordability constraints or low consumption levels.

An OPEX grant could address this gap by ensuring reliable operations, reducing default risks for investors, and encouraging stronger interest from local developers who may otherwise lack working capital. It would also reinforce MENTARI's equity and access objectives, ensuring that clean energy systems remain functional and affordable over the long term, ultimately making the programme more resilient, inclusive, and scalable.

Bibliography

A. P. Verma and Imelda (2022): Clean Energy Access: Gender Disparity, Health, and Labour Supply. Graduate Institute of International and Development Studies International Economics Department Working Paper Series.

Indonesia Research Indonesia for Decarbonization (2022): Acceleration of the Energy Transition in Indonesia, Background Paper in G7-G20 Track 2 Dialogue, Indonesia

International Renewable Energy Agency (2022): Indonesia Energy Transition Outlook, IRENA, Abu Dhabi

Kementerian Keuangan Republik Indonesia (2022): Indonesia Luncurkan ETM Country Platform untuk Percepat Transisi Energi yang Adil dan Terjangkau, <https://www.kemenkeu.go.id/informasi-publik/publikasi/siaran-pers/Siaran-Pers-Indonesia-Luncurkan-ETM-Country>, downloaded on 14 April 2025

Kementerian Sumber Energi dan Sumber Daya Mineral Republik Indonesia (2025): Rencana Umum Ketenagalistrikan Nasional (2025), https://gatrik.esdm.go.id/assets/uploads/download_index/files/28dd4-rukn.pdf, download on 14 April 2025

Ministry of Women Empowerment and Child Protection (2022): Profil Perempuan Indonesia 2021.

Ministry of Women Empowerment and Child Protection (2025):. Profil Perempuan Indonesia 2024.

PT Perusahaan Listrik Negara Tbk (2021): Rencana Usaha Penyediaan Tenaga Listrik, <https://web.pln.co.id/statics/uploads/2021/10/ruptl-2021-2030.pdf>, download on 14 April 2025

United States Department of Agriculture (2023): Indonesia Climate Change Report, Voluntary Report, https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Indonesia%20Climate%20Change%20Report_Jakarta_Indonesia_ID2023-0014.pdf, download on 14 April 2025

Annex 1 Terms of Reference

MENTARI Brokerage Strand and Viability Gap Fund (VGF)

Evaluation Terms of Reference

Introduction

Tackling climate change and supporting inclusive economic development through partnerships is a key objective of the UK government's International Development White Paper published in November 2023. The British Embassy Jakarta delivers many of these objectives in Indonesia as part of the UK government's ambitious UK-Indonesia Partnership Roadmap and has established several programmes and initiatives that further cooperation and support in several areas, including climate change and economic development.

The British Embassy's Low Carbon Energy and Infrastructure team (LCEIT) manages a key component of this partnership through its support to Indonesia to accelerate a clean energy transition away from coal power and towards RE. The primary vehicle for this work is the MENTARI UK-Indonesia Low Carbon Energy Partnership ('MENTARI'), which has been operational since 2020.

One key pillar of the MENTARI programme is to work with investors, projects developers and other key stakeholders to broker and direct investment into RE infrastructure, under the MENTARI Brokerage Strand and Viability Gap Fund. During its initial four-year term, the programme is targeting brokered investment from public and private sources worth £766m. This support is delivered via several varied approaches, including but not limited to the provision of capital grants to reduce the cost of external finance, TA and project development advice, and funding for project preparation.

MENTARI programme integrates Gender Equality and Social Inclusion (GESI) in every work strand, some measures have been taking place to include GESI elements in brokerage strand. In 2020, the programme delivered a Gender & Inclusion (G&I) learning event to share key lessons learned on G&I investing, and best practices for investors and project developers on how to mainstream G&I (e.g. developing Gender Equity Action Plan; applying more G&I lens such as through exploring opportunities and risk in pipeline and due diligence process). In the second year, the programme developed a handbook outlining the steps and processes for project developers to integrate gender and inclusion issues into their project cycle. G&I TA support was provided to two project developers namely HDF Energy and Arya Watala Capital. In 2022, the programme developed a case study from the process of TA supports to the two project developers in the previous years. In 2023, the programme developed a G&I action plan and facilitated Gender Action Learning for Sustainability (GALS) training for two developers receiving brokerage support, namely Dewa Agri Coco and Climate Partner in which they work on carbon credit scheme.

Background

Launched in 2020, the MENTARI (formerly Indonesia RE) programme aims to support poverty reduction and inclusive economic growth by accelerating and expanding access to clean and affordable energy in Indonesia while mainstreaming Gender & Inclusion (G&I) in its delivery. The programme supports national and regional energy policy and regulatory reform; increased external investment in RE projects; and development of bankable commercial models through demonstration projects to attract increased private sector investment.

Contract signing between the delivery partners (a consortium led by Palladium International with members of Castlerock, ECA, and Hivos) and FCDO took place in December 2019 and the programme

mobilisation period started in January 2020. The programme was originally set to be implemented from 2020- 2023. An extension period has been approved to September 2025 for the consortium to deliver the works. The programme itself will run until April 2026.

There are four workstreams in the programme. All mainstream gender and inclusion in their design and delivery:

- a) Policy Strand aims to improve Indonesia's RE policies, regulations and guidelines to realise a more conducive business environment in the low carbon energy sector.
- b) Brokerage Strand aims to increase investment in low carbon energy projects in Indonesia by bridging the gap between potential investors and viable project developers through matchmaking services, TA and an investment grant facility called the Viability Gap Funding (VGF).
- c) Demonstration Pilot Project Strand has built two small-scale low carbon energy pilot projects to demonstrate feasible and replicable off-grid low carbon energy systems that will result in socio-economic benefits for the communities.
- d) Collaboration, Capacity Building & Networking Strand (CCBN) aims to support collaboration, networking, and capacity building of relevant stakeholders in the low carbon energy sector including policy makers, investors, project developers, communities, and academia.

MENTARI has two expected impacts (full ToC is available on Annex 1):

- Increased access to reliable and affordable low carbon energy (including for women and marginalised groups) leads to inclusive economic growth (#1).
- Increased investment in quality low carbon energy project in Indonesia (#2).

On the outcome level, the programme has three expected outcomes namely:

- Improved subsidiary policies, regulations and guidelines for implementation brings more conducive business environment in the low carbon energy sector (#1).
- Investment brokered for low carbon energy projects (#2).
- Socio-economic benefits generated, particularly for women and marginalised groups, in demo project intervention area (#3).

Brokerage Strand is designed to contribute to the achievement of outcome and impact number two by bridging the gap between potential investment and viable projects through TA, matchmaking services, and investment grant scheme.

TA provided from the Brokerage Strand is varied, depending on the needs of project developers such as but not limited to pre-feasibility studies, feasibility studies, market or grid study, environmental study, and others. The assistance provided has enabled the project developers to move to the next step of the project cycle towards financial close and operational stages.

Matchmaking services provided by the Brokerage Strand aim to enable potential investors to meet with viable project developers to explore investment opportunities.

The Viability Gap Fund (VGF) is an investment grant to support RE projects that have potential environmental and social impact, but which struggle to meet the level of commercial viability required by lenders. MENTARI is partnering with PT SMI, a Government of Indonesia-owned infrastructure investment company, to execute the VGF grant as a blended finance scheme, where MENTARI will provide the capital grant directly to the project and PT SMI will provide the loan. Potential projects can come from either PT SMI and MENTARI list with both MENTARI and PT SMI assessing the necessary criteria to be a successful project.

Purpose and Scope

The purpose of this Evaluation is to assess the progress and effectiveness of the MENTARI Brokerage Strand and Viability Gap Fund, considering the varied approaches that have been taken by this Strand between 2020-2023. We are seeking evidence and recommendations on the most effective types of support delivered to date, plus an assessment of other approaches that may be suitable to deliver the objective of brokering new investment into RE, considering the contribution of work undertaken to date towards MENTARI's objectives, and its value for money.

The objectives of this evaluation are:

- To assess the effectiveness and value for money of the different types of Brokerage services undertaken by the MENTARI programme
- To provide an evidence-based review and set of recommendations on What types of Brokerage activity (e.g. TA, investment grants) have been most effective and are most appropriate for leveraging investment into RE, in the Indonesian context?
- What other activities, including those which may have been tested within Indonesia or other comparable markets, could the MENTARI Brokerage Strand consider in future which may have high investment leveraging impact? and
- Are the right resources in place to deliver the objectives of the Brokerage Strand, and if the ambition of MENTARI's objectives was increased, what impact would this have on the level of resources needed?

The outputs of this Evaluation exercise will be a comprehensive, expert and useable set of evidence and recommendations on the areas above, which will be used by the MENTARI programme team to inform future programme strategy and direction from 2024 onwards particularly for the upcoming MENTARI phase two business case.

The Evaluation supplier will engage with several stakeholders in this evaluation process as part of data/information collection, such as but not limited to:

- Programme team as the donors and programme owner
- Energy Sector Lead at the Department of Business and Trade British Embassy Jakarta who is not part of programme team but engage with programme team to share project pipeline
- Programme Delivery Partner who delivers the programme on the ground and report back to programme team
- Programme Beneficiaries (project developers and investors) who received supports from the programme through TA, matchmaking, and/ or VGF.
- Stakeholders (PT SMI, PT PLN, Directorate General of Electricity of Ministry of Energy and Mineral Resources) who work together with programme team and delivery partner to deliver the intervention.
- External financial institutions and other development partners active in Indonesia or external technical consultants who supplier deems necessary to enrich the report.

The Programme Team in British Embassy Jakarta and Delivery Partner will initially facilitate meeting arrangements with relevant stakeholders/ beneficiaries.

MENTARI delivery partner and programme team will make below data/ information available to supplier as initial basis to conduct the evaluation. Supplier is responsible for further data gathering through interviews or other desk research.

- Programme Annual Report
- Brokerage pipeline list
- Brokerage matchmaking document
- Brokerage VGF documentation
 - Agreement with PT SMI
 - Due diligence legal study of VGF recipients
- Brokerage list of project developers receiving TA and the TA document
 - TA document – market study
 - TA document – feasibility study
 - TA document – pre-feasibility study
- Non-Disclosure Agreement (NDA)

The Recipient

The recipient of the evaluation report is the Programme Team at the British Embassy Jakarta, Programme Delivery Partners, and when applicable, the evaluation report may be subject to transparency release at gov.uk.

Where there is sensitive information that may not be suitable for publication but is useful for programme development, suppliers should flag it when submitting the report. A redacted version may be published if necessary.

Evaluation Framework and Questions

The Supplier is expected to present an evidence-based and learning-focussed mixed methods approach, combining primary and secondary data sources to answer below indicative Key Evaluation Questions according to the OECD DAC Evaluation Criteria of relevance, effectiveness, efficiency impact and sustainability:

- MENTARI aims to broker new investment into RE infrastructure. Considering the different types of support provided under the MENTARI Brokerage Strand,
 - **Effectiveness** - How effective have different type of support (technical assistance, matchmaking services, and viability gap fund) in improving the quality and bankability of supported projects?
 - **Effectiveness** - How have different type of support (technical assistance, matchmaking services, and viability gap fund) influenced investor confidence in selected projects and in RE investment opportunities in Indonesia?
 - **Effectiveness** - To what extent has the support increased the likelihood of projects securing investment, both during and beyond the programme's lifetime?
 - **Impact** - What has been the contribution of each type of activity in creating and sharing replicable business models and/or financing vehicles for RE, especially off-grid projects.
 - **Relevance** - How do the activities supported under the MENTARI Brokerage Strand align with the needs and priorities of RE infrastructure development in Indonesia?
 - **Lesson learned** – After answering the above questions, what have been the key success contributors and key challenges in delivering support to RE projects in Indonesia from MENTARI programme?

- MENTARI has undertaken several different approaches to delivering the brokered investment targets of the programme, including investment grants, technical assistance, project development funding and matchmaking services.
 - **Efficiency** - What is the value for money of different types of support provided by MENTARI in delivering programme objectives?
 - **Efficiency** – How do MENTARI’s strategies compare in terms of cost-effectiveness to other proven approaches in Indonesia and similar markets, including those utilised by other development partners?
 - **Sustainability** - Whether or not the single programme target of £766m for investment brokerage appropriate for fostering long-term sustainability and promoting a balanced focus on various project scales?
 - **Sustainability** - How adequate are the financial, managerial, and specialist resources that have been employed to achieve the objectives of Brokerage Strand in terms of ensuring sustainable outcomes?
 - **Lesson learned** – after comparing VFM of different type of supports, would it had been better to focus on certain type of support? If yes, which one and why? If no, why?
 - **Lesson learned** – after analysing the VFM particularly on VGF, has the scheme successfully achieved the intended objectives?
- **Gender and Inclusion (G&I) assessment**
 - As the programme mainstreams G&I in its delivery, how significant has G&I aspect implemented in brokerage strand?
 - What could the strand have done differently to better mainstream G&I in its implementation?

The Requirements

Proposal

Supplier is expected to submit evaluation proposal addressing points in this term of reference.

Proposal should include:

- Workplan
- Methodology
- Personnel CVs (no longer than one page per person) – please include in the Annex
- Activity based budget
- Highlight of previous evaluation works (no longer than one page) – please include in the Annex

Personnel should have experience/ portfolio in the Indonesia RE market sector for at least five years; there must be at least one monitoring and evaluation expert in the team composition; there must be at least one Gender & Inclusion expert in the team composition.

There should be at least one personnel who is based in Jakarta as there might be several in-person meetings to be attended.

Length of proposal should not exceed 20 pages.

Timing and Budget

Procurement process is planned to be completed by early December 2024. An inception phase will follow until end of December inclusive of inception report submission and internal feedback. Supplier will have until end of April to carry out the evaluation and preparing the final report.

The evaluation total value shall not exceed GBP 60,000 including local tax and VAT.

Payment is preferred to be made in GBP with GBP 60,000 as the ceiling value.

Preferred payment scheme will be made in two terms: £40,000 in March and £20,000 in April.

Deliverables

Supplier is expected to provide below high-quality deliverables in a timely manner. Supplier is welcome to propose new timeline as long as it has all the deliverable listed below and all works should be completed by end of April 2025.

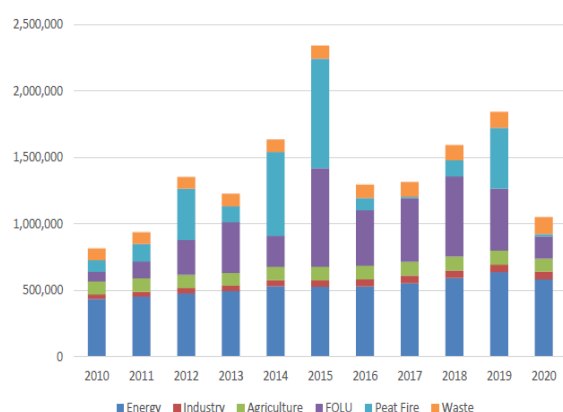
Deliverables
Inception phase
1st draft of inception report submission
Programme team review 1st draft
Supplier to address feedback to the 1st draft
2nd draft of inception report submission
EQUALS QA
Supplier to address feedback from programme team & EQUALS
Evaluation process (Evaluation process can take place while finalising feedback from EQUALS)
Data/ information gathering and processing
Evaluation progress call between programme team, supplier, and MENTARI delivery partner (bi-weekly)
Evaluation result
Evaluation result presentation to Programme Team
Evaluation report submission (following FCDO evaluation report template) 1 DFID Evaluation Report Template.docx
EQUALS QA
Supplier to address feedback from EQUALS
Final submission
Full evaluation report
PPT summary
Two pager highlights

Annex 2 Brokerage Strand and Viability Gap Fund (VGF) Overview

In this section we provide a summary overview of the MENTARI Brokerage Strand and VGF, situating it within the broader context of Indonesia's energy transition and the UK-Indonesia Low Carbon Energy Partnership. This section also discusses the roles of the partners and stakeholders involved, and the support mechanisms provided. Implementation Context

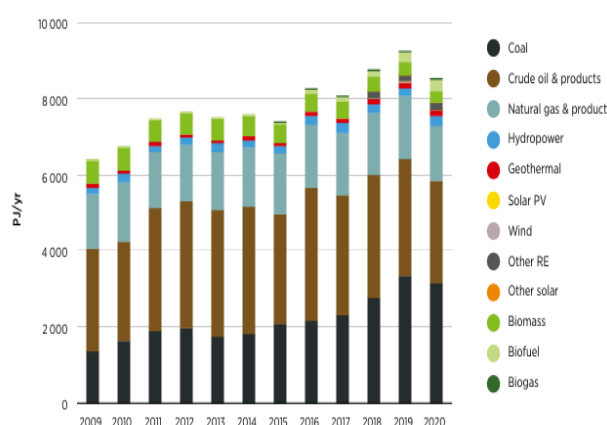
Current Status of Indonesia Energy Transition

Indonesia's commitment to the Paris Agreement was first articulated through its First Nationally Determined Contribution (NDC) submitted in 2016. In this document, Indonesia pledged to reduce greenhouse gas (GHG) emissions by 29% below the business-as-usual (BAU) scenario by 2030 through domestic efforts, and by up to 41% with international support. This commitment was further strengthened in 2022 by increased the unconditional target to 31.89% and the conditional target to 43.2%, both relative to the same BAU baseline. Additionally, the ENDC reaffirmed Indonesia's aspiration to achieve net-zero emissions by 2060 or sooner. An analysis of



Source: USDA, 2023

Figure 9. Indonesia Emission Profile in Sectors (Gg CO2e)



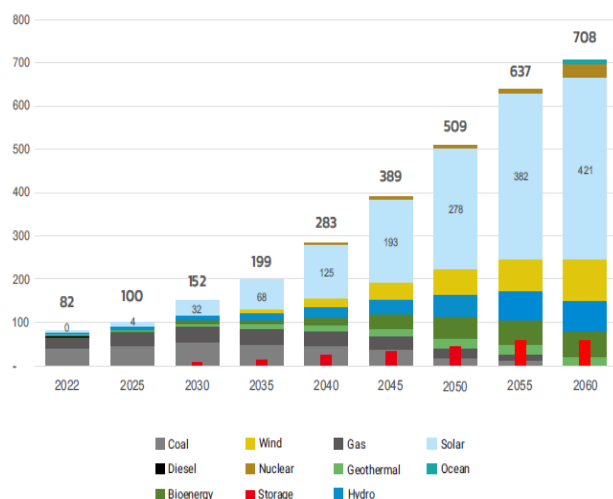
Note: PJ= petajoule, RE= renewable energy. Source: IRENA, 2022

Figure 10. Indonesia Energy Sector's Emission Profile (2009-2020)

sectoral GHG emissions indicates that Forestry and Other Land Use (FOLU) and the energy sector are the primary contributors to national emissions. As illustrated in Figure 9, emissions from Land Use, Land-Use Change, and Forestry (LU-LUCF) have historically been the highest. However, projections included in the ENDC suggest that by 2030, under a BAU scenario, the energy sector will become the largest contributor to GHG emissions.

Without intervention, the continuation of conventional economic development pathways is expected to drive further increases in emissions, undermining Indonesia's climate commitments and hindering the development of a sustainable and resilient energy system.

In response, the energy transition is recognised as a key strategy for decarbonisation, encompassing both the supply and demand sides of the energy system. On the supply side, the transition involves the early retirement of coal-fired power plants, the development of dispatchable and variable RE sources, and the expansion and modernisation of the transmission and distribution grid. On the demand side, the transition includes improving energy efficiency through the



Source: IRID, 2022

Figure 11. NZE Power Generation Capacity (GW) 2022-2060

ambitious target, projecting an increase in installed capacity to 443 GW by 2060. The composition of this future energy mix is designed to drastically reduce carbon intensity while maintaining energy security. The planned contributions are 24.1% from new energy, 49.5% from RE sources, including 20.7% from Variable RE (VRE) and 28.8% from non-VRE, and 26.4% from fossil fuel-based generation integrated with Carbon Capture and Storage (CCS) technologies

In addition to changes in generation capacity, the RUKN emphasises the development of an integrated power grid, including intra- and inter-island interconnections, to enhance grid reliability and enable the efficient distribution of RE across the archipelago. To implement the targets set in RUKN, the GoI estimates that the total investment requirement for generation and transmission infrastructure will amount to approximately IDR 1.09 trillion (equivalent to USD 30.3 billion per year over the 35 year period). This level of investment reflects the scale of transformation needed to decarbonise Indonesia's electricity system while supporting sustainable economic growth.

The *Rencana Usaha Penyediaan Tenaga Listrik* (RUPTL), or Electricity Supply Business Plan, is a strategic document prepared by PLN, in alignment with the guidelines and targets outlined in RUKN. In the 2021–2030 RUPTL, RE is allocated 10.6 GW, representing 51.6% of the total planned new capacity additions. In line with the updated direction set in the RUKN 2025–2060, the RUPTL is expected to be revised to incorporate new targets for RE development.

Indonesia now has two funding initiatives launched in 2022 for the decarbonisation of energy sector, the Energy Transition Mechanism (ETM) from the Climate Investment Fund channelled through the Asian Development Bank and the Just Energy Transition Partnership (JETP). The ETM focuses on early retirement of coal power plant, investment for RE projects, and reskilling coal workers to ensure a just transition. The JETP aims to accelerate the transition to a net zero power sector, which has specific target of RE generation share of 44% by 2030, GHG emission from on-grid power sector of no more than 250 MT CO₂ in 2030, and net zero emission in power sector by 2050. The JETP has five focus area: transmission lines and grid deployment, early coal power plant retirement, dispatchable RE acceleration, variable RE acceleration, and RE supply chain enhancement. The JETP would allocate US\$ 20 billion in funding that will be mobilised in two ways and ETP of US\$ 500 million in concessional funding.

deployment of high-efficiency equipment and systems, as well as accelerating the growth of green industries. This comprehensive approach is essential to aligning Indonesia's development trajectory with its climate goals and ensuring a cleaner, more resilient energy future.

In alignment with Indonesia's long-term goal of achieving net-zero emissions by 2060 or sooner, MEMR has revised the *Rencana Umum Ketenagalistrikan Nasional* (RUKN) or National Electricity General Plan for the 2025–2060 period. This updated plan serves as a strategic blueprint for transforming the electricity sector in support of national decarbonisation efforts. The RUKN 2025–2060 sets a significantly more

These ambitious targets will necessitate not only substantial financial commitments, but also the establishment of robust regulatory frameworks, effective institutional coordination, and enhanced international cooperation to facilitate access to technology and financing mechanisms.

RE Financing in Indonesia

Indonesia's RE sector holds substantial potential, yet investment levels remain significantly below what is required to meet national targets. In 2023, the country attracted only about USD 1.5 billion in RE investments, a figure that falls short of the annual financing needed to achieve its climate commitments. Despite possessing abundant resources like solar, hydro, and geothermal energy, Indonesia's RE penetration was approximately 15% as of 2024, indicating a slow transition away from fossil fuels⁴¹.

To align with its 2030 climate goals, Indonesia requires an estimated USD 146 billion in RE investments, highlighting a substantial financing gap. This shortfall is attributed to various factors, including policy and regulatory challenges that deter private investment. Moreover, the dominance of PLN and its procurement processes have been cited as barriers to attracting private sector participation⁴².

Efforts are underway to address these challenges and mobilise the necessary investments. For instance, Indonesia's sovereign wealth fund, Danantara Indonesia, has partnered with the Qatar Investment Authority to establish a USD 4 billion joint investment fund, aiming to prioritise projects in RE among other sectors. Additionally, initiatives like the JETP have pledged significant funds to support Indonesia's energy transition, although disbursement delays have been reported. Addressing policy and regulatory hurdles remains crucial to unlocking the full potential of RE investments in Indonesia.

GEDSI and Poverty Alleviation in Green Transition Policy

Indonesia has demonstrated strong commitments to a green and just transition by integrating equity and inclusion into its energy and climate policy framework. The ENDC emphasises gender's role in a just transition, aiming to enhance workforce quality and ensure equitable access to quality employment, particularly for vulnerable groups. Similarly, the LTS-LCCR outlines mitigation and adaptation priorities across key sectors, including energy, highlighting the importance of just transition, gender and inter-generational equity, and the inclusion of indigenous peoples and local communities. Additionally, Indonesia adopted the *Rencana Aksi Nasional Gender dan Perubahan Iklim* (RAN GPI) to fulfil commitments made during the 27th and 28th Conferences of the Parties (COP) in 2022 and 2023, which aims to mainstream gender issues into climate policies and programmes.

Despite having stated its commitments, Indonesia has yet to implement significant gender-responsive regulations and enforcement mechanisms in the energy sector. Energy policies often overlook gender-specific disparities and considerations, resulting in predominantly gender-neutral approaches that fail to address the distinct needs and contributions of different genders and vulnerable groups. This is evidenced by Laws No. 30 of 2007 and No. 30 of 2009 as well as other related policies, that regulate energy supply and utilisation, aiming to promote welfare and prosperity for all, yet lack explicit gender considerations. Furthermore, Indonesia's National Energy Policy (*Kebijakan Energi Nasional*) aims to achieve energy security, sustainability, and equity, forming the basis for the General National Energy Plan (RUEN) and Regional General Energy Plans (RUED) in each province. While it provides strategies on expanding

⁴¹ Source: <https://www.eco-business.com/news/funding-is-not-a-barrier-for-indonesias-clean-energy-transition-its-project-viability-jetp-official>

⁴² Source: <https://apnews.com/article/indonesia-coal-energy-transition-fossil-g20-cop-2d8fd110a855a37167d49211e65fc51d>

energy access and transitioning to renewable sources, it lacks explicit measures to address gender disparities or encourage the incorporation of gender-focused approaches.

The lack of gender targeting in Indonesia's energy policies has contributed to the low level of women's participation in the country's energy sector. In fact, only 0.09% of all female workers are employed in electricity and gas procurement, compared to 0.4% of male workers.⁴³ There is also a significant gender pay gap in this sector. On average, women earn IDR 2,935,380, while men earn IDR 5,138,688 in electricity, gas, steam/hot water, and air conditioning supply sectors.⁴⁴ In terms of energy usage, particularly within household energy consumption patterns, women disproportionately bear the health and time burdens associated with limited access to modern energy. Research on a clean energy initiative in Indonesia revealed that women who were exposed to the programme earlier experienced notable gains in lung capacity and an increase in the number of hours they worked.⁴⁵ The benefits were most significant for women who managed household responsibilities, whereas the impact on men was negligible and lacked statistical significance.⁴⁶ This points to limited clean energy access as a contributing factor to health disparities between men and women.

Overview of the Brokerage Strand

MENTARI's Brokerage Strand operates on the premise that limited access to capital and high perceived risks are key obstacles preventing the expansion of RE projects in Indonesia. By addressing structural barriers to investment and linking developers with financiers, the brokerage model plays a catalytic role in shifting the financial landscape toward greater adoption of low-carbon energy solutions. The brokerage strand serves its role in reducing risks for investors while also enhancing the bankability of projects through provision TA, financial structuring support, and matchmaking services

This goal is achieved through a comprehensive approach that addresses both supply and demand, as well as a key matchmaking process linking project developers and potential investors, which is illustrated in the latest ToC of the Brokerage Strand per Figure 12 below.

MENTARI has collaborated closely with the GoI, project developers, and financiers to improve regulatory frameworks and boost investment in low-carbon energy. On the supply side, it builds a database of potential investors and development of innovative financing/de-risking instruments making financing more accessible. On the demand side, MENTARI assembles a pipeline of clean energy projects and provides tailored TA to help them advance in the development phase and reach investment-ready stage. Finally, the Brokerage Strand connects these viable projects with suitable financiers by organising match-making meetings, improving the chance of successful deals.

As of April 2024 (Annex 2), the MENTARI Brokerage Strand has achieved nearly all reported impacts, outcomes, intermediate outcomes, and outputs. The only exception is Intermediate Outcome 3, *"Investor lending bandwidth expanded to allow for greater deal flow"*, which remains at 0% against a cumulative target of a 25% increase in outreach and/or applications received by partner investors by the end of the programme.

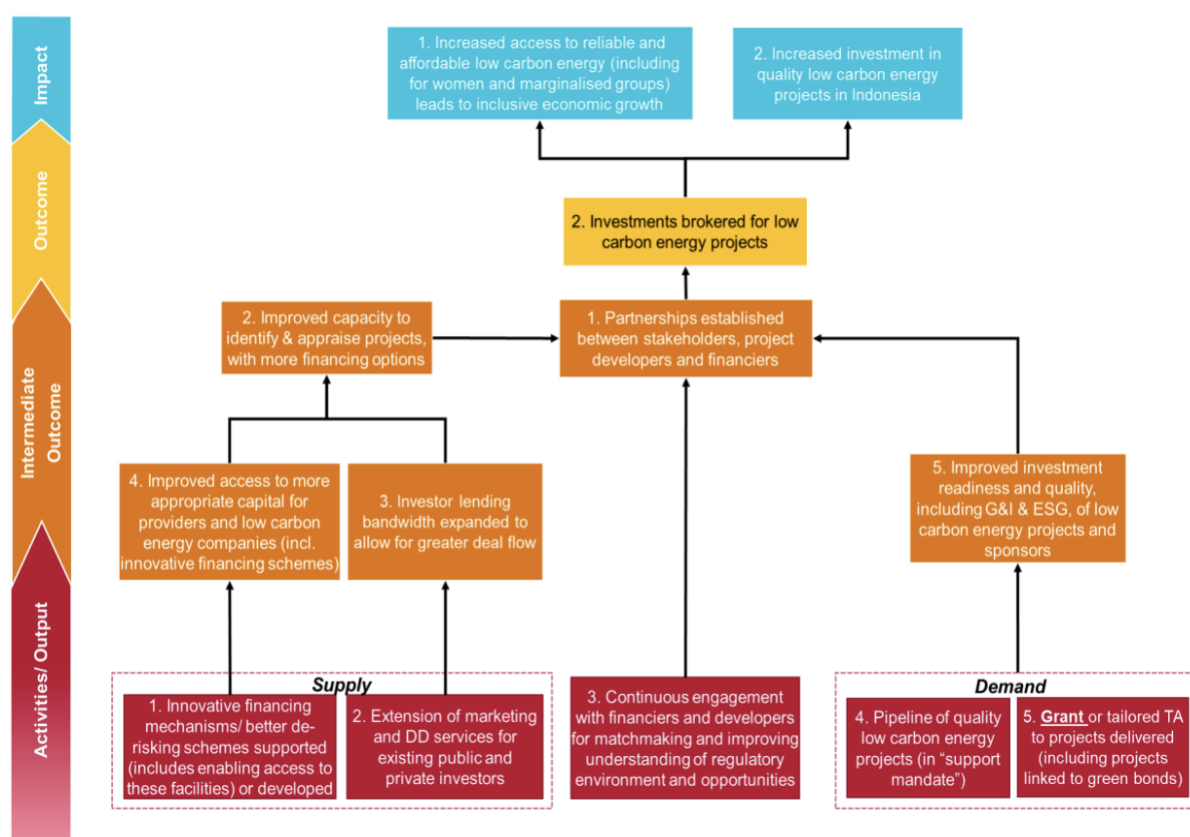
⁴³ Government of Indonesia, Ministry of Women Empowerment and Child Protection. Profil Perempuan Indonesia 2021.

⁴⁴ Government of Indonesia, Ministry of Women Empowerment and Child Protection. Profil Perempuan Indonesia 2024.

⁴⁵ A. P. Verma and Imelda. 2022. Clean Energy Access: Gender Disparity, Health, and Labour Supply. Graduate Institute of International and Development Studies International Economics Department Working Paper Series.

⁴⁶ *Ibid.*

Figure 12 Brokerage Strand Theory of Change



There are three mechanisms used by the MENTARI Brokerage Strand to improve the bankability of RE projects in Indonesia: TA, matchmaking, and VGF. These mechanisms are designed to address key barriers across the project development lifecycle, from early-stage feasibility to financial close. TA helps developers strengthen project design and documentation, matchmaking facilitates strategic connections between developers and a diverse pool of investors, while the VGF provides targeted financial support to close funding gaps in commercially marginal but high-impact projects. Detailed information on the projects that have received one or more Brokerage Strand mechanisms is stated in Annex 6.

Technical Assistance

MENTARI provides targeted TA to public institutions, private sector actors, and project developers to strengthen their capacity in advancing clean energy initiatives. This includes regulatory advisory, feasibility assessments, project structuring guidance, and support for enabling policy environments.

Project Pipeline Identification and Screening

MENTARI identified projects for TA through bilateral outreach and referrals from institutional partners such as PLN, MEMR, and PT SMI. Projects were screened based on criteria including technical feasibility, alignment with national priorities, and potential for private sector investment. The Diesel Replacement Programme (DRP), implemented with PLN, was a key targeted initiative under TA. MENTARI provided pre-feasibility studies, grid impact analysis, and PPA drafting for selected DRP sites. In total, 17 RE projects received TA support. There are two projects that received TAs have finished financial transaction and awaiting COD this year (Diesel Conversion 0,11 MW Katingan Project & Sago Bark Biomass 1 MW

in Karimun). The TA is also enabling four projects to reach Commercial Operating Date (COD), for instance the Coconut Husk Biomass project in Maluku and three hydro projects in Bali, Lombok and Sumatera that obtained VGF.

Sector and Technology Focus

TA was provided for a range of technologies, with emphasis on best technology available for small and medium scale RE, both off-grid and on-grid, including later-stage technologies like hydrogen. The geographic focus was on underserved regions, particularly Eastern Indonesia.

Engagement with Developers and Investors

MENTARI worked closely with developers to scope support needs, coordinate FS inputs, and ensure deliverables were relevant to investor requirements. Feedback loops were established during TA delivery to improve quality and responsiveness.

Outreach and Communications Strategy

Technical success stories, such as support for PT Arya Watala Capital and the DRP, were shared through workshops, newsletters, and direct engagement with financiers to build awareness of project viability and generate follow-up interest for matchmaking or VGF support.

Matchmaking

MENTARI facilitates connections between RE project developers and potential financiers or investors. This includes identifying investment-ready projects, supporting due diligence processes, and hosting engagement forums to align stakeholder expectations and foster project financing opportunities.

Project Pipeline Identification and Screening

Projects were included in the matchmaking process only after achieving a minimum level of technical readiness, including projects that received TA support. Screening ensured projects had at least basic documentation, financial models, and initial permits. Up to April 2024, MENTARI has supported 16 projects in matchmaking with financiers and investors.

Sector and Technology Focus

The matchmaking prioritised distributed solar PV, mini-hydro, and renewable-powered microgrids and also focused on projects aligned with Just Energy Transition goals and those with demonstrable potential for private investment.

Engagement with Developers and Investors

MENTARI has connected the developers with different range of investors, from commercial banks, development financial institutions, private equity, thus enhancing the likelihood of the projects to obtain funding.

Outreach and Communications Strategy

Investor matchmaking was supported through dedicated project teasers, pitch decks, and matchmaking briefings. MENTARI also had participated in investment forums and dissemination of pipeline updates to a pre-qualified investor list.

Viability Gap Funding

MENTARI leverages Viability Gap Funding as a strategic financing tool to enhance the bankability of RE projects that are socially and environmentally impactful but not yet financially viable. The VGF was introduced in a later stage as part of an innovative financing mechanism to support high-potential projects facing challenges securing capital. This facility was then developed in collaboration with PT SMI with specific objective of enhancing the commercial viability of small and medium-sized renewable projects. VGF provides targeted financial support, such as grants or subsidies, to reduce capital or operational costs, thereby improving project returns and attracting private sector investment. This mechanism is particularly relevant for projects in remote or underserved areas where commercial feasibility remains a key barrier.

Project Pipeline Identification and Screening

Projects for VGF were selected through a combination of competitive intake and referral from MENTARI's TA pipeline. Screening criteria focused on technical feasibility and strong potential for financial closure, but with insufficient DSCR to meet lender thresholds.

Sector and Technology Focus

The VGF targeted small-scale RE projects with high social or access impact but low commercial returns. The initial round supported 3 mini-hydro projects in Bali, Lombok, and West Sumatra.

Engagement with Developers and Investors

Developers applied for VGF grants with support from PT SMI and MENTARI. Investors (including PT SMI) were engaged to co-finance the remaining capex requirement, with VGF bridging the bankability gap. VGF-enabled projects often reached financial close and construction due to improved DSCR and lower equity risk.

Outreach and Communications Strategy

The VGF is communicated directly to PT SMI and the designated beneficiaries (PT Brantas Energi). This direct contact is due to cooperation agreement with PT SMI specifically to build on project financing using VGF as the additionality of MENTARI support.

As per the last total investment tracking of MENTARI brokerage strand, total capacity and investment mobilized of renewable energy projects in Brokerage Strand are shown in the figure below.

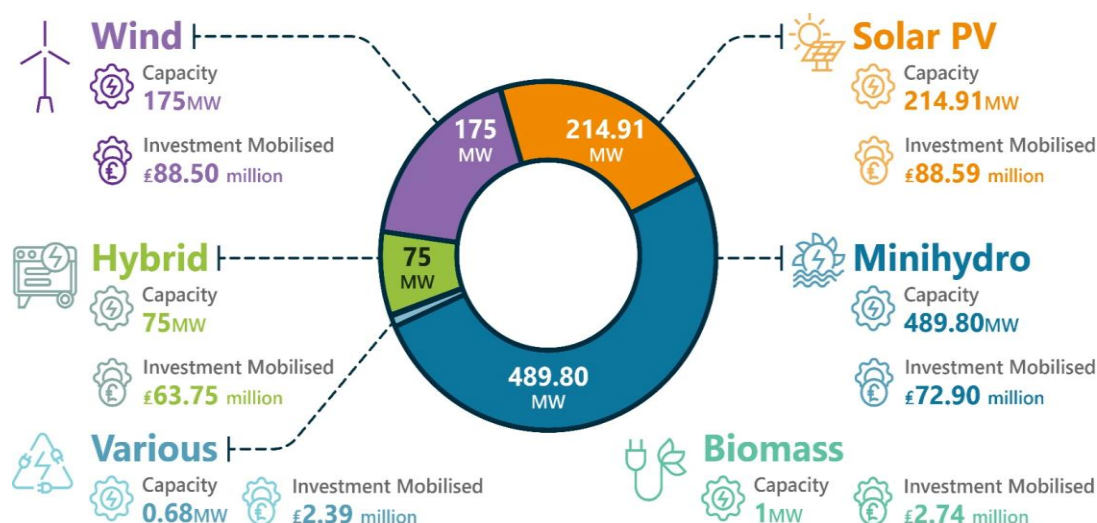


Figure 8. RE Projects in MENTARI Brokerage

Roles of Partners and Stakeholders

Role of UK Foreign, Commonwealth & Development Office (FCDO) as the Programme Owner

FCDO serves as the strategic owner and institutional leader of the MENTARI Brokerage Strand, operating through its mission at the British Embassy in Jakarta. As a UK government entity, FCDO does not implement day-to-day activities. Instead, it provides the strategic direction, funding, diplomatic engagement, and oversight that shape the entire programme's vision and coherence.

At the highest level, FCDO acts as the programme funder and policy anchor. It defines the overall objectives of the Brokerage Strand, namely, to mobilise finance into Indonesia's low-carbon energy transition by addressing investment barriers. FCDO ensures that these objectives align with the UK's international commitments on climate finance, development cooperation, and energy diplomacy. Through its diplomatic presence, it uses political relationships with Indonesian ministries (e.g. MEMR, Ministry of Finance) and state-owned entities (e.g. PLN) to enable stakeholder alignment, and market confidence.

FCDO also plays a crucial role in shaping and managing blended finance instruments, such as VGF. It determines funding priorities, approves fund design, and supervises its deployment, ensuring it supports projects that are not only financially viable but also contribute to broader policy and social goals, such as gender inclusion and equitable energy access. Furthermore, FCDO serves as a convenor and connector. It leads engagement with national and international stakeholders, including development banks, private financiers, and other donor governments. During project implementation, the list of financiers is further expanded upon with financiers introduced by FCDO.

FCDO also plays a role enhancing infrastructure financing institutions. A MoU signed between PT SMI and FCDO in November 2024 sees both collaborating to design a Trust Fund for PT SMI to support clean energy projects in Indonesia.

Importantly, the FCDO provides monitoring, learning, and adaptation oversight. It assesses whether the Brokerage Strand is meeting its strategic objectives and uses these insights to influence broader UK–Indonesia energy cooperation or adjust programme strategy.

Role of Indonesia Ministry of Energy and Mineral Resources (MEMR) as the Co-Programme Owner

MEMR plays a central and enabling role in the MENTARI Brokerage Strand as the regulatory authority and policy steward of Indonesia’s energy transition. Its involvement is essential to ensuring that the investments and project support mobilised by the UK government through MENTARI are aligned with national priorities, legally compliant, and capable of being implemented on the ground.

As a co-launching partner of MENTARI, MEMR was instrumental in shaping the programme’s overall direction, particularly its alignment with Indonesia’s commitment to increase RE’s share to 23% of the national energy mix by 2025 and to reduce carbon emissions by 29% by 2030. This strategic role places MEMR not just as a stakeholder, but as a national counterpart and co-owner of the programme’s goals.

MEMR receives an annual programme plan from the delivery partners at the beginning of each year, outlining the activities to be implemented over the year. In addition, the delivery partners submit an annual handover report, detailing the activities carried out during the year, to MEMR for review and approval.

Role of Palladium International as the Leader of the Programme Implementers/Delivery Partners

Palladium International serves as the lead implementation partner of the MENTARI programme, managing the day-to-day execution of TA, Matchmaking, and VGF. As the prime contractor, Palladium is responsible for coordinating programme strategy, daily operations, compliance, financial management, and stakeholder engagement. Working alongside consortium partners, PT Castlerock Consulting, Hivos, and ECA, Palladium ensures effective implementation across MENTARI programmes. This includes overseeing technical delivery, managing reporting requirements, and facilitating coordination. Within the Brokerage Strand, Palladium plays a key operational role in enabling the development of bankable RE projects. It seeks to ensure that brokerage activities are well-integrated into the overall programme strategy and works closely with Castlerock and other partners to maintain alignment. Palladium’s in-country team manages regional specialists who engage directly with project developers, local authorities, and financial institutions to identify, assess, and support RE initiatives. This involves facilitating TA, stakeholder matchmaking, and early-stage project development to help attract private investment. Through this approach, Palladium aims to close the gap between project pipelines and financing opportunities, supporting MENTARI’s goal of accelerating Indonesia’s low-carbon energy transition.

In addition, Palladium is tasked with ensuring that GEDSI is embedded across all programme components. Collaborating with partners such as Hivos, it aims to promote inclusive participation and support women-led enterprises to enhance equitable outcomes. While Castlerock leads the technical delivery of the policy and finance components in Brokerage Strands, Palladium provides overarching coordination across the consortium to ensure coherence and maximise the programme’s impact in fostering a just and inclusive energy transition in Indonesia.

Role of PT SMI as the Implementation Partner in VGF

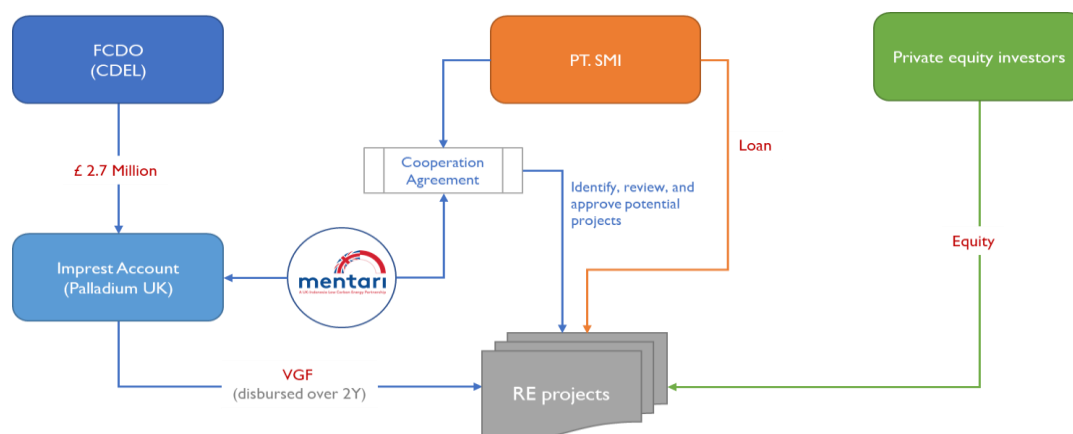
PT Sarana Multi Infrastruktur (PT SMI) serves a pivotal and facilitative function in the MENTARI programme as a principal financial intermediary and implementation partner, especially in the formulation and execution of the VGF and in promoting green financing mechanisms in Indonesia. As a state-owned

enterprise operating under the Ministry of Finance, PT SMI offers blended finance solutions for infrastructure projects, including those focused on RE.

Within the framework of the MENTARI programme, PT SMI played a key role in the operationalisation of the VGF, which provided investment grants aimed at supporting small-scale RE projects that are financially marginal yet technically feasible. The VGF is disbursed directly from Palladium UK in the form of investment grant, but its provision is tied with the loan product provided by PT SMI to the project developer, where the total VGF partnership with PT SMI is allocated at up to GBP 2,700,000 GBP (including taxes and 3% of management fee). The eligible projects can receive: (i) up to 20% of the total CAPEX or up to GBP 750,000 of the total project value, or (ii) up to 30% or up to GBP 750.000 for special cases such as small projects or projects with innovative elements in accordance with the mutual agreement of the Parties and the Agreement of the FCDO. To ensure smooth execution of the VGF, SMI Management has created a dedicated unit aimed at promoting green financing, that also promote the strategic significance of this VGF initiative.

The structure of the VGF support is illustrated in the figure below.

Figure 13 Structure of the VGF Flow

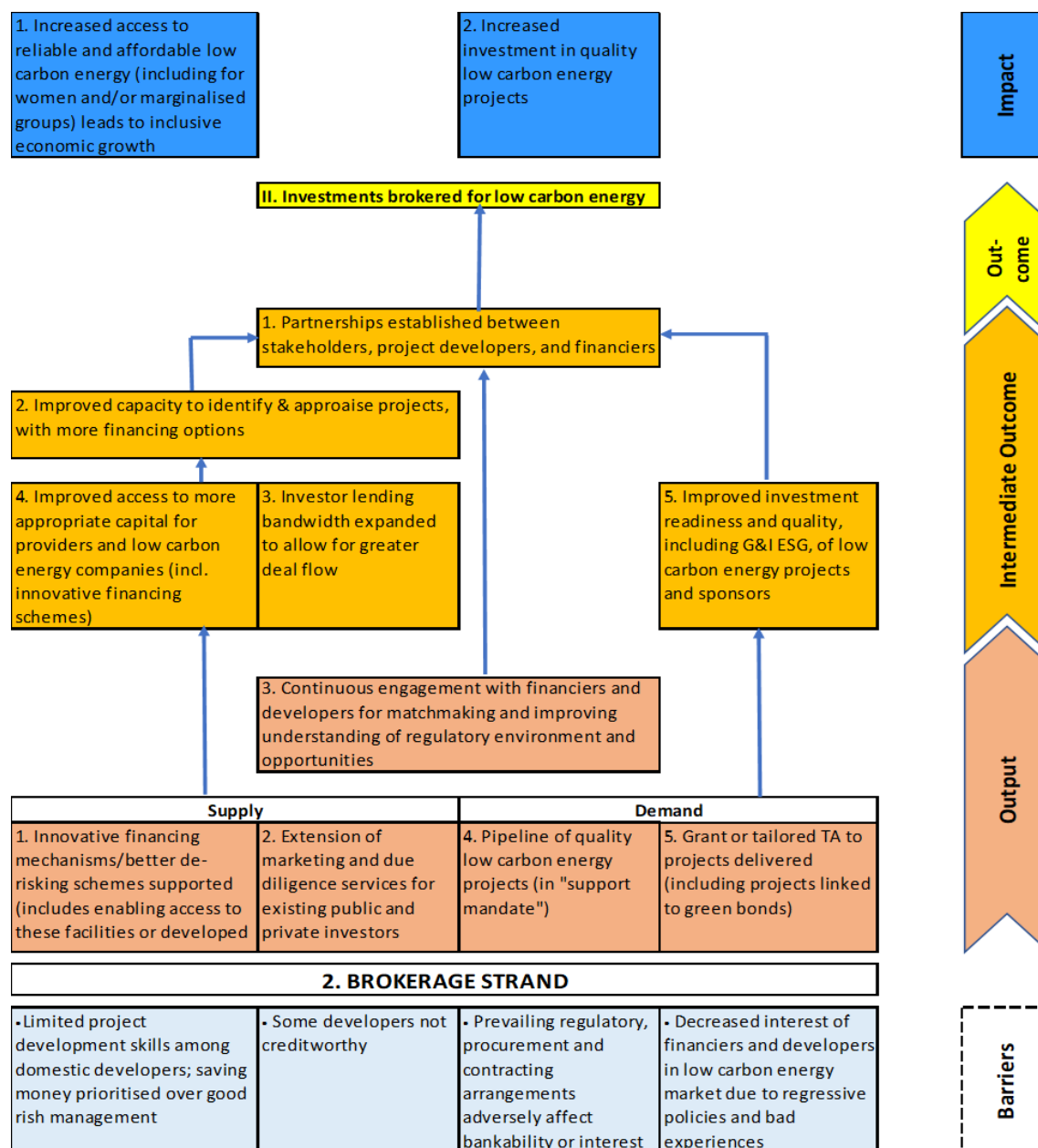


Source: Palladium Quarterly Report

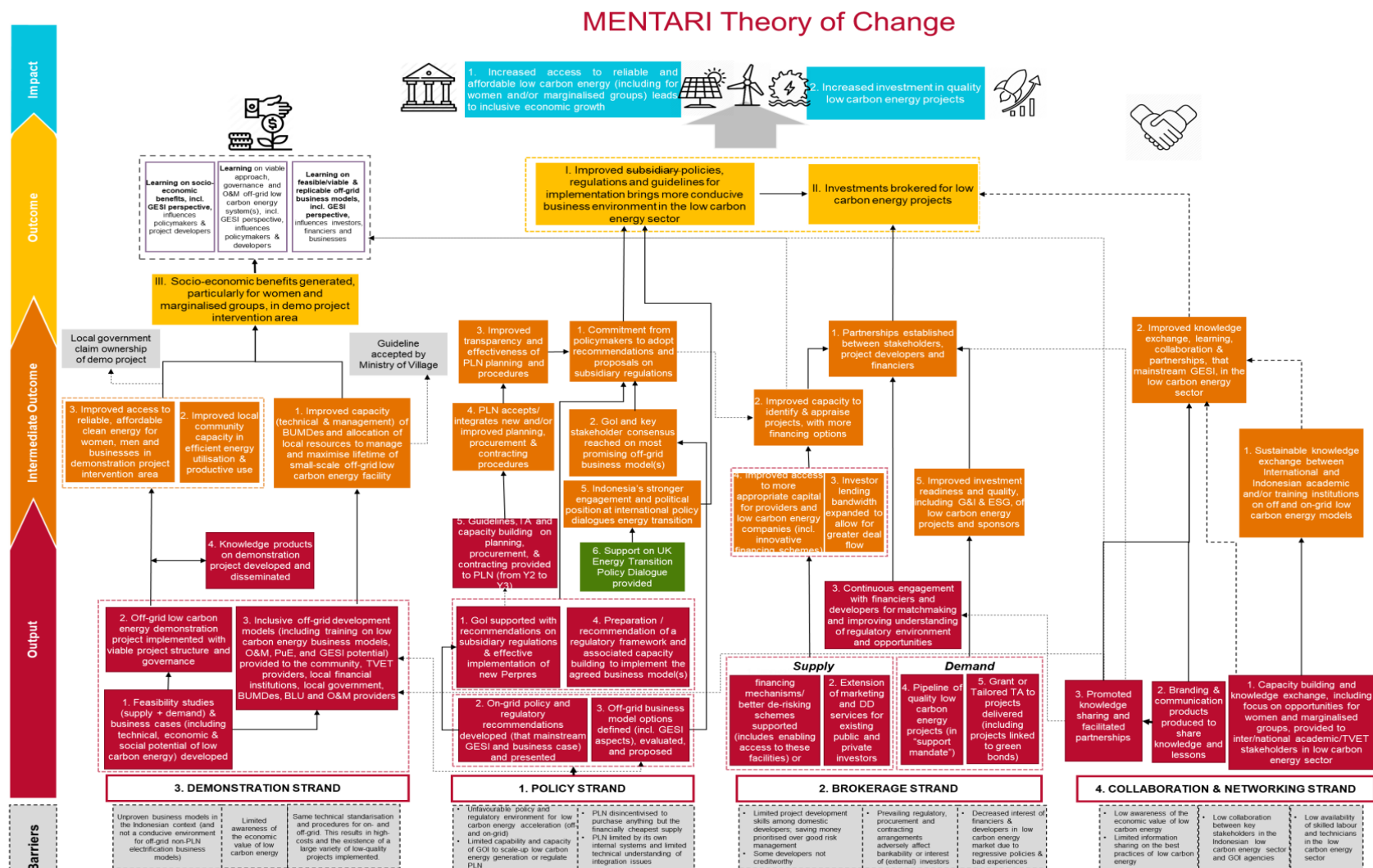
Annex 3 MENTARI Brokerage Strand Theory of Change

The theory of change (ToC) of MENTARI programme has been updated several times since 2020 and based on Palladium Logframe April 2024 document. The status of the MENTARI brokerage strand ToC is shown below.

MENTARI Brokerage Strand Theory of Change as of April 2024



MENTARI Theory of Change as of April 2024



Indicator Status of MENTARI Brokerage Strand as per April 2024

TOC	TARGET	INDICATOR	PLANNED/ ACHIEVED	CUMMULATIVE MILESTONE
IMPACT 1 Increased access to reliable and affordable low carbon energy (including for women and marginalised groups) leads to inclusive economic growth	844,000 households by end of the programme	1a. Number of additional households with access to low carbon energy in Indonesia	Planned	844,000
			Achieved	8,780,779
	1.6 GW by the end of the programme	1b. RE capacity additions (in GW) in Indonesia	Planned	1.6GW
			Achieved	2.93 GW
IMPACT 2 Increased investment in quality of low carbon energy projects in Indonesia.	GBP 766 million by end of the Programme (cumulative)	2a. Value of investment brokered in Low Carbon Energy in Indonesia	Planned	£766m
			Achieved	£927m
OUTCOME Investments brokered for low carbon energy projects	60 RE projects brokered.	2a. Number of on- and off grid RE projects brokered	Planned	60
			Achieved	147
INTERMEDIATE OUTCOME 1 Partnerships established between stakeholders, project developers and financiers	10 intermediations by end of Programme (cumulative) <i>(***contributing to at least 10 projects for the outcome target)</i>	1a. Number of intermediations established between stakeholders, project developers and financiers	Planned	10
			Achieved	12
INTERMEDIATE OUTCOME 2 Improved capacity to identify & appraise projects, with more financing options	3 potential financiers by end of Programme (including introduction and project identification) (cumulative)	2a. Number of potential financiers showing commitment to make low carbon energy investments in Indonesia	Planned	3
			Achieved	10
INTERMEDIATE OUTCOME 3 Investor lending bandwidth expanded to allow for greater deal flow	25% (cumulative) increase in outreach and/or applications taken by partner investors by end of Programme <i>(***contributing to at least</i>	3a. Percentage change in outreach and/or applications taken by Programme partner investors	Planned	25%
			Achieved	0

TOC	TARGET	INDICATOR	PLANNED/ ACHIEVED	CUMMULATIVE MILESTONE
	10 projects for the outcome target)			
INTERMEDIATE OUTCOME 4 Improved access to more appropriate capital for providers and low carbon energy companies (incl. innovative financing schemes)	1 by end of Programme	4a. Number of new and/or existing financial schemes/facilities/mechanisms tailored and presented to key stakeholders that could increase the flow of finance towards the low carbon energy sector in Indonesia	Planned	1
			Achieved	2
INTERMEDIATE OUTCOME 5 Improved investment readiness and quality, including GEDSI & ESG, of low carbon energy projects and sponsors	40 low carbon energy projects indicate progress or improved project quality, including GEDSI, by end of the programme (cumulative)	5a. Number of low carbon energy projects report improved project quality, including GEDSI	Planned	40
			Achieved	126
OUTPUT 1 Innovative financing mechanisms/ better de-risking schemes supported (includes enabling access to these facilities) or developed	2 by the end of programme	1a. Number of new and/or existing financial schemes/facilities/mechanisms (i.e. blended finance facility or other de-risking solutions) that are receiving TA support	Planned	2
			Achieved	2
OUTPUT 2 Extension of marketing and DD services for existing public and private investors	5 by the end of programme (cumulative)	2a. Number of marketing and due diligence proposals submitted to financial institutions	Planned	5
			Achieved	8
OUTPUT 3 Continuous engagement with financiers and developers for matchmaking and improving understanding of regulatory environment and opportunities.	15 events or one-on-one engagements for both financiers and developers by the end of the Programme (cumulative)	3a. Number of facilitations, meetings, trainings, FGDs, and/or events organised	Planned	15
			Achieved	23

TOC	TARGET	INDICATOR	PLANNED/ ACHIEVED	CUMMULATIVE MILESTONE
OUTPUT 4 Pipeline of quality low carbon energy projects (in “support mandate”)	£766m value of probability weighted pipeline for on-grid and off-grid clean energy projects.	4a. Size and value of probability weighted pipeline for on-grid and off-grid clean energy projects (cumulative).	Planned	£766m
			Achieved	£2,97 bn (unadjusted) £1,86m (adjusted)
OUTPUT 5 Grant or Tailored TA to projects delivered (including projects linked to green bonds)	TA service to at least 30 projects provided by the end of the Programme (cumulative)	5a. Number of low carbon energy projects that received TA, Grant, and/or brokering services	Planned	30
			Achieved	140

Annex 4 Key Evaluation Questions Matrix

KEQ	THEME	DATA SOURCES	METHODOLOGIES	REMARK
1. How effective have different types of support (technical assistance, matchmaking services, and viability gap fund) been in improving the quality and bankability of supported projects?	Effectiveness	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis - Cross-reference project documents with the beneficiaries' documents and interviews	Given the range of list of projects with different readiness levels, the bankability analysis focuses on projects that have reached financial close and obtain financing from third party financiers, since these projects are proof that the support from the brokerage strand has improved bankability of the projects
2. How have different types of support (technical assistance, matchmaking services, and viability gap fund) influenced investor confidence in selected projects and in RE investment opportunities in Indonesia?	Effectiveness	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis - Cross-reference project documents with the beneficiaries' documents and interviews	N/A
3. To what extent has the support increased the likelihood of projects securing investment, both during and beyond the programme's lifetime?	Effectiveness	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis	N/A

KEQ	THEME	DATA SOURCES	METHODOLOGIES	REMARK
			- Cross-reference project documents with the beneficiaries' documents and interviews	
4. What has been the contribution of each type of activity in creating and sharing replicable business models and/or financing vehicles for RE, especially off-grid projects.	Impact	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis - Cross-reference project documents with the beneficiaries' documents and interviews	The analysis focuses on the effectiveness of the VGF as an innovative financing instrument
5. How do the activities supported under the MENTARI Brokerage Strand align with the needs and priorities of the RE electrification development in Indonesia?	Relevance	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis - Cross-reference project documents with the beneficiaries' documents and interviews	N/A
6. After answering KEQ1-KEQ5, what have been the key success contributors and key challenges in delivering support to	Programme learning	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis	N/A

KEQ	THEME	DATA SOURCES	METHODOLOGIES	REMARK
RE projects in Indonesia from MENTARI programme?			- Cross-reference project documents with the beneficiaries' documents and interviews	
7. What is the value for money added of the different types of support provided by MENTARI in delivering programme objectives?	Efficiency	- Annual report of MENTARI Project - Other relevant project documents - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis - Cross-reference project documents with the beneficiaries' documents and interviews	N/A
8. How do MENTARI's strategies compare in terms of cost-effectiveness to other proven approaches in Indonesia and similar markets, including those utilised by other delivery partners?	Efficiency	- Annual report of MENTARI Project - Benchmark with impact report of similar projects - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis - Cross-reference project documents with the beneficiaries' documents and interviews	The cost effectiveness analysis refers to the value of money of the support and comparison with other delivery partners
9. Whether or not the single programme target of £766m for investment brokerage is appropriate for fostering long-term sustainability and promoting a balanced focus on various project scales?	Sustainability	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis	N/A

KEQ	THEME	DATA SOURCES	METHODOLOGIES	REMARK
			- Cross-reference project documents with the beneficiaries' documents and interviews	
10. How adequate are the financial, managerial, and specialist resources that have been employed to achieve the objectives of Brokerage Strand in terms of ensuring sustainable outcomes?	Sustainability	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis - Cross-reference project documents with the beneficiaries' documents and interviews	N/A
11. After comparing VfM of different types of support, would it have been better to focus on a certain type of support? If yes, which one and why? If no, why?	Programme learning / efficiency	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis - Cross-reference project documents with the beneficiaries' documents and interviews	VfM analysis is conducted in accordance with the MENTARI annual report
12. After analysing the VfM particularly on VGF, has the scheme successfully achieved the intended objectives?	Programme learning / efficiency	- Annual report of MENTARI Project - Stakeholder interviews, from the consortium, project developers, financiers and investors	- In-depth interview with the stakeholders - Impact report analysis - Project scoping - Project portfolio analysis	VfM analysis is conducted in accordance with the MENTARI annual report

KEQ	THEME	DATA SOURCES	METHODOLOGIES	REMARK
			- Cross-reference project documents with the beneficiaries' documents and interviews	
13. Has GEDSI been integrated into the brokerage strand and the VGF? Are there any specific GEDSI guidelines or directions provided by FCDO or the delivery partners?	GEDSI	- Consultation results with programme owner, delivery partner, investors, developers, financiers. - Programme documents including Gender Action Plans, business case, technical assistance records, and other documentation	- In-depth interviews with programme stakeholders - Stocktaking and desk-based review of programme documents.	N/A
14 . What actions should be taken to improve the integration of GEDSI in the implementation of the brokerage strand and VGF?	GEDSI	- Stakeholder feedback from interviews with programme owner, delivery partner, investors, developers, financiers - Programme documents including Gender Action Plans, business case, technical assistance records, and other documentation	- In-depth interviews with programme stakeholders - Stocktaking and desk-based review of programme documents.	N/A

c. List of Questions Related to KEQ

KEQ	INTERVIEW QUESTIONS NO. (a-u)	STAKEHOLDER
1. How effective have different type of support (TA, matchmaking, and VGF) in improving the quality and bankability of supported projects?	a, b, c	All stakeholders
2. How have different types of support (TA, matchmaking, and VGF) influenced investor confidence in selected projects and in RE investment opportunities in Indonesia?	f, g, h, i	All stakeholders
3. To what extent has the support increased the likelihood of projects securing investment, both during and beyond the programme's lifetime?	b, c, d, e	All stakeholders
4. What has been the contribution of each type of activity in creating and sharing replicable business models and/or financing vehicles for RE, especially off-grid projects.	k, l, m	All Stakeholder
5. How do the activities supported under the MENTARI Brokerage Strand align with the needs and priorities of the RE electrification development in Indonesia?	k, l, m	All stakeholders
6. After answering the above questions (KEQ1-KEQ5), what have been the key success contributors and key challenges in delivering support to RE projects in Indonesia from MENTARI programme?	a, c, e, f, l, k, l, m	All stakeholders
7. What is the VfM of the different types of support provided by MENTARI in achieving programme objectives?	f, g, h, i	All stakeholders
8. How do MENTARI's strategies compare in terms of cost-effectiveness to other proven approaches in Indonesia and similar markets, including those utilised by other delivery	b, e, l, m	Programme Team at BEJ
9. Whether or not the single programme target of £766m for investment	a, b, c	Consortium

KEQ	INTERVIEW QUESTIONS NO. (a-u)	STAKEHOLDER
brokerage appropriate for fostering long-term sustainability and promoting a balanced focus on various project scales?		
10. How adequate are the financial, managerial, and specialist resources that have been employed to achieve the objectives of Brokerage Strand in terms of ensuring sustainable outcomes?	d, e, f d, e, g, h, l, m	Consortium Project Owner/Project Developer, Investor (TA/Matchmaking/VGF)
11. After comparing VfM of different type of supports, would it had been better to focus on certain type of support? If yes, which one and why? If no, why?	e, f, g, h	All stakeholders
12. After analysing VfM particularly on VGF, has the scheme successfully achieved the intended objectives?	l, j, k	All stakeholders
13. Has GEDSI been integrated into the brokerage strand and the VGF? Are there any specific GEDSI guidelines or directions provided by FCDO or the delivery partners?	n, o, p, q, r, u	All stakeholders
14. What actions should be taken to improve the integration of GEDSI in the implementation of the brokerage strand and VGF?	s, t, u	All stakeholders

Note: All stakeholders include the Programme Owner (FCDO and MEMR), Programme Implementor (Consortium), Project Developer/Project Owner who received TA support, Project Developer/Project Owner/Investor who received Matchmaking, Project Developer/Project Owner who received VGF, and VGF Partner Implementer (PT SMI).

Interview Questions:

- Has MENTARI facilitated investment in RE projects? To what extent is this investment driven by MENTARI compared to other factors?
- What is the impact of MENTARI-supported projects on Indonesia's energy transition (e.g., MW capacity added, emissions reduction, diesel displacement), if any?
- Do you feel the MENTARI Brokerage Strand is effective in improving the bankability of RE projects? If so, how?
- How is the reimbursement procedure in the TA and VGF mechanisms?
- What is the project engagement procedure in the three mechanisms of the Brokerage Strand?
- Has the result of the TA contributed to attracting Financial Institution (FI) interest in the project?
- What types of TA are provided under the MENTARI programme?
- What types of support are provided under the MENTARI Programme for matchmaking?

- i. Has the VGF contributed to reducing financial risks and increasing private sector investment? If so, how?
- j. What role has MENTARI played in policy and regulatory improvements for RE financing, if any?
- k. Are Brokerage Strand financing mechanisms (VGF, carbon credits, and others) scalable beyond the programme's timeline?
- l. What steps are taken to ensure that MENTARI-supported projects remain financially and operationally sustainable post-funding?
- m. What best practices and lessons learned from the MENTARI programme can inform future programmes?
- n. To what extent is GEDSI mainstreamed in each type of brokerage supports (TA, matchmaking, VGF) to ensure inclusive benefits for women and marginalised groups throughout the project cycle?
- o. To what extent have project developers incorporated gender-responsive or socially inclusive measures in their projects as a result of MENTARI's support?
- p. How well do programme stakeholders (project developers, investors, government agencies) understand and apply GEDSI principles within the programme?
- q. How do the GEDSI strategies within the Brokerage Strand and VGF align with Indonesia's national GEDSI policies, as well as the broader MENTARI programme goals?
- r. To what extent have women and marginalised groups (e.g., rural women, Indigenous populations, people with disabilities) benefited from the programme?
- s. What are the key challenges and successes in implementing GEDSI aspects of the programme?
- t. What best practices and lessons learned from the MENTARI programme can inform future GEDSI strategies? What recommendations can be made to improve GEDSI integration in the programme?
- u. How is data related to GEDSI, including gender-disaggregated data, being collected and analysed throughout the project lifecycle?

Annex 5 Use and Influence Plan

The table below sets out who the evaluation deliverables outlined in Section 1 are intended to reach, the audience priority of different stakeholders, the objective of engaging these stakeholders with evaluation outputs, and the primary routes to engaging these stakeholders. At the end of the assignment, all data held by NIRAS will be sanitised and formally hand it over to FCDO for any future application. All deliverables produced by NIRAS will be the intellectual property of FCDO, with full rights and ownership vested in them.

Stakeholder	Audience Type	Engagement Objective	Primary Engagement Approach
FCDO	Primary	Share findings and learning about MENTARI programme to inform future programming decisions.	Provision of full reports. In-person engagement and workshops.
Palladium International and PT Castlerock Consulting	Primary	Coordination on stakeholders to interview. Share findings and learning about MENTARI programme to guide the remainder of the programme.	Provision of full reports through FCDO. In-person engagement and workshops.
Government of Indonesia (MEMR) and PT Sarana Multi Infrastruktur (PT SMI)	Secondary	Share findings and learning about MENTARI programme.	Provision of reports and relevant outputs through FCDO or Palladium International or through private consultations where relevant.
Low-carbon energy actors, MENTARI wider consortium	Tertiary	Share findings and learning about MENTARI programme.	Provision of report and relevant outputs through public channels, such as DevTracker.

The evaluation aims to inform programme strategy and direction, with the primary audience being FCDO, who will receive all evaluation outputs directly, and the MENTARI delivery partners as the programme funder and implementing partners. All findings, lessons, and recommendations will be directed toward to their roles, helping them understand challenges and opportunities, results achieved, and areas for adaptation to maximise the impacts. FCDO will use the findings to guide the remainder of the programme, while delivery partners are expected to learn from the lessons implement agreed recommendations. The MENTARI programme team, who may access report findings through FCDO, will apply the insights to refine future strategies, particularly as a direction for the preparation of the MENTARI Phase Two business case concerning the Brokerage Strand.

Government of Indonesia (GoI) institutions, particularly MEMR, UK government departments, PT SMI, donors, and organisations with a direct interest in the MENTARI programme implementation will be the secondary stakeholders benefiting from the evaluation results, as the findings may inform their policies and decisions related to financial support schemes and business models for RE electrification. Additionally, tertiary users, such as wider market actors within and outside Indonesia involved in low-carbon energy, will also have access to the findings which is expected to enhance the programme's influence by ensuring broader dissemination of the evaluation results. Tertiary users will be able to access the report via public platforms such as DevTracker, or through private consultations where relevant

Annex 6 KEQ and Findings

KEQ	FINDING
1. How effective have different types of support (technical assistance, matchmaking services, and viability gap fund) been in improving the quality and bankability of supported projects?	Finding 1: The effectiveness of support options from the Brokerage Strand varies between beneficiaries. The general consensus is that the TA has served project developers well in earlier phases of the projects, while the VGF could have bigger potential in increasing the financial feasibility of the project with better design.
2. How have different types of support (technical assistance, matchmaking services, and viability gap fund) influenced investor confidence in selected projects and in RE investment opportunities in Indonesia?	Finding 2: Overall, evidence indicates all three types of support can positively influence investor perceptions, but there is not a "one-size-fits-all" approach for meeting investor expectations and some have demanded higher quality outputs to inform decision making.
3. To what extent has the support increased the likelihood of projects securing investment, both during and beyond the programme's lifetime?	Finding 3: The Brokerage Strand support helped to mitigate some degree of associated uncertainties and project risks, thus improving the level of investment readiness, especially within the underserved and riskier segments of Indonesia's RE market. High-quality project preparation documents function as crucial "soft derisking" to improve investors' confidence in both the technical quality and the integrity of the project pipeline, thus increasing the project's likelihood to secure investment. VGF had comparably a more direct and catalytic impact on investment readiness as it addressed a tangible financing barrier and enabled actual deal closure, as opposed to upstream preparation.
4. What has been the contribution of each type of activity in creating and sharing replicable business models and/or financing vehicles for RE, especially off-grid projects.	Finding 4: MENTARI's contribution to new business and financing models is tangible, particularly through the VGF's structure and early demonstrations like the RE projects with hybrid business models (e.g. coconut husk biomass project). However, replication remains nascent. While the VGF shows clearer structural replicability, context-specific models like biomass or hybrid mini-grids require tailored adaptation and clearer dissemination. Going forward, MENTARI could enhance impact by codifying these models into actionable knowledge products and supporting follow-on replication efforts through technical or policy support mechanisms.
5. How do the activities supported under the MENTARI Brokerage Strand align with the needs and priorities of RE electrification development in Indonesia?	Finding 5: The MENTARI Programme aligns with the efforts to increase access to reliable electricity through the development of RE projects and shifting the use of hard-to-found diesel in remote, underdeveloped, and off-grid areas.

KEQ	FINDING
6. After answering KEQ1-KEQ5, what have been the key success contributors and key challenges in delivering support to RE projects in Indonesia from MENTARI programme?	Finding 12: MENTARI's Brokerage Strand contributed significantly to providing successful support cases in unlocking RE investment in Indonesia for underserved segments of the market. The programme's success hinged on its layered support model, catalytic VGF, and context-sensitive TA. However, challenges in coordination, quality assurance, VGF scalability, and GEDSI integration constrained its full potential.
7. What is the value for money of different types of support provided by MENTARI in delivering programme objectives?	Finding 6: The Brokerage Strand has reportedly achieved value for money across its three support types, with the VGF demonstrating the highest investment leverage (> 1:10), TA offering cost-efficient project readiness support, and matchmaking enabling high-return investor connections at low cost.
8. How do MENTARI's strategies compare in terms of cost-effectiveness to other proven approaches in Indonesia and similar markets, including those utilised by other delivery partners?	Finding 7: Compared to other donor programmes in Indonesia, MENTARI shows a stronger focus on mobilising private investment for small- to medium-scale RE. The cost effectiveness level is seemingly competitive considering leverage ratios and the areas where MENTARI is operating: high-risk, distributed energy markets underserved by larger energy infrastructure.
9. Was the single programme target of £766m for investment brokerage appropriate for fostering long-term sustainability and promoting a balanced focus on various project scales?	Finding 10: The £766 million brokerage target was appropriate and strategically grounded in Indonesia's national electricity plan (RUPTL), serving as a catalytic benchmark to promote decentralised RE (DRE) investments in large scale. MENTARI has demonstrated balanced support across project scales (in small and medium size category) and different geographies - providing a sustainable model blended finance model for DRE development in the country.
10. How adequate are the financial, managerial, and specialist resources that have been employed to achieve the objectives of Brokerage Strand in terms of ensuring sustainable outcomes?	Finding 11: MENTARI deployed financial, managerial, and technical resources effectively, with a responsive, expert-driven support model tailored to diverse project needs. However, sustainability could be further strengthened through more frequent coordination with GoI counterparts and improved alignment of TA quality with evolving investor expectations.
11. After comparing value for money of different type of supports, would it had been better to focus on certain type of support? If yes, which one and why? If no, why?	Finding 8: While the VGF demonstrated the highest value for money due to its leverage and financial closure results, the limited sample size suggests it should be scaled, not singularly prioritised. A balanced approach remains appropriate, as TA plays a crucial upstream role, especially in underserved areas, and matchmaking, though less impactful on its own, adds value when paired with TA or VGF
12. After analysing the VFM particularly on VGF, has the scheme successfully achieved the intended objectives?	Finding 9: The VGF met its objectives by making RE projects financially viable and attracting private investment, but its impact was limited to a small number of mini-hydro projects under one developer, highlighting challenges in identifying eligible candidates.

KEQ**FINDING**

13. Has GEDSI been integrated into the brokerage strand and the VGF? Are there any specific GEDSI guidelines or directions provided by FCDO or the delivery partners?

Finding 13: The integration of GEDSI principles has been part of the MENTARI Programme since its inception. However, there is no evidence indicating that specific requirements or guidance on GEDSI integration had been provided within the Brokerage Strand, resulting in limited uptake.

Finding 14: While GEDSI considerations were gradually incorporated, particularly in villages where women constituted the majority of the population, the requirements were not always understood by programme stakeholders leading to inconsistent application.

14. What actions should be taken to improve the integration of GEDSI in the implementation of the brokerage strand and VGF?

Finding 15: The introduction of standardised, mandatory GEDSI requirements could have mitigated the challenges of inconsistent GEDSI application, particularly considering the varied interests, understanding and drivers of the stakeholders engaged by the Brokerage Strand.

Finding 16: GEDSI is not included as a formal requirement in the VGF application process, nor is it used as a criterion for project selection or eligibility, meaning there is limited GEDSI integration and significant room for improvement. However, the nature of the projects is not necessarily well suited to achieving GEDSI results given the scale of the projects MENTARI seeks to enable in contrast to current GEDSI guidance which is oriented towards off-grid developments.

Annex 7 MENTARI Beneficiaries

NO	MENTARI SUPPORT	NAME OF PROJECT	PROJECT DEVELOPER	LOCATION	SIZE (MW)	FINANCIAL INSTITUTION
1	Technical Assistant	Off-grid PV for Eastern Indonesia Islands	ION Ventures Ltd.	Maluku	1.8	N/A
2	Technical Assistant	Off-grid PV for Eastern Indonesia Islands	ION Ventures Ltd.	Maluku		
3	Technical Assistant	Off-grid PV for Eastern Indonesia Islands	ION Ventures Ltd.	Maluku		
4	Technical Assistant	Off-grid PV for Eastern Indonesia Island	ION Ventures Ltd.	NTT		
5	Technical Assistant	3x1 MW in Buton	PT. Mutitron Automa	Sulawesi	3	
6	Technical Assistant	Potential 10 MW Floating Tidal Energy Plant	Orbital Marine Power	NTT	10	
7	Technical Assistant	3 x 3.3 MW MHPP	PT. Sejahtera Energi Persada	Bengkulu	9.9	
8	Technical Assistant	PV-Mini Hydro Hybrid	PT. Siteba Energi	Sulawesi	4	
9	Technical Assistant	Diesel Conversion to Solar PV for Village Facilities	PT. Arya Watala Capital	Kalimantan	0.11	
10	Technical Assistant	Coconut Husk Biomass	Alam Energi Hijau	Maluku	1	
11	Technical Assistant	Hybrid Hydrogen/PV/Battery	PT. HDF Energy Indonesia	Sumba	35	
12	Technical Assistant	Hybrid Hydrogen/PV/Battery	PT. HDF Energy Indonesia	Rote	20	
13	Technical Assistant	Hybrid Hydrogen/PV/Battery	PT. HDF Energy Indonesia	Alor	20	
14	Technical Assistant	PLN Sustainability bond	PT. Perusahaan Listrik Negara	Various		
15	Technical Assistant	PLN Diesel Replacement Phase I	PT. Perusahaan Listrik Negara	Various		
16	Technical Assistant	Support Kemendesra on 21 villages as DAK for Renewable Energy Business	Kementerian Energi dan Sumber Daya Mineral	Various	0.685	
17	Technical Assistant	PLN Diesel Replacement Phase II	PT. Perusahaan Listrik Negara	Various		

NO	MENTARI SUPPORT	NAME OF PROJECT	PROJECT DEVELOPER	LOCATION	SIZE (MW)	FINANCIAL INSTITUTION
18	Matchmaking	1 MW Coconut Husk Biomass	PT. Dewa Agri Coco Indonesia	Maluku	1	Climate Partner Impact GmbH
19	Matchmaking	120 MW Bali Banyuwangi Power Reserve	Gurin Energy	Java/Bali	120	Clime Capital
20	Matchmaking	55 MW Wind West Java	Gurin Energy	Java	55	Clime Capital
21	Matchmaking	100 MW Floating Solar PV	Gurin Energy	Java	100	Clime Capital
22	Matchmaking	Hybrid Hydrogen/PV/Battery	PT. HDF Energy Indonesia	Sumba	35	Infracore Asia
23	Matchmaking	Hybrid Hydrogen/PV/Battery	PT. HDF Energy Indonesia	Rote	20	PT SMI
24	Matchmaking	Hybrid Hydrogen/PV/Battery	PT. HDF Energy Indonesia	Alor	20	
25	Matchmaking	4 x 7 MW Pearaja MHPP	PT. Sejahtera Energi Persada	Sumatra	40	Cross Boundary Energy
26	Matchmaking	4 x 10 Garoga MW MHPP	PT. Sejahtera Energi Persada	Sumatra	28	Cross Boundary Energy
27	Matchmaking	Expansion of 1 MW PV	PT. Sumber Energi Surya Nusantara	Sumba & Maumere	10	Quantum Capital
28	Matchmaking	200 MW PV in Hengjaya Mine	PT. Sumber Energi Surya Nusantara	Sulawesi	200	Quantum Capital
29	Matchmaking	BT 3 MHPP	PT. Terregra Asia Energy	Sumatra	10	Indo Ventures
30	Matchmaking	BT 4 MHPP	PT. Terregra Asia Energy	Sumatra	10	Indo Ventures
31	Matchmaking	Sisira MHPP	PT. Terregra Asia Energy	Sumatra	9.8	Indo Ventures
32	Matchmaking	Teunom 3 MHPP	PT. Terregra Asia Energy	Sumatra	135	Glasgow Financial Alliance for Net Zero
33	Matchmaking	Teunom 2 MHPP	PT. Terregra Asia Energy	Sumatra	240	Glasgow Financial Alliance for Net Zero
34	VGF	MHPP Brantas Mahalona	PT. Brantas Mahalona Energi	Bali	1.4	N/A
35	VGF	MHPP Brantas Prospek Mandiri	PT. Brantas Prospek Mandiri	NTB	0.6	
36	VGF	MHPP Brantas Total Energi	PT. Brantas Total Energi	Sumatra	5.1	

Annex 8 Stakeholder Consultations

The table below contains the list of stakeholders consulted in the Data Collection Phase.

NO	STAKEHOLDER	ENTITY NAME	SERVICES RECEIVED	NUMBER OF INTERVIEWEES
1	Programme Owner	FCDO	-	2
2	Programme Owner	MEMR	-	4
3	Delivery Partner	Palladium International	-	3
4	Implementer Partner	PT SMI	VGF	1
5	Investor	Clime Capital	TA	1
6	Investor	Climate Partner Impact GmbH	Matchmaking	1
7	Investor	Global Energy Alliance for People and Planet (GEAPP)	Matchmaking	1
8	Investor	Ion Ventures Ltd.	TA	1
9	Developer	PT PLN	TA	3
10	Developer	PT HDF Energy Indonesia	TA, Match-making	1
11	Developer	PT Brantas Energi	VGF	3
12	Developer	PT Arya Watala	TA	1
13	Developer	PT Mutitron Automa	TA	2
	TOTAL			24

Annex 9 Documents Reviewed

NO.	DOCUMENT TYPE	NAME
1	00 Business Case	Business Case; Amendment; Options Paper
2	01 Project Pipeline	Project Pipeline December 2021
3	01 Project Pipeline	Dukungan Studi Kajian yang Diperlukan
4	01 Project Pipeline	Pipeline Investor
5	01 Project Pipeline	Project Pipeline December 2022
6	01 Project Pipeline	Project Pipeline September 2022
7	01 Project Pipeline	Project Pipeline March 2022
8	01 Project Pipeline	Project Pipeline April 2024 - BAST
9	01 Project Pipeline	Project Pipeline February 2024
10	02 Project Assessment Matrix	IDE - Containerised PV
11	02 Project Assessment Matrix	INV - Rural RE for Productive Use
12	02 Project Assessment Matrix	WTL - Diesel Replacement for Village Facilities
13	02 Project Assessment Matrix	Zaffra - 10MW Utility Solar
14	02 Project Assessment Matrix	IDSUD - 15kW Containerised PV
15	02 Project Assessment Matrix	ARH - Coconut to Electricity
16	02 Project Assessment Matrix	AEH - Coconut Biomass
17	02 Project Assessment Matrix	DEA - Coconut Biomass
18	02 Project Assessment Matrix	HBE - MHPP in Buton
19	02 Project Assessment Matrix	HDF - Renewable Rote & Alor
20	02 Project Assessment Matrix	HDF - Renewable Sumba
21	02 Project Assessment Matrix	AKO - Floating PV
22	02 Project Assessment Matrix	GUR - BBPR Wind
23	02 Project Assessment Matrix	IOV - Rural RE for Productive Use
24	02 Project Assessment Matrix	MTT - 3x1MW PV in Buton
25	02 Project Assessment Matrix	OMP - Tidal Lombok
26	02 Project Assessment Matrix	SEP - 4x6.375 MW MHPP in Sebelat
27	02 Project Assessment Matrix	STB - Hybrid PV MHPP
28	02 Project Assessment Matrix	KPP - Sago Bark Biomass
29	03 Site Visit	Site Visit PLTBm Maluku 4-8 Mar
30	03 Site Visit	Site Visit Buton Sept 2021

NO.	DOCUMENT TYPE	NAME
31	03 Site Visit	Travel Report Lombok & Bali
32	03 Site Visit	Site Validation Assessment from Halmahera
33	04 Technical Assistance	TOR Feasibility Study MHPP Buton
34	04 Technical Assistance	TOR Biomass Expert
35	04 Technical Assistance	Report Pre-FS Maluku Biomass Power Plant
36	04 Technical Assistance	Consultant Agreement - Sakti Siregar - Biomass Expert
37	04 Technical Assistance	Consultant Agreement - MENTARI Personnel Terms of Reference - Biomass Expert
38	04 Technical Assistance	Consultant Agreement - S Siregar Amendment
39	04 Technical Assistance	Consultant Agreement - Sakti Siregar - Biomass Expert
40	04 Technical Assistance	TOR Topography Study Sumba
41	04 Technical Assistance	Report Topography Study Sumba
42	04 Technical Assistance	Subcon Agreement Topography Study Sumba
43	04 Technical Assistance	TOR_RFQ Grid Study Rote Alor
44	04 Technical Assistance	Report Preliminary Grid Study Alor
45	04 Technical Assistance	Subcon Agreement Grid Study Alor
46	04 Technical Assistance	Presentation - Site Survey Alor Rote
47	04 Technical Assistance	TOR_RFQ Grid Study Rote Alor
48	04 Technical Assistance	Report Preliminary Grid Study Rote
49	04 Technical Assistance	Subcon Agreement Grid Study Rote
50	04 Technical Assistance	Presentation - Site Survey Alor Rote
51	04 Technical Assistance	TOR PPTA for FS Katingan
52	04 Technical Assistance	Report FS Katingan
53	04 Technical Assistance	Subcon Agreement FS Katingan
54	04 Technical Assistance	Subcon Agreement - Agreement Amendment 2 FS Katingan
55	04 Technical Assistance	Subcon Agreement - Agreement Amendment 3 FS Katingan
56	04 Technical Assistance	Subcon Agreement - Collaboration Amendment FS Katingan
57	04 Technical Assistance	Presentation - Tampelas Village - Katingan - Watala R01
58	04 Technical Assistance	Report MENTARI Fund Feasibility Study
59	04 Technical Assistance	TOR for FS Energy Access
60	04 Technical Assistance	FS Report Benjuring FS Report Kabalsiang FS Report Kaimear FS Report Ngara

NO.	DOCUMENT TYPE	NAME
		FS Report Ria I FS Report Tam Ngurhir FS Report Ut Island FS Report Warialau FS Energy Access Inception Report
61	04 Technical Assistance	Benjuring Kabalsiang Kaimear Ngara Ria I Tam Ngurhir Ut Island Warialau Subcon Agreement - Amendment Agreement 1 FS Energy Access Subcon Agreement - Amendment Agreement 2 FS Energy Access Subcon Agreement - FS Energy Access
62	04 Technical Assistance	Presentation - MENTARI Kickoff Meeting Presentation Mar 2022 - hire
63	04 Technical Assistance	Presentation - Survey Planning_17052022
64	04 Technical Assistance	Technical Memo FS Siteba
65	04 Technical Assistance	TOR LARAP Study
66	04 Technical Assistance	Inception Report LARAP Study
67	04 Technical Assistance	Subcon Agreement LARAP Studies
68	04 Technical Assistance	TOR Lombok Strait Study
69	04 Technical Assistance	RFQ Lombok Strait Tidal Stream Energy Feasibility Study
70	04 Technical Assistance	Report Orbital Tidal Study - KO MoM
71	04 Technical Assistance	Subcon Agreement - Final Task Order - Aquatera - Lombok Strait Study
72	04 Technical Assistance	Subcon Agreement - Prosperity Fund
73	04 Technical Assistance	Presentation - Orbital Tidal Study - Kick off Meeting
74	04 Technical Assistance	Invitation to Tender Pack for Tidal Stream Energy Study
75	04 Technical Assistance	TOR Pre-FS Buton
76	04 Technical Assistance	Report Output IV (Pre-FS PLTS Lapandewa) R5 FIX
77	04 Technical Assistance	Report Output IV (Pre-FS PLTS Laslimu) R5 FIX
78	04 Technical Assistance	Report Output IV (Pre-FS PLTS Wangiwangi) R4 FIX
79	04 Technical Assistance	Subcon Agreement - Subcontract EMEA Prosperity Fund (MENTARI) - REKADAYA SENTOSA Signed MENTARI
80	04 Technical Assistance	Presentation - Kick off Meeting Pre-FS PLTS Buton-290322
81	04 Technical Assistance	TOR Grid Study - Sebelat MHPP

NO.	DOCUMENT TYPE	NAME
82	04 Technical Assistance	Site Survey Report - Sebelat HEPP Interconnection
83	04 Technical Assistance	Subcon Agreement - Sebelat HEPP
84	04 Technical Assistance	Laporan Coaching Clinic November 2022
85	04 Technical Assistance	Laporan Coaching Clinic Oktober 2022
86	04 Technical Assistance	Indicative Offer Infraco to HDF
87	04 Technical Assistance	TOR - Support to PLN Green Bond with LOE
88	04 Technical Assistance	TOR - PLN Batch 1 HOMER Training
89	04 Technical Assistance	TOR - PLN Batch 2 HOMER Training
90	04 Technical Assistance	KAK Kelanjutan Fase 1
91	04 Technical Assistance	Support Continuation for PLN Diesel Replacement Program
92	04 Technical Assistance	TOR Biomass Feedstock Assessment
93	04 Technical Assistance	Biomass Feedstock Assessment Report
94	04 Technical Assistance	TOR GESI and GALS Training for Carbon Credit Project I
95	04 Technical Assistance	TOR Training on Safeguarding for Carbon Credit Project II
96	04 Technical Assistance	Dukungan Teknis Pelatihan GEDSI.html
97	04 Technical Assistance	Konsinyering Lanjutan Optimasi Dedielisasi
98	04 Technical Assistance	Undangan Konsinyering Dedieselisasi Tahap 1 - 136 Lokasi
99	04 Technical Assistance	Concept Note Dukungan Fase 2
100	04 Technical Assistance	TOR PLN HOMER Training Batch 3 & 4
101	04 Technical Assistance	TOR Market Sounding
102	04 Technical Assistance	Undangan Pembahasan Dedieselisasi Tahap II (Verifikasi Lokasi & Piloting Lahan untuk Regional Sumatera, Kalimantan, dan Jawa
103	04 Technical Assistance	Undangan Pembahasan Dedieselisasi Tahap II (Verifikasi Lokasi & Piloting Lahan untuk Regional Sulawesi, Maluku, Papua dan Nusa Tenggara
104	05 Supervision & Monitoring	Final of Preliminary Grid Study Alor Island
105	05 Supervision & Monitoring	Matchmaking Gurin-Climate Capital
106	05 Supervision & Monitoring	News Article Kunjungan ke PLMTh Bali
107	05 Supervision & Monitoring	News Article Kunjungan ke PLMTh Lombok
108	05 Supervision & Monitoring	Email: Introduction - HSBC (MENTARI GFANZ Projects)
109	05 Supervision & Monitoring	Email: Introduction - Macquarie (MENTARI GFANZ Projects)
110	05 Supervision & Monitoring	Email: Project Opportunity Enquiry (GFANZ - MENTARI - Standard Chartered)
111	06 Innovative Financing	Agreement VGF MENTARI SMI - Signed

NO.	DOCUMENT TYPE	NAME
112	06 Innovative Financing	IRENA - MENTARI LOI - Signed
113	06 Innovative Financing	RFQ - Legal Consultant Services for Transactions for Provision of Financing Facilities
114	06 Innovative Financing	SMI - MENTARI Termsheet - Signed
115	06 Innovative Financing	ToR Konsultan Hukum BMN MENTARI
116	06 Innovative Financing	Dokumentasi
117	06 Innovative Financing	Laporan Pelatihan Safeguarding Dewacoco
118	07 Service Credit	SC HC Variation 02 Aug
119	07 Service Credit	Brokerage Funnel Design and Project Assessment
120	07 Service Credit	Market Assessment Update Final
121	07 Service Credit	Email: Brokerage Market Assessment for 2021
122	07 Service Credit	Email: Correspondence of Terregra-Indoventures
123	07 Service Credit	Email: Facilitation Meeting HDF-Infracore Asia
124	07 Service Credit	Email: Facilitation Meeting Sesna-Quantum
125	07 Service Credit	Email: Correspondence of Maxima-Climate Capital
126	07 Service Credit	2021 Brokerage Investment Tracker March 2022
127	07 Service Credit	Pipeline Project MENTARI March 2022
128	07 Service Credit	Service Credit March 2022 for FCDO
129	07 Service Credit	MENTARI Investment Brokered March 2022
130	07 Service Credit	Email: RE for Signature Service Credit Update Year Two MENTARI
131	07 Service Credit	SC 2021 Checklist Updated
132	07 Service Credit	Scoring Sheet for MENTARI Service Credit 2021 Updated
133	07 Service Credit	Brokerage Funnel Design and Project Assessment
134	07 Service Credit	RE Supply & Demand Market Assessment Update Oct 2020
135	07 Service Credit	Market Assessment Update Final
136	07 Service Credit	Email: Brokerage Market Assessment for 2021
137	07 Service Credit	DRP Brief for JETP
138	07 Service Credit	Email: Correspondence of Terregra-Indoventures
139	07 Service Credit	Email: Facilitation Meeting HDF-Infracore Asia
140	07 Service Credit	Email: Facilitation Meeting Sesna-Quantum
141	07 Service Credit	Email: Correspondence of Maxima-Climate Capital
142	07 Service Credit	2021 Brokerage Investment Tracker March 2022

NO.	DOCUMENT TYPE	NAME
143	07 Service Credit	Brokerage Investment Tracker March 2023
144	07 Service Credit	Lokasi PLTD Dediesel Tahap II
145	07 Service Credit	Daftar DAK
146	07 Service Credit	Pipeline Project MENTARI March 2022
147	07 Service Credit	Pipeline Project MENTARI April 2023
148	07 Service Credit	SC 2022 Tracker Updated
149	07 Service Credit	Scoring Sheet for MENTARI Service Credit 2022
150	07 Service Credit	Summary SC 2022
151	07 Service Credit	Brokerage Funnel Design and Project Assessment
152	07 Service Credit	RE Supply & Demand Market Assessment Update Oct 2020
153	07 Service Credit	Market Assessment Update Final
154	07 Service Credit	Email: Brokerage Market Assessment for 2021
155	07 Service Credit	DRP Brief for JETP
156	07 Service Credit	Email: Correspondence of Terregra-Indoventures
157	07 Service Credit	Email: Facilitation Meeting HDF-Infracore Asia
158	07 Service Credit	Email: Facilitation Meeting Sesna-Quantum
159	07 Service Credit	Email: Correspondence of Maxima-Climate Capital
160	07 Service Credit	2021 Brokerage Investment Tracker March 2022
161	07 Service Credit	Brokerage Investment Tracker March 2023
162	07 Service Credit	Lokasi PLTD Dediesel Tahap II
163	07 Service Credit	Daftar DAK
164	07 Service Credit	Brokerage Investment April 2024
165	07 Service Credit	Pipeline Project MENTARI March 2022
166	07 Service Credit	Pipeline Project MENTARI April 2023
167	07 Service Credit	Pipeline Project MENTARI April 2024
168	07 Service Credit	Risk Adjusted Calculation April 2024
169	08 Brokerage Methodology	Brokerage Methodology Note
170	08 Brokerage Methodology	Brokerage Target
171	08 Brokerage Methodology	Brokerage Targets update Q3 2021
172	08 Brokerage Methodology	Brokerage Targets update Q4 2021
173	08 Brokerage Methodology	Brokerage Targets update Q4 2022
174	09 NDAs	NDA Program MENTARI - PLN EBT

NO.	DOCUMENT TYPE	NAME
175	09 NDAs	Mutual Confidentiality Agreement - SUD Energies
176	09 NDAs	Mutual NDA - Alam Renergi Hijau
177	09 NDAs	Mutual NDA - Clime
178	09 NDAs	Mutual NDA - Arya Watala
179	09 NDAs	Mutual NDA - PT Sumber Energi Surya Nusantara
180	09 NDAs	Mutual NDA - SESNA
181	09 NDAs	Mutual NDA - Inovasi
182	09 NDAs	Mutual NDA - Positive
183	09 NDAs	MCA Palladium TGRA Tbk
184	09 NDAs	MCA Palladium with Haka Buton Energi
185	09 NDAs	Mutual NDA - IREP
186	10 Brokerage VGF Documenta- tion	Agreement VGF MENTARI - SMI Signed
187	10 Brokerage VGF Documenta- tion	Consultant Agreement - Irene
188	10 Brokerage VGF Documenta- tion	Term Sheet VGF
189	10 Brokerage VGF Documenta- tion	Laporan Uji Tuntas dari Segi Hukum atas PT Brantas Mahalona Energi Sehubungan dengan Rencana Pembiayaan Proyek Pembangunan PLMTH Titab 2x0,64 MW
190	10 Brokerage VGF Documenta- tion	Kuasa untuk Menjual Saham yang Digadaikan, Pergantian Gadai atas Rekening Bank, Surat Kuasa Mengelola dan Melakukan Penarikan Rekening, Akta Perjanjian Pengalihan Hak Atas Perjanjian Jual Beli Tenaga Listrik untuk Kepentingan Penjaminan, Akta Pernyataan Kesanggupan, Perjanjian Jaminan Perusahaan, Surat Konfirmasi, Surat Pendapat Hukum, Akta Perjanjian Pembiayaan, Akta Pemberian Jaminan Fidusia atas Bangunan, Mesin, dan Peralatan Proyek, Akta Pemberian Jaminan Fidusia atas Pendapatan Proyek Termasuk Kompensasi Hasil Pengakhiran PPA, Akta Pemberian Jaminan Fidusia atas Hasil Pembayaran Asuransi, Perjanjian Gadai Saham (no.47), Kuasa yang Tidak Dapat Dicabut Kembali (no. 49), Kuasa untuk Menjual Saham yang Digadaikan, Perjanjian Gadai Saham (no.50), Kuasa yang Tidak Dapat Dicabut Kembali (no. 52)

NO.	DOCUMENT TYPE	NAME
191	10 Brokerage VGF Documenta- tion	Laporan Uji Tuntas dari Segi Hukum atas PT Brantas Prospek Mandiri Sehubungan dengan Rencana Pembibayaan Proyek Pembangunan PLMTH Pandanduri 2x0,29 MW
192	10 Brokerage VGF Documenta- tion	Kuasa untuk Menjual Saham yang Digadaikan, Pergantian Gadai atas Rekening Bank, Surat Kuasa Mengelola dan Melakukan Penarikan Rekening, Akta Perjanjian Pengalihan Hak Atas Perjanjian Jual Beli Tenaga Listrik untuk Kepentingan Penjaminan, Akta Pernyataan Kesanggupan, Perjanjian Jaminan Perusahaan, Surat Konfirmasi, Surat Pendapat Hukum, Akta Perjanjian Pembiayaan, Akta Pemberian Jaminan Fidusia atas Bangunan, Mesin, dan Peralatan Proyek, Akta Pemberian Jaminan Fidusia atas Pendapatan Proyek Termasuk Kompensasi Hasil Pengakhiran PPA, Akta Pemberian Jaminan Fidusia atas Hasil Pembayaran Asuransi, Perjanjian Gadai Saham (no.62), Kuasa yang Tidak Dapat Dicabut Kembali (no. 64), Kuasa untuk Menjual Saham yang Digadaikan, Perjanjian Gadai Saham (no.65), Kuasa yang Tidak Dapat Dicabut Kembali (no. 67)
193	10 Brokerage VGF Documenta- tion	Laporan Uji Tuntas dari Segi Hukum atas PT Brantas Prospek Mandiri Sehubungan dengan Rencana Pembibayaan Proyek Pembangunan PLMTH Batanghari 3x1,7 MW
194	10 Brokerage VGF Documenta- tion	Kuasa untuk Menjual Saham yang Digadaikan, Pergantian Gadai atas Rekening Bank, Surat Kuasa Mengelola dan Melakukan Penarikan Rekening, Akta Perjanjian Pengalihan Hak Atas Perjanjian Jual Beli Tenaga Listrik untuk Kepentingan Penjaminan, Akta Pernyataan Kesanggupan, Perjanjian Jaminan Perusahaan, Surat Konfirmasi, Surat Pendapat Hukum, Akta Perjanjian Pembiayaan, Akta Pemberian Jaminan Fidusia atas Bangunan, Mesin, dan Peralatan Proyek, Akta Pemberian Jaminan Fidusia atas Pendapatan Proyek Termasuk Kompensasi Hasil Pengakhiran PPA, Akta Pemberian Jaminan Fidusia atas Hasil Pembayaran Asuransi, Perjanjian Gadai Saham, Kuasa yang Tidak Dapat Dicabut Kembali (no. 79), Kuasa untuk Menjual Saham yang Digadaikan, Perjanjian Gadai Saham, Kuasa yang Tidak Dapat Dicabut Kembali (no. 82)

NO.	DOCUMENT TYPE	NAME
195	10 Brokerage VGF Documenta- tion	Grant Manual
196	10 Brokerage VGF Documenta- tion	BEJ MENTARI VGF No Objection Letter
197	10 Brokerage VGF Documenta- tion	Consultant Agreement - Josep Bely Utarja
198	11 Investment Tracker (TA- Matchmaking)	Brokerage Investment Tracker April 2024
199	12 Brokerage Reporting	Brokerage QR 2020-2024
200	12 Brokerage Reporting	Brokerage Annual Report 2020-2024
201	12 Brokerage Reporting	MENTARI Annual Review 2020-2024
202	13 Brokerage ToC & Logframe	Brokerage ToC 2020-2023 & Updated Logframe
203	14 Diesel Replacement Pro- gramme	DRP Brief
204	14 Diesel Replacement Pro- gramme	MoV DRP 2022
205	14 Diesel Replacement Pro- gramme	MoV DRP 2023
206	International Women and Girls Strategy	International Women and Girls Strategy 2023-2030

Annex 10 Interview Questions based on Services Received

Programme Owner

TOPIC	QUESTIONS
GENERAL	1. Historical background of MENTARI Programme
	2. What is the role of MEMR in the MENTARI programme?
	3. Is there any reason to expand the location area of Brokerage Strand implementation from the eastern part of Indonesia but also includes outside the eastern part of Indonesia?
	4. Will it be possible to obtain the technical document of Brokerage Strand attached in the Contract Agreement between FCDO and the Delivery Partners?
GEDSI	1. Which GEDSI guidelines form the basis for the FCDO to apply and enforce in the MENTARI program?
	2. What are the FCDO's GEDSI objectives, and in which documents are they outlined?
	3. What strategies does the FCDO use to ensure compliance with GEDSI guidelines within the MENTARI ecosystem, particularly among MENTARI's delivery partners?
	4. Are GEDSI aspects explicitly outlined in the contract agreement between the FCDO and its delivery partners?
	5. Does the FCDO have an evaluation or monitoring system to assess the MENTARI program's progress against its GEDSI objectives and guidelines? If so, how is this monitoring implemented?
	6. How is GEDSI integrated into the reporting process to the FCDO by MENTARI's delivery partners, including through MREL cycles, quarterly and annual reports, and annual review meetings?
	7. Has the FCDO faced any challenges in enforcing GEDSI guidelines across the MENTARI ecosystem, such as resistance or capacity gaps among delivery partners, investors, financiers, or MENTARI's stakeholders like beneficiary ministries? How does this challenges direspond oleh FCDO?
	8. Does the FCDO provide any support in the form of technical assistance, such as knowledge production and learning activities, to build GEDSI capacity across the MENTARI ecosystem?
	9. Has the FCDO conducted any impact assessments or studies on the effectiveness of MENTARI's GEDSI interventions?
	10. What lessons learned from MENTARI's GEDSI implementation can be applied to other FCDO-funded programmes in Indonesia?

TOPIC	QUESTIONS
-------	-----------

TECHNICAL ASSISTANCE	1. What is the scope or services of Technical Assistance?
	2. What is the requirement to be able to get Technical Assistance?
MATCHMAKING	1. What is the scope or service of Matchmaking?
	2. What is the requirement to be able to get matchmaking service?
	3. What are the main barriers delaying RE project financing, and how has MENTARI helped overcome them?
	4. What steps have been taken to ensure that MENTARI-supported projects remain financially and operationally sustainable post-funding?
	5. What are the key lessons from MENTARI's model that can inform future energy financing programmes in Indonesia and other countries?
VIABILITY GAP FUNDING (VGF)	1. What is the scope of service of VGF?
	2. What is the requirement to be able to get VGF?
	3. How has the Viability Gap Fund (VGF) contributed to reducing financial risks and increasing private sector investment?
	4. How accessible and transparent is the Viability Gap Fund (VGF) application and disbursement process?
	5. Are the financing mechanisms (VGF, blended finance, carbon credits) scalable beyond the program's timeline?

Delivery Partner

TOPIC	QUESTIONS
-------	-----------

GENERAL	1. Is there any reason to expand the location area of Brokerage Strand implementation from the eastern part of Indonesia but also includes outside the eastern part of Indonesia?
GEDSI	1. Which GEDSI guidelines form the basis for the delivery partner in implementing GEDSI within the MENTARI program?
	2. Are GEDSI aspects explicitly outlined in the formal contract agreement between the delivery partners and the FCDO?
	3. How are these GEDSI guidelines incorporated into the delivery partners' GEDSI approach and strategies? In which documents are these approaches outlined?
	4. Is GEDSI formally included as part of agreements between delivery partners and their employees, consultants, contractors, and other collaborating entities?

TOPIC	QUESTIONS
	5. How does the delivery partner ensure GEDSI capacity-building among its employees and contractors, as well as across the MENTARI ecosystem, including developers, investors, and financiers?
	6. It is mentioned that eight GEDSI learning events have been conducted for programme stakeholders (policymakers, financiers, and developers). How did the delivery partner identify capacity gaps to determine training strategies, materials, and target participants for these technical assistance (TA) sessions?
	7. In the project shortlisting process for financial schemes, green bonds, and other MENTARI-supported initiatives, are there any GEDSI aspects considered as eligibility criteria?
	8. What strategies do delivery partners use to ensure the participation of women and marginalised groups in facilitated discussions, considering the program's achievement of 41% participation from these groups?
	9. How do delivery partners measure GEDSI performance against MENTARI's contractual GEDSI targets?
	10. Is the verification process conducted through self-assessment, and does it include beneficiary confirmation with equal representation of women, persons with disabilities, and other vulnerable groups?
	11. Has the delivery partner faced any challenges in enforcing GEDSI guidelines across the MENTARI ecosystem, such as resistance or capacity gaps among investors, financiers, or MENTARI stakeholders like beneficiary ministries? How has the delivery partner responded to these challenges?
TECHNICAL ASSISTANCE	1. What is the scope or services of Technical Assistance?
	2. What is the requirement to be able to get Technical Assistance?
	3. How much projects have been asked for Technical Assistance support?
	4. What are the main reasons for the project could not get TA support?
	5. What steps have been taken to ensure that MENTARI-supported projects can be built?
	6. What are MENTARI's expectations for improvement in the coming programme?
MATCHMAKING	1. What is the scope or service of Matchmaking?
	2. What is the requirement to be able to get the matchmaking service? Has MENTARI reviewed the proposed projects before they are introduced to the financial institution?
	3. What are the main barriers delaying RE project financing, and how has MENTARI helped overcome them?
	4. What steps have been taken to ensure that MENTARI-supported projects remain financially and operationally sustainable post-funding?

TOPIC	QUESTIONS
	5. What are the key lessons from MENTARI's model that can inform future energy financing programmes in Indonesia and other countries?
	6. How much projects have been asked for Matchmaking support?
	7. What are the main reasons for the project could not get Matchmaking support?
	8. What are MENTARI's expectations for improvement in the coming programme?
VIABILITY GAP FUNDING (VGF)	1. What is the scope of service of VGF?
	2. What is the requirement to be able to get VGF?
	3. How has the Viability Gap Fund (VGF) contributed to reducing financial risks and increasing private sector investment?
	4. How accessible and transparent is the Viability Gap Fund (VGF) application and disbursement process?
	5. Are the financing mechanisms (VGF, blended finance, carbon credits) scalable beyond the program's timeline?

Matchmaking

TOPIC	QUESTIONS
GENERAL	1. Historical background of project developer's/financial institutions participation in Matchmaking
GEDSI	1. Is GEDSI included as a criterion for accessing the matchmaking service?
	2. What are the GEDSI requirements within the matchmaking service?
	3. How are potential investors and project developers screened to ensure alignment with GEDSI principles?
	4. Is technical assistance provided to help project developers meet GEDSI requirements?
	5. Are there post-matchmaking support mechanisms to ensure that GEDSI commitments are upheld in formalised agreements?
	6. How does the matchmaking service track and report GEDSI outcomes in the agreements it facilitates?
	7. Have there been any challenges in integrating GEDSI considerations into the matchmaking process? If so, how have they been addressed?
	8. What are the key success factors for effectively integrating GEDSI into match-making services?
MATCHMAKING	1. What is the scope or service of Matchmaking?

TOPIC	QUESTIONS
	2. What is the requirement to be able to get the matchmaking service?
	3. What are the main barriers delaying RE project financing, and how has MENTARI helped overcome them?
	4. What steps have been taken to ensure that MENTARI-supported projects remain financially and operationally sustainable post-funding?
	5. What are the key lessons from MENTARI's model that can inform future energy financing programmes in Indonesia and other countries?
	6. What are project owner's/financial institution's expectations for improvement in the coming programme?

Technical Assistance

TOPIC	QUESTIONS
GENERAL	1. Historical background of project developer's participation in Technical Assistance
GEDSI	1. What types of GEDSI technical assistance (TA) are provided?
	2. Who are the recipients of GEDSI TA?
	3. At what stage of the programme is GEDSI TA typically conducted? For example, is GEDSI training provided during the programme preparation phase to equip stakeholders with the necessary GEDSI capacity?
	4. How is the need for GEDSI TA and its materials identified?
	5. How is it ensured that both men and women participate in TA sessions proportionally?
	6. Are there any follow-up mechanisms to assess the long-term impact of GEDSI TA on participants and their work?
	7. Are there any success stories or best practices from previous GEDSI TA sessions that can be replicated?
TECHNICAL ASSISTANCE	1. What is the scope or services of Technical Assistance?
	2. What is the requirement to be able to get Technical Assistance?
	3. What steps have been taken to ensure that MENTARI-supported projects can be built?
	4. What are project owner/project developer's expectations for improvement in the coming programme?

Viability Gap Fund

TOPIC	QUESTIONS
GENERAL	1. Historical background of project developer's participation in VGF

TOPIC	QUESTIONS
GEDSI	1. Does the VGF impose or require GEDSI considerations for projects receiving VGF support through MENTARI?
	2. Do you require project developers to conduct gender assessments or develop Gender Action Plans (GAPs) as part of the funding process?
	3. What GEDSI-related due diligence processes does your organisation conduct before approving VGF financing?
	4. How do you ensure that funded projects uphold GEDSI principles throughout implementation?
	5. How has MENTARI's support (e.g., matchmaking, technical assistance) influenced your approach to GEDSI integration in VGF funding?
	6. What GEDSI-related tools, data, or guidance from MENTARI have been useful in your investment decision-making?
	7. How does the VGF measure GEDSI performance against MENTARI GEDSI contractual targets?
	8. How do you ensure that GEDSI commitments made by project developers in the investment process are upheld during project implementation?
VIABILITY GAP FUNDING (VGF)	1. What is the scope of service of VGF?
	2. What is the requirement to be able to get VGF?
	3. How has the Viability Gap Fund (VGF) contributed to reducing financial risks and increasing private sector investment?
	4. How accessible and transparent is the Viability Gap Fund (VGF) application and disbursement process?
	5. Are the financing mechanisms (VGF, blended finance, carbon credits) scalable beyond the program's timeline?
	6. What are project owner's/PT SMI's expectations for improvement in the coming programme?