

Terms of Reference

Framework Agreement for Five (5) International Consultants to Perform In-Country Applications of the Derisking Renewable Energy Investment (DREI) Framework

[For International Consultants without prior DREI experience¹]

Location:	Home-based with mission travel
Type of Contract:	Individual Contract as Framework Agreement
Starting Date:	October 1, 2020
Languages Required:	English
Expected duration of Agreement:	3 years (max. 300 working days) depending on demand for services and good performance
Supervisor:	UNDP unit commissioning DREI application (may vary for each assignment) and/or Principal Technical Advisor, Energy/Mitigation, New York

Background:

UNDP is the knowledge frontier organization for sustainable development in the UN Development System and serves as the integrator for collective action to realize the Sustainable Development Goals (SDGs). UNDP's policy work carried out at HQ, Regional and Country Office levels, forms a contiguous spectrum of deep local knowledge to cutting-edge global perspectives and advocacy. In this context, UNDP invests in the Global Policy Network (GPN), a network of field-based and global technical expertise across a wide range of knowledge domains and in support of the signature solutions and organizational capabilities envisioned in the Strategic Plan.

Within the GPN, the Bureau for Policy and Programme Support (BPPS) has the responsibility for developing all relevant policy and guidance to support the results of UNDP's Strategic Plan. BPPS's staff provides technical advice to Country Offices, advocates for UNDP corporate messages, represents UNDP at multi-stakeholder fora including public-private dialogues, government and civil society dialogues, and engages in UN inter-agency coordination in specific thematic areas. BPPS works closely with UNDP's Crisis Bureau (CB) to support emergency and crisis response. BPPS ensures that issues of risk are fully integrated into UNDP's development programmes. BPPS assists UNDP and partners to achieve higher quality development results through an integrated approach that links results-based management and performance monitoring with more effective and new ways of working. BPPS supports UNDP and partners to be more innovative, knowledge and data driven including in its programme support efforts.

UNDP's 2018-2021 Strategic Plan emphasizes the critical links between environmental sustainability, climate change mitigation and adaptation, and broader efforts to achieve the goals of the 2030 Agenda and Paris Agreement. As part of the Global Policy Network in the Bureau for Policy and Programme Support, UNDP's

¹ Candidates with prior DREI experience should refer to the parallel procurement, referenced "Framework Agreement for Two (2) International Consultants to Perform Applications of the Derisking Renewable Energy Investment (DREI) Framework – [For International Consultants with prior DREI experience]"

Nature, Climate Change, and Energy (NCE) Team promotes and scales up integrated whole-of-governance approaches and nature-based solutions that reduce poverty and inequalities, strengthen livelihoods and inclusive growth, mitigate conflict, forced migration and displacement, and promote more resilient governance systems that advance linked peace and security agendas.

The NCE Team works with governments, civil society, and private sector partners to integrate natural capital, environment and climate concerns into national and sector planning and inclusive growth policies; support country obligations under Multilateral Environmental Agreements; and implement the UN's largest portfolio of in-country programming on environment, climate change, and energy. This multi-billion dollar portfolio encompasses: Biodiversity and Ecosystem Services including forests; Sustainable Land Management and Desertification including food and commodity systems; Water and Ocean Governance including SIDS; Climate Change Mitigation and Adaptation; Renewable and Modern Energy; Extractive Industries; Chemicals and Waste Management; Environmental Governance and Green/Circular Economy and SCP approaches. This work advances crosscutting themes on innovative finance, digital transformation, capacity development, human rights, gender equality, health, technology, and South-South learning.

In addition to UNDP's bilateral partnerships on natural capital, environment and climate, UNDP is an accredited multilateral implementing agency of the Green Climate Fund (GCF), the Multilateral Fund (MLF), the Adaptation Fund (AF) and the Global Environment Facility (GEF) which includes the Global Environment Facility Trust Fund (GEF Trust Fund); the Nagoya Protocol Implementation Fund (NPIF); the Least Developed Countries Fund (LDCF); and the Special Climate Change Fund (SCCF)). As part of UNDP's partnership with these vertical funds, UNDP provides countries specialized integrated technical services for eligibility assessment, programme formulation, capacity development, policy advice, technical assistance, training and technology transfer, mobilization of co-financing, implementation oversight, results management and evaluation, performance-based payments and knowledge management services.

UNDP's approach to energy aligns with the SDG 7 targets (renewable energy, energy efficiency and energy access), and is formulated around a Signature Solution on energy as set out in UNDP's 2018-2021 Strategic Plan. Clean, reliable, and affordable energy is a key driver of sustainable development. UNDP's signature solution on energy has three main areas of focus: in low-income countries, on energy access (electrification, clean cooking), with a UNDP commitment to electrify 100 million individuals by 2030 in middle-income countries, helping achieve transformational change and accelerate a just energy transition, including a focus on smart cities (energy efficiency, e-mobility, rooftop PV, battery storage); and in crisis settings, providing sustainable energy solutions in situations of displacement, around energy as a means to build resilience.

UNDP has developed a clear, market transformation-based theory of change and offer on energy, with its Derisking Renewable Energy Investment (DREI) framework central to this offer. DREI is an innovative, quantitative methodology for developing countries to cost-efficiently select public instruments to scale up sustainable energy investment. With DREI, UNDP assists governments to systematically identify the barriers and risks which can hold back private sector investment, and then supports policymakers to put in place packages of targeted public interventions to address these risks. Detailed techno-economic modelling and analysis underlies this support.

The DREI framework includes a theory of change, various conceptual tools (such as derisking tables), reports and a suite of financial models and tools in Excel (including LCOE tools, financing cost tools, instrument costing tools). Collectively, these conceptual and financial tools bring methodological coherence, and create efficiencies in generating quantitative and graphic outputs. At present, the DREI framework is available for application in four distinct renewable energy sectors, both grid-connected and off-grid: utility-scale (grid-

connected PV or wind), grid-connected rooftop PV, off-grid solar PV-battery mini-grids, and off-grid pay-as-you-go solar home systems (SHS). For more information please visit www.undp.org/DREI.

In the context of the above, UNDP is looking to engage a pool of International Consultants to perform in-country applications of the DREI Framework. These in-country applications can take a range of forms, from lighter to more comprehensive, and can occur at either/or both the design phase or implementation phase of projects. The pool will comprise seven International Consultants, two (2) with prior DREI experience, and five (5) without prior DREI experience.

Description of Responsibilities:

UNDP is initiating a process to institutionalize DREI as a standard offer in its growing energy and climate projects and programs portfolio. Within this context, and to respond to increase in demand for DREI, UNDP is putting in place an expert pool of International Consultants (“DREI Apps Consultants”) to conduct in-country DREI applications and support the further development of the DREI framework. Consultants are expected to produce robust and high-quality analyses and financial models using established DREI methodologies and tools and contribute to dissemination of the results.

In performing these services, DREI Apps Consultants will work closely with all parties involved in the DREI application: UNDP Country Offices and local partners (including government partners), National Consultants engaged by the Country Office or commissioning unit to support the DREI Apps Consultants in performing in-country DREI analyses, as well as the DREI Core Team, who provide quality assurance and overall methodological guidance. Close collaboration with UNDP’s global energy team, including Regional Technical Advisors (RTAs) and Regional Policy Advisory (RPAs), is also foreseen where DREI applications fit into broader UNDP energy programs/projects. DREI Apps Consultants will report to the engagement lead for each specific assignment, which may vary but could include UNDP Country Offices, project/program managers and/or Principal Technical Advisor, Energy/Mitigation, New York. Given the technical nature of DREI, all outputs need to be technically cleared by the Principal Technical Advisor, Energy/Mitigation, New York.

Scope of work:

1. Orientation

- Consultants selected under this Framework Agreement are required to make themselves available for two half-days (at maximum) of remote orientation (split in several 2-3 hour blocks) upon project start;
- The sessions will cover an overview of DREI framework fundamentals, specificities of applying the DREI framework, best practices from recent DREI applications, case studies and practical exercises.

2. The following activities (Activity 1-5) are foreseen across two overall focus areas: first, in-country DREI applications, and second, DREI methodology development. Individual assignments under this Framework Agreement may comprise one, or several, of these activities, or identical activities but in different countries/sectors.

Focus Area 1: In-country DREI applications

Activity 1: Perform a *light* DREI application in a specific sector and country

This activity encompasses a lighter application of the DREI framework, focusing on the methodology’s stage 1 and 2, and generating findings related to financing cost waterfalls and

instrument selection. Lighter DREI applications are implemented, for example, at project design stage, to scan the risk environment across different sectors before selecting a sector for a full DREI analysis, or when testing barrier and risk tables for new sectors.

Stage 1: Risk environment

- Gather market information on the clean energy sector, including existing/planned investments, market barriers and relevant stakeholders. Using the template barrier and risk table, prepare a barrier and risk table tailored to the specific sector and country.
- Using the template DREI interview materials, prepare tailored interview materials for the specific sector and country.
- Arrange and perform structured interviews with private sector developer and/or investors in the clean energy technology in-country. These interviews can be performed remotely via telephone. Record both quantitative and qualitative findings. Treat all findings with full confidentiality.
- Using the DREI financing cost waterfall tool (Excel), generate financing cost waterfalls which identify how risks contribute to higher financing costs.

Stage 2: Public instrument selection

- Provide a matrix of the baseline public instruments being implemented by the national government or other development actors.
- Based on the interview data, select a package of public instruments to be used in the DREI analysis.
- Based on the interview data, determine the quantitative effectiveness of each selected public instrument in mitigating its targeted risk category and prepare post-derisking financing cost waterfalls.

Activity 2: Perform a *full* DREI application in a specific sector and country

This activity covers the full application of the DREI framework. A *full* DREI application goes beyond the content of a *light* DREI application and models as well instrument costs and project life-cycle costs (LCOE) to derive key performance metrics of the selected public instrument package.

Stage 1: Risk environment

- Gather market information on the clean energy sector, including existing/planned investments, market barriers and relevant stakeholders. Using the template barrier and risk table, prepare a barrier and risk table tailored to the specific sector and country.
- Using the template DREI interview materials, prepare tailored interview materials for the specific sector and country.
- Arrange and perform structured interviews with private sector developers and/or investors in the clean energy technology in-country. These interviews can be performed remotely via telephone. Record both quantitative and qualitative findings. Treat all findings with full confidentiality.
- Using the DREI financing cost waterfall tool (Excel), generate financing cost waterfalls which identify how risks contribute to higher financing costs.

Stage 2: Public instrument selection

- Provide a matrix of the baseline public instruments being implemented by the national government or other development actors.
- Based on the interview data, select a package of public instruments to be used in the DREI analysis.
- Using the DREI public instrument costing tool (Excel), model the anticipated cost of the selected package of public instruments. Determine reasonable underlying assumptions for the modelling, based on benchmarks in the country. Document the rationale and sources of assumptions.
- Based on the interview data, determine the quantitative effectiveness of each selected public instrument in mitigating its targeted risk category and prepare post-derisking financing cost waterfalls.

Stage 3: LCOE modelling

- Determine a suitable investment target (target installed capacity, target year) for the clean energy technology in the developing country under consideration for the modelling analysis.
- Determine a suitable approach to identifying the baseline technology, including the role of subsidies and non-cost reflective tariffs
- Using the DREI LCOE tool (Excel), perform modelling analyses of the clean energy technology in a pre-derisking and post-derisking scenario, and in comparison to the baseline technology.
- Determine reasonable data and assumptions (capacity factors, investment costs, operational costs, etc.) for the clean energy technology and the baseline technology to be used in the modelling analyses. Document the rationale and sources of assumptions.

Stage 4: Evaluation

- Using the DREI LCOE tool, generate standard performance metrics for the DREI analysis.
- Perform sensitivity analyses on a range of issues, including, where appropriate:
 - Fossil-fuel subsidies and fuel imports;
 - Different approaches to baseline calculation ;
 - Key assumptions (for example: fuel cost, capacity factors, investment costs, balancing costs);
 - The cost-efficiency of individual instruments, and different packages of instruments to identify the most cost efficient combination;
 - Different approaches to costing financial instruments.

Cross-cutting tasks:

- Populate, regularly update and share an Assumptions Book. The Assumptions Book will gather and summarize key data, information and assumptions to be used in the DREI analysis and report. The Assumptions Book acts as an efficient way to share this data, and to comment on it, amongst the team.
- At regular intervals in the consultancy, provide feedback and suggestions to UNDP regarding the methodology and functionality of the DREI tools, including any recommendations regarding their improvement.

Focus Area 2: Methodology development

Activity 3: Technical support with Excel models/tools for existing DREI methodologies

- General support to the DREI Core Team for improving and updating the existing suite of DREI financial models and tools (e.g. refining or adding functionalities of the tool, developing new automated graphical representations)

Activity 4: Develop a derisking table for a new sector

- Gather market information on investor activity in the new sector.
- Define key assumptions for the reference business model to be assessed.
- Identify potential stakeholder groups whose behavior can affect, either directly or indirectly, investor barriers.
- Identify investor barriers and then group barriers into independent risk categories.
- For each risk category, identify often-used public instruments (policy and financial derisking instruments).

Activity 5: Develop a life-cycle cost modeling tool for a new sector

- Define a baseline scenario for the new sector.
- Define modeling assumptions for the baseline and clean energy scenarios, including system design & investment costs, operational inputs, capital structure & financing, and load profiles.
- Develop a financial tool to model life-cycle costs of the baseline scenario and the clean energy scenario pre- and post-derisking
- Develop functionalities for sensitivity analyses and visualizing key outputs

Anticipated key deliverables:

The following deliverables are foreseen under this Framework Agreement. Depending on the activities selected for an individual assignment, a specific sub-set of these deliverables will be requested.

Focus Area	Description	Indicative deliverables
Focus Area 1	In-country DREI applications	Detailed work and mission plan submitted to UNDP for endorsement
		Regular status updates with DREI Core Team (e.g. interim check-ins, sharing interim drafts)
		Mission and meeting reports, where applicable (e.g. interview missions, meetings with national partners, dissemination mission)
		Completed versions of standardized DREI tools (e.g. LCOE tool, financing cost tool, instrument costing tool)
		Presentation materials setting out the quantitative and qualitative findings of the DREI analysis, using standardized templates (e.g. summary DREI report, full DREI report, PowerPoint slide deck)
		Dissemination activities with national partners (e.g. roundtables, webinars and stakeholder workshops to discuss and collect feedback on findings)
		Supporting materials to the DREI application (e.g. assumptions book)

Focus Area 2	Methodology Development	Detailed work plan
		Revised financial models for existing sectors
		Derisking table for new sector
		Financial modelling tools for new sector

Indicative level of effort

- The level of effort will be defined case-by-case for each assignment. Individual assignments under this Framework Agreement may comprise one, or several, activities, or identical activities but in different countries/sectors;
- An Indicative level of effort range per Activity is described below. The actual level of effort will vary depending on the local context (e.g. complexity of the sector) and the specifics of the activities conducted (e.g. number of structured interviews conducted, final DREI report format, number of missions, etc.):

Activity	Description	Indicative range
Activity 1	Perform a light DREI application in a specific sector and country	10-15 days
Activity 2	Perform a full DREI application in a specific sector and country	20-30 days
Activity 3	Technical support with Excel models/tools for existing DREI methodologies	1-10 days
Activity 4	Develop a derisking table for a new sector	10-15 days
Activity 5	Develop a financial modelling tool for a new sector	10-15 days

Key performance indicators:

- Effective, timely, high-quality, and often independent support;
- Professional and clear communication with national counterparts and local stakeholders;
- Timely and quality submission of deliverables, including completed tools and reports;
- Number of light DREI or full DREI applications conducted;
- Number of new sector methodologies developed.

Institutional Arrangements:

- The overall objective of this Framework Agreement is to facilitate and expedite the process by which UNDP can hire the services of a DREI Apps Consultant;
- Estimated level of effort including travel: approximately 100 working days over 12 months for each consultant. Maximum working days over the 3-year period would be 300 days per consultant;
- The Framework Agreement to be signed will be for a fixed all-inclusive daily fee;
- UNDP does not warrant that any quantity of services will be purchased during the term of the Framework Agreement as this will depend on forthcoming needs, availability of resources, and good performance;
- Once the Framework Agreement is signed, if there is a specific assignment, the focal person at UNDP would contact the Consultant by email informing of the specific deliverables and timeline;
- The consultant must advise within 48 hours whether s/he is available to deliver the requested service;
- Thereafter a Purchase Order will be raised. Financial commitments will only be established each time the services are requested within the scope of the Framework Agreement through the transmitted purchase order.

- IC as a Framework agreement is non-exclusive (i.e. it does not prohibit UNDP from entering into another such agreement with another individual or entities);
- The consultant will work from home with a limited amount of mission travel not exceeding 90 days' travel in the 3-year period;
- The Consultant will be given access to relevant information necessary for execution of the tasks under this assignment;
- The Consultant will be responsible for providing her/his own working station (i.e. laptop, internet, phone, scanner/printer, etc.) and must have access to a reliable internet connection;
- The consultant will engage with the Supervisor by email and Skype on an as needed basis. In addition, the consultant will also engage with other UNDP colleagues based in NY, relevant regional hubs, and country offices;
- Given the global consultations to be undertaken during this assignment, the consultant is expected to be reasonably flexible with his/her availability for such consultations taking into consideration different time zones where applicable;
- Payments will be made upon satisfactory delivery and acceptance of outputs, submission of a time sheet and certification of payment form, and acceptance and confirmation by the Supervisor on days worked (with a "day" calculated as 8 hours of work).

Travel:

- International travel may be required to countries in the following regions: Africa, Latin America, Southeast Asia. Over the 3-year period, a maximum of 6 missions are foreseen per year, with expected mission duration of approximately 5 days per mission. Exact locations to be determined and discussed upon commencement of each specific assignment;
- Any necessary mission travel must be approved in advance and in writing by the Supervisor;
- The BSAFE course must be successfully completed prior to commencement of travel;
- Consultants are responsible for obtaining any visas needed in connection with travel with the necessary support from UNDP;
- Individual Consultants are responsible for ensuring they have vaccinations/inoculations when travelling to certain countries, as designated by the UN Medical Director;
- Consultants are required to comply with the UN security directives set forth under <https://dss.un.org/dssweb/>;
- The consultant will be responsible for making his/her own mission travel arrangements in line with UNDP travel policies;
- All related travel expenses will be reimbursed as per UNDP rules and regulations upon submission of an F-10 claim form and supporting documents. Costs for mission travel should not be included in financial proposal.

Competencies:

Corporate

- Demonstrates integrity by modelling the UN's values and ethical standards;
- Promotes the vision, mission, and strategic goals of UNDP;
- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability;
- Treats all people fairly without favouritism;
- Fulfills all obligations to gender sensitivity and zero tolerance for sexual harassment.

Functional

- Demonstrated ability to work effectively as part of a collaborative team and process;
- Ability to work with multiple stakeholders across a wide range of disciplines;
- Ability to communicate effectively in writing to in a simple and concise manner;
- Able to work independently and remotely with minimal supervision;
- Ability to work under pressure and time constraints.

Technical

- Knowledge of techno-economic modelling for low-carbon energy;
- Knowledge of low-carbon energy solutions, including key trends, and innovative business and finance models;
- Knowledge of public instruments to promote low-carbon energy.

Client Orientation, Professionalism, Communications

- Ability to make new and useful ideas work;
- Ability to improve performance and satisfaction;
- Capable of working in a high-pressure environment with sharp deadlines, managing many tasks simultaneously;
- Strong interpersonal skills, able to communicate and work with diverse people at Headquarters, Regional Bureaux, Country Offices and field-based.

Qualifications:

Education

- Master's degree or equivalent in energy, engineering, finance, economics, business, or another related field. (Max 10 points)

Experience

- At least 5 years of professional experience with renewable energy investment and direct exposure to one or several of the following sectors: utility-scale solar and wind, solar PV-battery mini-grids, pay-as-you-go solar home systems. Experience around public instruments to promote investment in renewable energy, will be an advantage. (Max 20 points)
- Experience with research-based financial modelling and quantitative analysis studies for low-carbon energy (e.g. LCOE modelling). (Max 30 points)
 - To demonstrate this experience, please submit a financial modelling sample, which can include techno-economic analyses, in Excel format. The modelling sample will be assessed on its sophistication, coherence, organization and use of financial analysis concepts.
 - The sample must relate to a recent (in the last 3 years) analysis in a developing country context and be focused on a renewable energy sector. The sample must also be the Consultant's own work.
- Experience working in developing country contexts in the regions of assignment (i.e. Africa, Latin America, Southeast Asia) preferred. (Max 5 points)
- Experience working with multilateral organizations and the UN system preferred. (Max 5 points)

Languages

- Excellent oral and written communications and presentations skills in English. (Pass/Fail)
- Strong oral and written communication skills in French, Arabic, and/or Spanish is an advantage. (Max 5 points)

Evaluation method:

- Only those applications which are responsive and compliant will be evaluated;
- Offers will be evaluated according to the Combined Scoring method – where the technical criteria will be weighted at 70%, and the financial offer will be weighted at 30%;
- The technical criteria (education, experience (including modelling sample), language [max. 75 points], written technical test [50 points] and technical interview [max. 75 points]) will be based on a maximum 200 points;
- Top 15 candidates that have achieved a minimum of 52.5 points from the review of the education, experience (including modelling sample) and language, will be considered for the written technical test;
- Top 8 candidates that have achieved a minimum of 35 points on the written technical test will be considered for the technical interview;
- Candidates obtaining 52.5 points or higher on the technical interview will be deemed technically qualified and considered for financial evaluation;
- Financial score [max 100 points] shall be computed as a ratio of the proposal being evaluated and the lowest priced proposal of those technically qualified;
- The financial proposal shall specify an all-inclusive daily fee. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal must additionally include a breakdown of this daily fee.
- The top 5 applicants receiving the highest combined score and that have accepted UNDP's General Terms and Conditions will be awarded the contract.

Documentation to be submitted:

- Applicants must submit a duly completed and signed UNDP Personal History form (P11) and/or CV including Education/Qualification, Professional Certification, Employment Records /Experience to be downloaded from the below link;
- Applicants must submit a financial or techno-economic modelling sample in Excel format (1 file, maximum 3 worksheets, max file size 10 MB);
- Applicants must reply to the mandatory questions asked by the system when submitting the application;
- Applicants must submit a duly completed and signed Annex II Offeror's letter to UNDP confirming interest and availability for the Individual Contractor (IC) assignment to be downloaded from the UNDP procurement site.

UNDP Personal History form (P11) required of all applicants: [P11](#)

General Conditions of Contract for the ICs: [GTC](#)