



TERMS OF REFERENCE

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Concerning the service

EGI-2025-0460

**INDEPENDENT VERIFICATION
FOR THE VERIFICATION OF DISBURSEMENT-LINKED INDICATORS
AND PROGRAM ACTIONS**

UNDER

**RESULTS-BASED LOAN PROGRAM: ACCELERATING INDONESIA
CLEAN ENERGY TRANSITION – PHASE 1**

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ARTICLE 1. Presentation of the Prescriber Service

The present service is commissioned by Agence Française de Développement (AFD). AFD supports the Government of Indonesia and PLN in the development of renewable energy infrastructure and energy efficiency measures, with a particular focus on aligning projects with international environmental and social safeguard standards.

ARTICLE 2. Subject of the contract

AFD is looking for the service of Independent Verification for the verification of disbursement-linked indicators and program actions under the Results-Based Loan Accelerating Indonesia Clean Energy Transition – Phase 1 (RBL AICET).

ARTICLE 3. Context and objectives of the mission

Background

1. Indonesia is pursuing a transition to a green economy that promotes sustainable, low-carbon growth. The results-based loan (RBL) program supports Indonesia in achieving its development objective. The RBL program supports the Perusahaan Listrik Negara (State Electricity Corporation, [PLN]) in accelerating large-scale supply of solar photovoltaic and wind power electricity in partnership with the private sector while prioritizing power grid development and institutional capacity strengthening to manage the energy transition. By supporting the realization of Indonesia's ambitions for renewable energy and power grid development, the program also contributes to the ASEAN Power Grid vision to create a fully integrated regional power network across Southeast Asia.
2. With anticipated financing from the Asian Development Bank (ADB)¹, Agence Française de Développement's (AFD), and Kreditanstalt für Wiederaufbau (KfW), PLN will implement the RBL program Accelerating Indonesia's Clean Energy Transition (AICET) Program – Phase 1. ADB published its Project Implementation Document in October 2025².
3. The AICET program comprises four results areas:
4. **Outcome:** The outcome will be measured by (i) metric tons of carbon dioxide emissions avoided annually (disbursement-linked indicator **[DLI] 1**) and (ii) two indicators not linked to disbursement, which will track the metric tons of nitrogen oxides and sulfur dioxides avoided annually. Three output results will contribute to the achievement of the outcome.
5. **Output 1: Transition to renewable clean electricity supply facilitated.** This output will monitor progress towards (i) additional solar photovoltaic and/or wind power generated electricity supplied to the grid (**DLI 2**); and (ii) a capacity building program established at PLN Corporate University to deliver courses on energy transition for PLN male and female staff (**DLI 3**).
6. **Output 2: Power grid infrastructure for renewable energy integration strengthened.** This output will support (i) strengthened transformer capacity at substations in Java-Bali, Sumatra, and Sulawesi (**DLI 4**); and (ii) upgraded transmission control centers in Sumatra and Sulawesi (**DLI 5**).

¹ It includes financing from ADB ordinary capital resources and ADB administered trust funds: GEAPP Energy Access and Transition Trust Fund, United Kingdom-ASEAN Catalytic Green Finance Facility Trust Fund, European Union-ASEAN Catalytic Green Finance Facility Trust Fund, and ASEAN Infrastructure Fund.

² [Accelerating Indonesia's Clean Energy Transition Program \(Phase 1\): Program Implementation Document | Asian Development Bank](#)

7. **Output 3: Institutional capacity to manage an energy transition enhanced.** This output will ensure that (i) safeguard frameworks prepared for the RBL program are implemented with required qualified environment and social staff resources (**DLI 6**); (ii) PLN staff have knowledge and skills relevant to energy transition increased (**DLI 7**); and (iii) open positions in roles and departments relevant to renewable energy development in PLN are filled by women (**DLI 8**).

8. In addition, a program action plan (PAP) was developed which includes measures to strengthen the systems and capacity required for achieving DLI targets.

9. For the above, PLN requested technical assistance to engage an independent agent to verify achievement of results and implementation progress of program actions. The selected independent verification agent (IVA) will conduct semiannual verification of progress and results reported by PLN. The IVA will rely on a desk review of documentation provided by PLN and will conduct field visits when physical verification of evidence is required.³ Additional details on the DLIs and the verification protocols can be made available upon request.

Objectives of the consultancy

10. An experienced consulting firm or association of firms (in joint-venture or sub-contractor) will be engaged to ensure credible and independent verification of the extent to which the DLIs are achieved under the AICET program.

11. The primary purpose of this assignment is to conduct independent verification of progress on DLIs before any disbursement can be done for the AICET program under the DLI category of allocated financing. This consultancy will: (a) design the evaluation methodology for verification of the progress made on DLIs⁴, and (b) conduct the verification in a transparent and independent manner such that it provides the robust evidence for decision makers.

ARTICLE 4. Scope of the consultancy

12. The primary task will be to carry out transparent and impartial verification of the DLIs of the AICET program.

- (i) Assess progress against each DLI and verify results achieved.
- (ii) Submit draft verification reports to PLN and AFD within fifteen (15) working days after the verification of results, in accordance with the agreed template. Over the six (6) years of implementation, at least 12 bi-annual reports and 12 summary reports will need to be prepared and submitted. The reports should present, but not limited to: summary of the process of DLI verification and assessment, procedures for quality control, the results of the verified DLI achievements, short analysis of reasons for discrepancies and recommendations supporting management decisions for adjustments when and where needed.

DLI 1: metric tons of carbon dioxide emissions avoided annually

DLI 2: additional solar PV and/or wind power generated electricity supplied to the grid

³ Desk review may need to be accompanied with online and/or offline meetings with PLN. Physical verification should be considered at a minimum for the annual verification in each year. The selected firm will be responsible to arrange for the verifications including meetings and field visits in close coordination with PLN.

⁴ Verification protocols for each DLI have been already developed by PLN and the financiers. The IVA would use this verification protocol as a basis and update it as may be required at the start of the verification process.

DLI 3: capacity building program established at PLN Corporate University to deliver courses on just energy transition for PLN male and female staff
DLI 4: transformer capacity at substations in Java-Bali, Sumatra, and Sulawesi strengthened
DLI 5: transmission control centers in Sumatra and Sulawesi upgraded
DLI 6: safeguard frameworks prepared for the RBL program are implemented with required qualified environment and social staff resources
DLI 7: PLN staff have knowledge and skills relevant to just energy transition increased
DLI 8: open positions in roles and departments relevant to renewable energy development in PLN are filled by women

Non-DLI 1: metric tons of sulfur dioxides avoided annually

Non-DLI 2: metric tons of nitrogen oxides avoided annually

- (iii) Based on the feedback and discussion with PLN and AFD finalize the DLI verification report, and submit final verification report to PLN and AFD.⁵

ARTICLE 5. Deliverables

13. The DLI verification process will be in accordance with the already developed verification protocols (2025, as may be amended from time to time) and the relevant sections of the Program Implementation Document (2025, as may be amended from time to time). The selected firm will submit the listed deliverables to PLN and AFD in a timely manner following the agreed-on timelines and work plan.

14. The deliverables for each round of verification exercises are listed below. The rounds covered by the service are mentioned below, the others rounds being covered by AFD's co-financiers.

1st Round (2026-2027) => Covered by AFD's cofinancier's contract

1. Inception report with
 - a. Evaluation methodology for verification designed (including sampling approach and final updates/specifications to verification protocols, as may be needed)
 - b. Detailed questionnaire, evidence requirements, templates for data processing finalized in coordination with PLN

Covering Period 1 January to 30 June 2026 (including prior results)

2. Summary note of the implementation of the verification exercise
3. Draft Verification Report⁶ and complete data set
4. Final Verification Report (payment milestone verification report 1.1)

Covering Period 1 July to 31 December 2026 (including prior results)

5. Summary note of the implementation of the verification exercise
6. Draft Verification Report and complete data set
7. Final Verification Report (payment milestone verification report 1.2)

2nd Round (2027-2028) => the object of the service

⁵ In addition to a written report, the selected firm should present the verification findings online and/or offline.

⁶ Draft Verification Reports should be delivered with the intention to be final. They are referred to as drafts only to address minor queries in case of unforeseen changes/circumstances.

Covering Period 1 January to 30 June 2027

1. Summary note of the implementation of the verification exercise
2. Draft Verification Report
3. Final Verification Report (payment milestone verification report 2.1)

Covering Period 1 July to 31 December 2027

4. Summary note of the implementation of the verification exercise
5. Draft of 2nd Verification Report and complete data set
6. Final 2nd Verification Report (payment milestone verification report 2.2)

3rd Round (2028-2029) => the object of the service

Covering Period 1 January to 30 June 2028

1. Summary note of the implementation of the verification exercise
2. Draft Verification Report
3. Final Verification Report (payment milestone verification report 3.1)

Covering Period 1 July to 31 December 2028

4. Summary note of the implementation of the verification exercise
5. Draft Verification Report and complete data set
6. Final Verification Report (payment milestone verification report 3.2)

4th Round (2029-2030) => Covered by AFD's cofinancier's contract

Covering Period 1 January to 30 June 2029

1. Summary note of the implementation of the verification exercise
2. Draft Verification Report
3. Final Verification Report (payment milestone verification report 4.1)

Covering Period 1 July to 31 December 2029

4. Summary note of the implementation of the verification exercise
5. Draft Verification Report and complete data set
6. Final Verification Report (payment milestone verification report 4.2)

5th Round (2030-2031) => Covered by AFD's cofinancier's contract

Covering Period 1 January to 30 June 2030

1. Summary note of the implementation of the verification exercise
2. Draft Verification Report
3. Final Verification Report (payment milestone verification report 5.1)

Covering Period 1 July to 31 December 2030

4. Summary note of the implementation of the verification exercise
5. Draft Verification Report and complete data set
6. Final Verification Report (payment milestone verification report 5.2)

6th Round (2031-2032) => Covered by AFD's cofinancier's contract

Covering Period 1 January to 30 June 2031

1. Summary note of the implementation of the verification exercise
2. Draft Verification Report
3. Final Verification Report (payment milestone verification report 6.1)

Covering Period 1 July to 31 December 2031

4. Summary note of the implementation of the verification exercise
5. Draft Verification Report and complete data set
6. Final Verification Report (payment milestone verification report 6.2)

Final Report

7. Draft final summary report (consolidation of all verification reports including lessons learned and recommendations based on the verification)
8. Final summary report (consolidation of all verification reports including lessons learned and recommendations based on the verification)

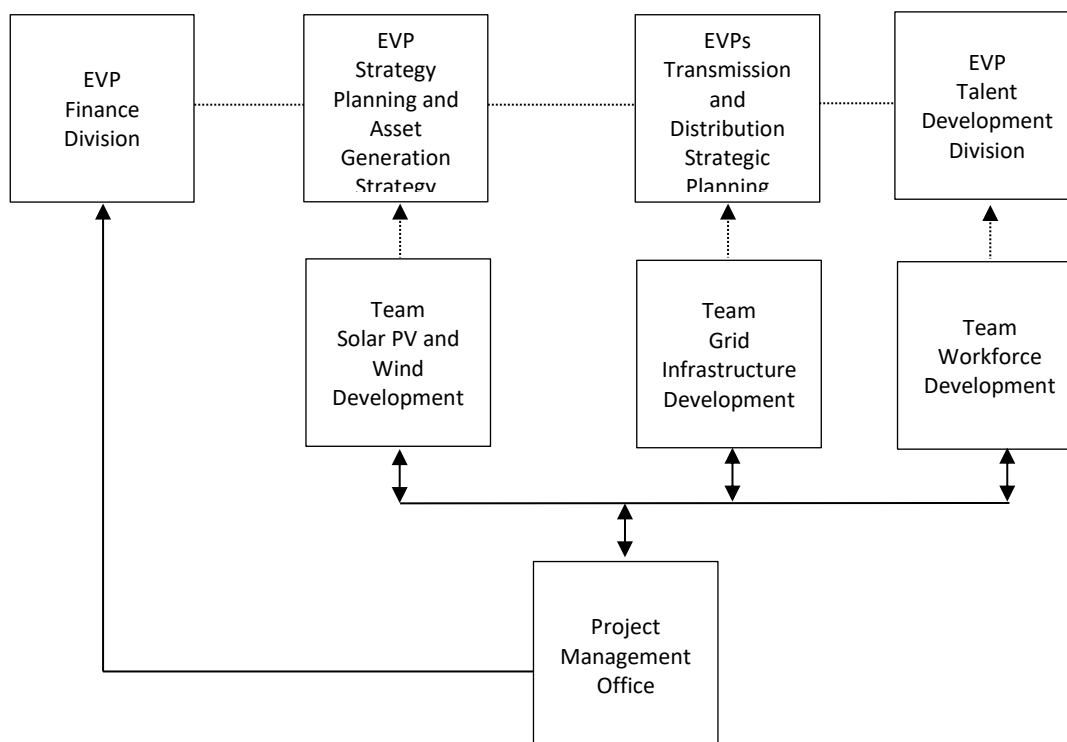
ARTICLE 6. Execution modality

6.1 Conditions of execution

15. PLN is the executing and implementing agency of the program. It is currently foreseen that PLN Project Management Office, headed by an EVP, will coordinate and report on the DLIs, PAPs, and program implementation progress. Three project teams headed by an EVP will be set up and responsible for the day-to-day implementation of the program including planning and coordinating TA activities. Each project team will focus on the implementation of one specific RBL program work stream: (i) solar PV and wind electricity supply development; (ii) grid infrastructure strengthening; and (iii) inclusive workforce development. Multiple divisions from PLN Holding and Sub-Holding (Indonesia Power and Nusantara Power) will be involved in each project team.⁷

Chart: Program Implementation Structure

⁷ PLN will have implementation support from consultancy under technical assistance from ADB, AFD, and KfW. The selected firm may consider to approach these consultants as part of its independent verification process.



16. The geographic boundaries of the program are provided below. It is currently foreseen that many, if not all, of the solar PV and wind power plants will be located within the Java-Madura-Bali grid. Transmission line reconductoring, transmission line maintenance CAPEX, substation transformer maintenance CAPEX, distribution line reconductoring and extension, distribution transformer uprating, and distribution maintenance CAPEX are eligible expenditure items under the AICET program and while they contribute to the power system's capacity to integrate more variable renewable energy into the grid, their implementation is not tracked for disbursements. Nevertheless, the selected firm will need to verify a sample of such investments in the context of environment and social safeguard compliance verification and procurement monitoring.

GEOGRAPHIC BOUNDARIES OF THE PROGRAM

Activity	Geographic Boundary
Generation	
Grid-Connected Solar Photovoltaic & Wind	nationwide
Transmission	
Transmission Line Reconductoring	Java-Madura-Bali, Sumatra, Sulawesi
Transmission Line Maintenance CAPEX	Java-Madura-Bali, Sumatra, Sulawesi
Substation Transformer Uprating and Extension	Java-Madura-Bali, Sumatra, Sulawesi
Substation Transformer Maintenance CAPEX	Java-Madura-Bali, Sumatra, Sulawesi
Control Center Upgrades ^b	Sumatra and Sulawesi
Distribution	
Distribution Line Reconductoring and Extension	Java, Sulawesi
Distribution Transformer Uprating	Java, Sulawesi

Distribution Maintenance CAPEX	Java, Sulawesi
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The estimated budget allocated to this contract is 1,200,000 € excluding tax.

6.2 Implementation period

17. The implementation period of the RBL program is January 2026 to December 2031. Independent verification of claimed achievements by PLN will be required to cover the entire RBL program implementation period.

18. The contract will cover Round 2 and 3 (verification report 2.1, 2.2, 3.1 and 3.2) of the assignment. The contract may then be extended for the subsequent Rounds of the assignment subject to satisfactory performance or may be continued by the co-financiers of the RBL under the form of a direct appointment. Bidders will need to submit the technical proposal that cover Round 2 and 3 of the assignment while also demonstrating in its technical proposal the capacity to continue the assignment for subsequent verification rounds.

ARTICLE 7. Qualifications and key experts

Qualifications

19. The selected firm including its experts nominated to work on the assignment will have:

- 10 years' overall experience with five (5) years in monitoring, assessing, validation/verification of indicators and evaluating public and/or private sector energy sector development programs. Experience in verifying and tracking results achievements for disbursement, or similar as relevant to the TOR, will be preferred.
- Documented experience of developing monitoring and evaluation indicators, tools and systems measuring results/target achievement of large-scale (development/energy sector) programs.
- Verifiable statistical and research, monitoring and evaluation expertise, as relevant to the TORs.
- Documented experience of preparing quality reports which are concise and succinct to allow policy and technical decisions.
- At least one member of the nominated team of experts, preferably one monitoring or evaluation experts and one of the safeguard experts working on the assignment, will have prior work experience in Indonesia, preferably in the power sector, and are able to read, write, and converse in Bahasa. All experts are required to be able to read, write, and converse in English.

Key experts

20. It is up to the discretion of the firm to determine the composition of its team of experts in its proposal including number, expertise, and time input of team members unless specified otherwise. In its proposal, the firm needs to demonstrate among other (i) how the nominated team will meet the expectations of the assignment as described in this TOR and (ii) how the nominated team of experts is aligned with the firm's proposed methodology.

21. Interested firms shall be aware that local consultations will be largely in the local language (Bahasa) and some of the materials that will be used in the verification will need to be translated to the local language by the selected firm. The selected firm shall ensure that its team has sufficient capacity to undertake any translation and delivery in the national language. Interested firms are encouraged to engage national experts as part of its team, where feasible.

22. **At a minimum** the nominated team of experts must have the following key experts who meet the qualification and experience requirements as described below.

23. The nominated team must be comprised of the following experts:

i. Senior Monitoring and Evaluation Expert / Team Leader

Qualification:

- Master's Degree in Economics, Engineering, Statistics, Business Administration, Computer Sciences, or related field from a recognized university
- A first-level University Degree from a recognized university (Bachelor's Degree or equivalent in Economics, Engineering, Statistics, Business Administration, Computer Sciences, or related field) with an additional three (3) years of relevant experience will be given due consideration instead of Master's Degree

Experience:

- At least eight (8) years of relevant experience in the field of technical audits, monitoring and impact evaluation at the national and international level
- Solid understanding of technical audits, monitoring and evaluation tools and mechanisms and its implementation in the field as evidenced in the relevant field
- Very good understanding of state-owned enterprise functioning and protocols as evidenced in the past experience of the consultant
- Experience in technical audits, monitoring and impact evaluation in the power sector is preferred
- At least six (6) years in managing multifaceted projects and managing/leading multidisciplinary multicultural teams
- Strong communication skills with the ability to explain complex issues to clients who may not have the same level of technical expertise

ii. Monitoring and Evaluation Expert

Qualification:

- Master's Degree in Economics, Engineering, Statistics, Business Administration, Computer Sciences, or related field from a recognized university
- A first-level University Degree from a recognized university (Bachelor's Degree or equivalent in Economics, Engineering, Statistics, Business Administration, Computer Sciences, or related field) with an additional three (3) years of relevant experience will be given due consideration instead of Master's Degree

Experience:

- At least seven (7) years of relevant experience in the field of technical audits, monitoring and impact evaluation at the national and international level
- Solid understanding of technical audits, monitoring and evaluation tools and mechanisms and its implementation in the field as evidenced in the relevant field
- Very good understanding of state-owned enterprise functioning as evidenced in the past experience of the consultant
- Experience in technical audits, monitoring and impact evaluation in the power sector is preferred
- Ability to work with multidisciplinary multicultural teams

iii. Electric Power System Engineer

Qualification:

- Master's Degree in Electrical and/or Electronics Engineering, or related field from a recognized university
- A first-level University Degree from a recognized university (Bachelor's Degree or equivalent in Electrical and/or Electronics Engineering, or related field) with an additional three (3) years of relevant experience will be given due consideration instead of Master's Degree

Experience:

- At least seven (7) years of relevant experience in the field of power system design for power utilities
- Solid demonstrated experience in most, if not all, of the following:
 - Power systems design and support provided to development and construction teams working on power plant projects
 - Collection systems, including cable routing and cable sizing designed
 - System studies such as interconnection, power system or grounding system studies managed and performed
 - Negotiation of large generator interconnection agreements (LGIAs) and transmission service agreements (TSAs) supported, preferable with regards to solar PV and/or wind power generation and its implementation monitored
 - Interconnection standards, established interconnection requirements reviewed and compliance ensured
 - Procurement specifications for substation, transmission line and other subcontracts developed
 - Specifications for interconnection switchyard and solar PV and/or wind power plant substation including transformers, breakers, and power factor correction equipment developed
 - Drawings of grid interconnection and collection system for interconnection applications prepared
 - System data from client, utility, suppliers, and subcontractors for system modeling collected
 - Power transmission systems and its operation management optimized, preferably in context of integrating solar PV and wind power plants
 - Assurance provided that construction and interconnection protocols have been met.
- Very good understanding of state-owned enterprise functioning as evidenced in the past experience of the consultant
- Strong communication skills with the ability to explain complex issues to clients who may not have the same level of technical expertise
- Ability to work with multidisciplinary multicultural teams

iv. Human Resources Development Specialist

Qualification:

- Master's Degree in Human Resources, Psychology, Business Administration with Focus in Human Resources, or a related discipline
- Bachelor's Degree in Human Resources, Psychology, Business Administration with Focus in Human Resources, or a related discipline

Experience:

- At least seven (7) years in case of Master's Degree and at least fifteen (15 years) in case of Bachelor Degree of relevant experience, preferably in the context of power utilities
- Solid demonstrated experience in most, if not all, of the following:
 - Conducting workforce planning and workflow analysis with focus on increasing

- organization's gender equity
- Interviewing candidates and making hiring recommendations
- Developing performance plans and conducting follow-up evaluations
- Designing and delivering employee training programs including development of e-learning modules and experience with e-learning platforms and tools
- Designing and delivering mentorship programs
- Overseeing employee benefits programs, healthcare and retirement plans
- Ensuring organizations comply with applicable laws and regulations
- Very good understanding of state-owned enterprise functioning as evidenced in the past experience of the consultant is preferred

v. Social Safeguard Specialist

Qualification:

- Master's Degree in Applied Social Sciences/Social Work, Social Administration, Sociology, Anthropology, or Development Studies/Counseling from a recognized university
- A first-level University Degree from a recognized university (Bachelor's Degree or equivalent in Applied Social Sciences/Social Work, Social Administration, Sociology, Anthropology, or Development Studies/Counseling) with an additional three (3) years of relevant experience will be given due consideration instead of Master's Degree

Experience:

- At least seven (7) years overall relevant experience in social impact assessment and/or planning, implementation and monitoring of land acquisition, involuntary resettlement or indigenous peoples safeguards for internationally financed infrastructure projects
- Technical knowledge and experience in relevant areas such as social impact assessment, resettlement and/or indigenous peoples planning, social audits, corrective action planning, external monitoring, and implementation of other social safeguard activities for large infrastructure projects preferably in the power sector and in Indonesia
- Experience in supervisory work on-site with/for contractors or working on the implementation of infrastructural projects is an asset
- Experience with involuntary resettlement, indigenous peoples safeguards and/or effective stakeholder engagement/participation and grievance redress mechanism and other relevant international safeguard standards and policies (including relevant best international practices and/or guidelines and procedures) of multilateral financial institutions, especially the Asian Development Bank and/or World Bank, and their practices; and preferable in Indonesia
- Experience working in development in several countries; experience in Southeast Asia is an asset
- Demonstrated ability/experience working with multidisciplinary multicultural teams

vi. Environment Safeguard Specialist⁸

Qualification:

- Master's Degree in Environmental Science, Environmental Engineering, Agricultural Engineering, Biology, Ecology, Natural Resource Management, or related fields from a recognized university
- A first-level University Degree from a recognized university (Bachelor's Degree or equivalent

⁸ Firms submitting proposals may want to consider that the environment and/or social safeguard specialist have the expertise to use geographic information system for high level screening of potential impacts and/or include an expert in the team with that capability.

in Environmental Science, Environmental Engineering, Agricultural Engineering, Ecology, Natural Resource Management, or related field) with an additional three (3) years of relevant experience will be given due consideration instead of Master's Degree

Experience:

- At least seven (7) years overall relevant experience in environmental impact assessment and/or environmental safeguard management for internationally financed infrastructure projects
- Technical knowledge and experience in relevant areas such as environmental impact assessment, environmental studies, environmental management planning and management, and implementation of environmental safeguard activities on large infrastructure projects preferably in the power sector and in Indonesia
- Experience in supervisory work on-site with/for contractors or working on the implementation of infrastructural projects is an asset;
- Experience with environmental safeguards and other pertinent policies and standards (including best international practices and/or relevant guidelines and procedures on environmental safeguards, environmental assessment, environmental analysis, effective stakeholder participation and complaint resolution systems, and the regulations and legal framework governing environmental and social management) of multilateral financial institutions, especially the Asian Development Bank and World Bank, and their practices
- Experience working in development in several countries; experience in Southeast Asia is an asset
- Ability to work with multidisciplinary multicultural teams