engineers without borders australia

Terms of Reference

Evaluation of Engineers Without Borders Australia's International Program funded by the Australian NGO Cooperation Program

May 2026

These terms of reference outline the background, purpose, objectives, roles and responsibilities, communication procedures and scope of work to be included in the Evaluation of Engineers Without Borders Australia's International Program funded by the Australian NGO Cooperation Program; for the period July 2023 to June 2026.

1 Background

EWB Australia's vision is that "Everyone has access to the engineering knowledge and resources required to lead a life of opportunity, free from poverty."

Mission: We connect, educate and empower people through humanitarian engineering. Humanitarian engineering uses a people centered, strength-based approach to improve community health, wellbeing and opportunity.

EWB Australia's story began over twenty years ago, with a small group of engineers in Melbourne and across Australia. Today, the EWB community includes thousands of people and dozens of organisations working together to engineer a better world. EWB is the only dedicated organisation in Australia that connects STEM (science, technology, engineering and mathematics) professionals with local communities, industry, education sector and government to address social and environmental issues.

EWB Australia works towards achieving its vision through three major focus areas:

1. developing technology and infrastructure to alleviate poverty and accelerate inclusive sustainable development in Australia and overseas;
2. redefining engineering as a profession providing stewardship and leadership for a more equitable and sustainable world and;
3. inspiring and mobilising a global community who believe in a world where technology benefits all.

EWB's work is progressed through its International, First Nations Australia and Learning Programs.

EWB Engineering Program:

Engineers Without Borders Australia aims to provide people living in the Asia-Pacific region with access to equitable technology to live well and pursue their aspirations sustainably. We work to promote human dignity, thriving ecosystems, diversity, and indigenous wisdom. We are committed to producing technology that is always gender equitable, universally accessible and environmentally sustainable.

To help us realise our vision for equitable technology, EWB forms partnerships across engineering, international development and tertiary education both within and beyond Australia. Our partners include community advocacy groups, industry leaders, universities, government agencies and many fellow non-governmental and non-for-profit organisations. These partnerships connect EWB with a wide range of stakeholders and provide multiple ways to build the capacities of the communities we work with.

EWB mobilises our network of experienced, motivated professionals, who volunteer their expertise to help deliver equitable technology. Our mobilisation strategy brings specialists in WASH, renewable energy, architecture, construction, project management, planning and leadership development. Working alongside EWB staff in-country, our volunteers offer specialised knowledge, and their membership strengthens EWB's link to the engineering community.

The evaluation will focus on the International Program that is currently implemented in Cambodia, Timor-Leste and Vanuatu.

Cambodia Program Description:

The Cambodia program aims to improve health, livelihoods, gender equality, and climate resilience for vulnerable rural communities living in challenging environments through the development and implementation of locally appropriate water, sanitation, hygiene (WASH), and agricultural technologies. The program focuses on increasing equitable access to climate-resilient WASH infrastructure and sustainable agricultural solutions, particularly for women.

The program works in partnership with communities, government agencies, NGOs, and sector stakeholders to co-design, pilot, refine, and scale appropriate technologies that respond to local environmental and social conditions. Activities include technology development, community engagement, capacity strengthening, monitoring and evaluation, and sector advocacy to improve long-term sustainability, resilience, and inclusion within Cambodia's WASH and agriculture sectors.

Timor-Leste Program Description:

The Timor-Leste program aims to improve equitable access to safe, sustainable, and climate-resilient water systems and renewable energy solutions for vulnerable rural communities through locally appropriate engineering solutions, community engagement, and capacity strengthening. The program focuses on addressing challenges related to unreliable water access, water quality, seasonal scarcity, limited energy access, and the impacts of climate change, particularly for women.

Working alongside local communities, government institutions, NGOs, universities, and private sector partners, the program supports the co-design, construction, monitoring, and long-term management of rural water infrastructure, renewable energy systems, and related technologies. This includes solar-powered systems for remote agricultural machinery used in coffee processing to help farming families improve productivity and increase household income. The program also strengthens the technical and professional capacity of Timorese engineers, community water management groups, local technicians, and partner organizations to support sustainable operation, maintenance, and future scaling of resilient infrastructure solutions across Timor-Leste.

Vanuatu Program Description:

The Vanuatu program aims to improve community health, environmental protection, and climate resilience through the development and implementation of locally appropriate sanitation and water technologies for communities living in challenging environments. The program focuses on addressing

sanitation challenges in areas vulnerable to flooding, cyclones, sea level rise, high groundwater, and water insecurity, particularly for vulnerable and remote communities.

Working in partnership with government agencies, local engineering networks, communities, NGOs, and private sector stakeholders, the program supports the co-design, piloting, evaluation, and scaling of climate-resilient sanitation systems and related WASH technologies. The program also strengthens local capacity through engineering skills development, community training, sector coordination, and support for improved technical standards and long-term management systems to improve the sustainability, resilience, and inclusion of sanitation services across Vanuatu.

2 Scope of work

The purpose of this consultancy is to recruit a skilled evaluation consultant to perform an evaluation of EWB's Engineering Program, including 13 country-level projects (see Annex 1). for the period July 2023 to June 2026 (3 years). The International Program manages many projects, some of which are ANCP funded, and others funded by external funding sources. All projects will be in scope for this review.

The purpose of the evaluation is to:

- Assess the effectiveness of EWB engineering program in achieving intended short and medium-term outcomes;
- Determine likelihood that long-term outcomes and impact will be achieved;
- Review EWB's approach and strategies to achieve outcomes & impact.

This evaluation will provide EWB with an independent assessment about the performance and impact of the International Program through the achievements of the funded country-projects. Key findings, lessons learnt, and recommendations will help influence the design and operations of the Program.

The primary audience of the evaluation is EWB Australia's International team and the EWB Country teams. The secondary evaluation audience includes EWB Australia more broadly and the DFAT ANCP team.

The evaluator will explore the Program through the evaluation criteria of **effectiveness** and **impact.** Recommendations should focus on how the Program can be improved to better achieve impact.

The evaluation will respond to the following key evaluation questions:

1. To what extent is EWB achieving its end of program outcomes (EOPOs)?
    a. Is the short-term timeframe to achieve our EOPOs still the right mode of operating?
    b. If not, what changes do we need to make to our project logic/EOPOs or to our approach in conducting projects?
2. To what extent are existing processes to select, develop and deliver projects working well?
3. What barriers prevent the successful development and delivery of projects?
4. How can existing processes be improved to select, develop and deliver projects?
5. To what extent are engineering projects embedding climate change, gender, disability inclusion, and environmental protection considerations in their design and implementation?
6. What impact have EWB engineering projects achieved and what were the key achievements of all projects in scope for review?
7. How could EWB improve its reach while still maintaining impact at the core of project delivery?

The specific project activities to be completed include:

1. Contract signing.
2. Planning. Preparation of an evaluation plan, including methodology and data collection tools.
3. Desktop review. Complete a desktop review of key documents. See Annex 3 for a sample of the types of documents that will be available.
4. Stakeholder consultation. Conduct up to 3 key informant interviews with EWB Engineering Program staff from Australia and the Timor-Leste country offices.
5. Complete three in-country visits to Cambodia, Timor-Leste and Vanuatu EWB country offices where the Consultant will:
    a. Interview EWB office staff
    b. Interview up to two local government and in-country NGO partners
    c. Interview a selection of beneficiary community members
    d. Host gender segregated focus group in one beneficiary community
    e. Observe EWB's technology solutions in the field
6. Analyse data collected.
7. Draft an evaluation report, no longer than 30 pages (plus annexes), following the outline presented in Annex 4.
8. Finalise the evaluation report, incorporating feedback from EWB Australia.
9. Prepare and present a 60-minute summary of findings and recommendations to EWB Australia.

3 Expected deliverables:

1. Signed contract
2. Evaluation plan including planned methodology and data collection tools
3. Draft evaluation report
4. Final evaluation report
5. Presentation of findings and recommendations to EWB

4 Evaluation informants and methods

As a guide, EWB are suggesting that the following methods be applied to collect data from the key stakeholder groups outlined in Table 1 below. The consultant's proposal can recommend changes to the proposed methods and stakeholder group.

Table 1. Proposed evaluation methods and stakeholders

Methods	EWB Australia Eng team	EWB Country teams	Country partners	Community beneficiaries	Project outputs and solutions	Project documents
Desktop review						✔
Interview	✔	✔	✔	✔		
Focus Group				✔		
Observation				✔	✔	

5 Institutional arrangements

The Consultant(s) will report directly to the Senior Manager, International Engineering Programs located in Dili, Timor-Leste, and the Project Manager, located in Melbourne, Australia.

The Senior Manager, International Engineering Programs and Project Manager will provide all the project documents and required contacts in each country to arrange interviews. EWB Australia will also assist the consultant with travel and accommodation arrangements for the in-country visit.

The consultant will be responsible for scheduling all interviews and meetings with assistance provided for country partners and beneficiary communities.

The Consultant will work primarily from their home office. Travel to three participating countries to conduct stakeholder consultations and field observations is planned.

In the event that ongoing travel is not possible due to illness or otherwise, the in-country component of the evaluation will be cancelled, or cut-short and remote monitoring and evaluation methods will need to be substituted.

6 Duration of work

Table 2 outlines an initial estimate of the work effort to undertake the evaluation. The consultant can propose an alternative allocation of days with explanations given for proposed changes.

Table 2. Work effort

Task	Work effort (days)
Planning	3
Desktop review	5
Tools	2
Australia based interviews	2
Travel	3
In-country work	12
Analysis	4
Draft report	5
Finalise & present	1
Total	**37**

The consultancy will be conducted over a period of two months ideally between September 14th 2026 and November 20th 2026.

Table 3. Draft timeline

Output	Delivery by
1. Signed contract	14/09/2026
2.Evaluation plan including planned methodology and data collection tools	21/09/2026
3. Draft evaluation report	06/11/2026

Output	Delivery by
4. Final evaluation report	13/11/2026
5. Presentation of findings	20/11/2026

7 Resources/financial contributions

The consultant will invoice EWB Australia for services provided. EWB will cover consultant's airfares, in-country accommodation and in-country transport costs. A daily in-country per diem is allocated to cover in-country meals and incidental expenses. The consultant is required to cover all other costs.

A milestone payment schedule is outlined in Table 3 below.

Table 4. Milestone payment schedule

Amount	Milestone
Payment 1 - 20%	Evaluation Plan
Payment 2 - 80%	Submission of final report

8 Reporting, Communications and Decision Making

Both parties agree to provide each other with regular, accurate, timely and transparent communication and reporting on matters of common interest and activity.

EWB and the consultant will meet fortnightly where the consultant will provide EWB with updates on progress made, issues and challenges and next steps.

9 Qualifications, professional experience and key skills

The evaluation will be undertaken by a consultant with the following profile and experience.
Essential:

- 8+ years leading evaluation work, including one or more multi-country program evaluations in the Asia-Pacific region
- Must be able to demonstrate some experience in WASH project design, monitoring or evaluation in a developing country context
- Must have experience working with or collecting data from remote/rural communities
- Excellent verbal and written communication skills in English
- Minimum Masters or equivalent qualification in monitoring and evaluation or related discipline

Desirable:

- Background or experience in engineering, human centred design or community development an advantage
- Experience working Cambodia, Timor-Leste or Vanuatu an advantage

10 How to apply

Before **5pm AEST on 30 June 2026** please submit via email to engineering@ewb.org.au your application inclusive of:

a) A cover letter addressing the evaluator qualifications, professional experience and key skills outlined in this Terms of Reference.
b) Current CV(s).
c) A brief (up to 2 pages) outline of the proposed process to complete the evaluation including:
    - Proposed methodology and approach
    - Timeframe
    - Financial proposal in AUD, itemised with daily rate and travel costs
d) Example of previous evaluation report.

11 Annex 1. List of EWB Engineering Projects

Country	**Name**
Cambodia	Water Scarce, hard ground, and flood-affected sanitation solutions
Cambodia	SCE Technical Compendium
Cambodia	*ACIAR - Electrification of Agriculture Equipment for Improved Productivity and Sustainability (Non-ANCP)*
Cambodia	Climate-smart agriculture for vegetable production
Cambodia	AgriTools for Female Farmers in Siem Reap Province
Timor-Leste	Feto to the Front
Timor-Leste	Maina 1 Water System Rehabilitation and Improvement
Timor-Leste	Fahiria Water System Rehabilitation and Improvement
Timor-Leste	*BPP Coffee Solar Project (non-ANCP)*
Timor-Leste	ADRA ABMD (Agronegosiu Be'e Ba Moris Diak)
Vanuatu	Tumble Drum
Vanuatu	Building Capacity of Vanuatu Government Institutions
Vanuatu	Sanitation in Challenging Environment - Compost Toilet Pilots

12 Annex 2 – Sample documents

A sample of the types of documents that will be available to inform the evaluation include:

Program-level:

- 2030 EWB strategy
- Engineering Program Capability Statement
- EWB MEL Plan and Impact Framework
- ANCP annual reports
- EWB 2023 Program Evaluation

Country-level:

- ANCP Annual Plan and list all projects
- Quarterly project reports (small sample only)
- End-of-year report

Project-level:

- Project Plan/Project brief
- EWB Project Implementation Plan (PIP)
- Project baseline & endline and evaluation reports (where they exist)

13 Annex 3 - Final Evaluation Report layout.

1. Executive summary
2. Introduction
3. Methodology
    a. Limitations
4. Findings responding to the key evaluation questions
    a. Country specific findings
5. Conclusion
6. Recommendations
    a. Country specific recommendations
7. Annexes
    a. ToR
    b. Stakeholders consulted
    c. Others as required.

14 Annex 4. Engineering Program Logic

EWB Australia Engineering Program Logic

Version: 3/12/2024

GOAL

The lives of more than one million people have been improved through equitable, sustainable, and scalable technology

LINE OF ACCOUNTABILITY

END-OF-PROGRAM OUTCOMES (EOPOs)

- Improved Health and Well-being for Individuals
- Increased Income or Agricultural Yield
- Improved Gender Equity, Disability, and Social Inclusion
- Improved Environmental Conditions
- Improved Community Resilience, Coherence, and Well-being

INTERMEDIATE OUTCOMES

- Community members have increased and equitable access to technology, sustained over time
- Stronger local systems capability (governance, financing, human resource capability, etc.) to lead and deliver essential services through technology

IMMEDIATE OUTCOMES

- Women, people with disabilities, and Indigenous Peoples value the technologies and their potential benefits
- Community members value the technologies and their potential benefits
- People use technologies (and continue to use them over time)
- Technologies continue to function properly over time
- Community members manage, operate and maintain, technologies
- Communities change behaviours and social norms related to use of technologies
- An enterprise manufactures, markets, and distributes the product
- Community members have access to a safe and dignified level of goods and services while regular services and supply chains are disrupted
- National and sub-national government effectively lead and resource the implementation of policies and guidelines
- Sub-national government and service delivery partners deliver essential services with technology
- Local engineers and skilled trades (particularly women) increasingly lead the design and construction of quality technologies

ACTIVITIES

- Women, people with disabilities, and Indigenous Peoples have participated and influenced the technology effectively meeting their needs
- Community members have participated in the scoping and/or development of technology
- Safe and functional products are developed, tested, and refined
- Safe and functional infrastructure which meets relevant standards is in place
- Community members have the knowledge, skills, and governance systems in place to manage, resource, operate and maintain technology
- Communities understand the benefit of (and how to apply) changing behaviours and social norms to support technology use
- An enterprise is in place to take the effective product to market
- Communities and funding actors have the information they need to take emergency action
- National government has evidence, policies and guidance to inform decision-making
- Sub-national government and service delivery partners have the knowledge and skills to deliver essential services with technology
- Local engineers and skilled trades (particularly women) have improved technical and professional skills to design and construct quality technologies

ACTIVITIES

- Engage and consult with communities (including specifically women, people with disabilities, and Indigenous Peoples) to identify needs and potential technology solutions
- Develop, test and refine products (following an iterative approach, e.g. HCD or TDA)
- Design and build infrastructure (following a linear approach)
- Train and support community members to operate and maintain technologies
- Establish or support community-level governance systems to manage and resource infrastructure
- Communicate with communities and share information relating to behaviours and social norms
- IP registration, business model conceptualisation, and partner brokering for market-based scaling of effective products
- Provide community members technical advice and/or engineering services relating to emergency anticipation, response or recovery
- Develop evidence, policies, and guidelines with government and non-government stakeholders for increasing access to quality technology which meets minimum standards
- Provide technical advice and coordination support to government
- Training to sub-national government and service delivery partners for effective delivery of essential services with technology
- Train and mentor local engineers and skilled trades (with a focus on empowering women) in the design and construction of quality technologies

INTERVENTION APPROACHES

- ***Product Development (Iterative Approach)*** — ***Product Development (Iterative Approach)*** — ***Market-Based Scaling*** — ***Building Local Systems Capability***
- ***Infrastructure Development (Linear Approach)*** — ***Infrastructure Development (Linear Approach)***
- ***Emergency Anticipation, Response & Recovery*** — ***Emergency Anticipation, Response & Recovery*** — ***Emergency Anticipation, Response & Recovery***

MODES OF RESOURCING

- Internal Resourcing
- Engaging Local Volunteers
- Engaging International Volunteers
- Partnering with Local NGOs/ Institutions
- Partnering with Universities
- Engaging with Corporate Engineering Firms
- Using a Sub-Contractor
- Fee-for-Service Contracting / Being Sub-Contracted

SECTORS

- WASH
- Agriculture
- Climate Change
- GEDSI Targeted
- Living Sustainably On Country
- Other Technology

ENGINEERING PROGRAM PRINCIPLES

- Sustainability (needs met over time)
- Environmental protection
- "Nothing about us without us"
- Leave no one behind
- Do no harm / Build back better
- Humanitarian and development activities are integrated and complementary
- Community Identified Needs
- Impact, not Output