



## REQUEST FOR PROPOSAL (RFP) (For Low-Valued Services)

NAME & ADDRESS OF FIRM	DATE: August 18, 2020
	REFERENCE: MyRFP_2020_018

Dear Sir / Madam:

We kindly request you to submit your Proposal for **Development Of A National Energy System Modelling For Supporting Climate Policy Decision Making Using An Integrated Assessment Model (IAM) For Malaysia** .

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before Friday, September 04, 2020 and via email to the address below:

**United Nations Development Programme**  
**Menara PJH, Level 10, No 2, Jalan Tun Abdul Razak, Precinct 2, 62100 Putrajaya.**  
**procurement.my@undp.org**

Your Proposal must be expressed in the English language, and valid for a minimum period of **90 days**.

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the address above on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your Proposal by email, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of UNDP requirements.

The Proposal that complies with all of the requirements, meets all the evaluation criteria and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

<http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html>

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link :

[https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscoc/conduct\\_english.pdf](https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscoc/conduct_english.pdf)

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

*Patrick Pee*  
*Assistant Resident Representative*  
8/18/2020

## Description of Requirements

Context of the Requirement	Development of a national energy system model for supporting climate policy decision making using an integrated assessment model (IAM) for Malaysia			
Implementing Partner of UNDP	Ministry of Environment and Water Malaysia			
Brief Description of the Required Services <sup>1</sup>	The development of an economy-wide long-term modelling tool for Malaysia (using an Integrated Assessment Model – IAM) for the purpose of assessing mid-to-long-term climate and energy related policies and programs (e.g. ex-ante analysis and in communicating and updating the country's Nationally Determined Contribution – NDC).			
List and Description of Expected Outputs to be Delivered	<p>The expected outputs of the work are:</p> <ul style="list-style-type: none"> <li>(a) A national integrated energy system model for Malaysia with time horizon covering 2010 to 2050;</li> <li>(b) A detailed model documentation;</li> <li>(c) Capacity building on the model with user guide provided as teaching materials (and hands-on sessions);</li> <li>(d) A report study on decarbonisation pathways for Malaysia and recommendation for its NDC.</li> </ul>			
Person to Supervise the Work/ Performance of the Service Provider	UNDP Programme Manager and Undersecretary, Climate Change Division, Ministry of Environment and Water, Malaysia			
Frequency of Reporting	Monthly			
Progress Reporting Requirements	Monthly check ins with the Climate Change Division with a presentation on consultancy progress and status of deliverables.			
Location of work	<input checked="" type="checkbox"/> At Contractor's Location			
Expected duration of work	8 calendar months			
Target start date	01 October 2020			
Latest completion date	31 May 2021			
Travels Expected	At least once (Technical hand-over session)			
	<b>Destination/s</b>	<b>Estimated Duration</b>	<b>Brief Description of Purpose of the Travel</b>	<b>Target Date/s</b>
	Kuala Lumpur	7 days	Technical Hand-over session of the model	April 2021

<sup>1</sup> A detailed TOR may be attached if the information listed in this Annex is not sufficient to fully describe the nature of the work and other details of the requirements.

Special Security Requirements	<input checked="" type="checkbox"/> Completion of UN's Basic and Advanced Security Training <input checked="" type="checkbox"/> Comprehensive Travel Insurance				
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	Not applicable				
Implementation Schedule indicating breakdown and timing of activities/sub-activities	<input checked="" type="checkbox"/> Required				
Names and curriculum vitae of individuals who will be involved in completing the services	<input checked="" type="checkbox"/> Required				
Currency of Proposal	<input checked="" type="checkbox"/> United States Dollars				
Value Added Tax on Price Proposal <sup>2</sup>	<input checked="" type="checkbox"/> must be inclusive of VAT and other applicable indirect taxes				
Validity Period of Proposals (Counting for the last day of submission of quotes)	<input checked="" type="checkbox"/> 90 days  In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.				
Partial Quotes	<input checked="" type="checkbox"/> Not permitted				
Payment Terms <sup>3</sup>	Outputs	Percentage	Timing	Condition for Payment Release	
	Upon satisfactory submission and acceptance of workplan	10%	15 October 2020	Within thirty (30) days from the date of meeting the following conditions: a) UNDP's written acceptance (i.e.,	
	Upon satisfactory submission and acceptance of the model and its documentation	40%	31 January 2021		

<sup>2</sup> VAT exemption status varies from one country to another. Pls. check whatever is applicable to the UNDP CO/BU requiring the service.

<sup>3</sup> UNDP preference is not to pay any amount in advance upon signing of contract. If the Service Provider strictly requires payment in advance, it will be limited only up to 20% of the total price quoted. For any higher percentage, or any amount advanced exceeding \$30,000, UNDP shall require the Service Provider to submit a bank guarantee or bank cheque payable to UNDP, in the same amount as the payment advanced by UNDP to the Service Provider.

	<p>Upon satisfactory submission and acceptance of first draft full report</p> <p>Teaching module: On-line training module (at least 3 sessions)</p> <p>Upon satisfactory submission and acceptance of teaching material (videos, PPTs, and any softcopy/hardcopy materials)</p> <p>Upon satisfactory submission and acceptance of final draft full report</p>	<p>20%</p> <p>10%</p> <p>10%</p> <p>10%</p>	<p>28 February 2021</p> <p>31 March 2021</p> <p>31 March 2021</p> <p>15 May 2021</p>	<p>not mere receipt) of the quality of the outputs; and</p> <p>b) Receipt of invoice from the Service Provider.</p>
Person(s) to review/inspect/ approve outputs/complete d services and authorize the disbursement of payment	UNDP Programme Manager and the Undersecretary, Climate Change Division, Ministry of Environment and Water, Malaysia			
Type of Contract to be Signed	<input checked="" type="checkbox"/> Contract for Goods & Services			
Criteria for Contract Award	<input checked="" type="checkbox"/> Highest Combined Score (based on the 70% technical offer and 30% price weight distribution) <input checked="" type="checkbox"/> Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.			
Criteria for the Assessment of Proposal	<p><b>Technical Proposal (70%)</b></p> <input checked="" type="checkbox"/> Expertise of the Firm (35%) <input checked="" type="checkbox"/> Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan (40%) <input checked="" type="checkbox"/> Management Structure and Qualification of Key Personnel (25%)  <p><b>Financial Proposal (30%)</b></p> <p>To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.</p>			
UNDP will award the contract to:	<input checked="" type="checkbox"/> One and only one Service Provider			
Contract General Terms and Conditions <sup>4</sup>	<input checked="" type="checkbox"/> General Terms and Conditions for contracts (goods and/or services) Applicable Terms and Conditions are available at: <a href="http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html">http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</a>			

<sup>4</sup> Service Providers are alerted that non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this procurement process.

Annexes to this RFP <sup>5</sup>	<input checked="" type="checkbox"/> Form for Submission of Proposal (Annex 2) <input checked="" type="checkbox"/> Detailed TOR (Page 7 till 10)  <b>Note: Please separate the Financial Proposal (Section D &amp; E) and ensure that is password protected.</b>
Contact Person for Inquiries (Written inquiries only) <sup>6</sup>	Procurement.my@undp.org  Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.
Other Information [pls. specify]	Please refer to the detailed Terms of Reference (TOR) for all other information.

<sup>5</sup> Where the information is available in the web, a URL for the information may simply be provided.

<sup>6</sup> This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

## **Terms of Reference**

### **BACKGROUND**

The development of effective long-term climate strategies to implement appropriate and cost-effective mitigation actions rests upon the availability of among others, the application of sound assessment methods and tools for evaluating policies, strategies and programmes to enhance transparency and to inform sound climate action planning. Unfortunately, many developing countries including Malaysia lack comprehensive long-term sectoral mitigation analysis. These are among the challenges highlighted in Malaysia's First and Second Biennial Update Report, where the development and assessment of (long-term) national mitigation plans and strategies has been encumbered by the lack of expertise in conducting economy-wide long-term scenario assessment (using sophisticated modelling tools). To this effect, the Ministry of Environment and Water is in the process of strengthening its function under its Climate Change Division and a new unit dedicated for Greenhouse Gas (GHG) inventory and mitigation analysis has been established recently in 2019. Capacity building in the area of modelling hence, is very much a work-in-progress with future work focusing on strengthening capacity building particularly on the relevant tools and applications to facilitate the use of improved methodologies, including development of an economy-wide long-term modelling that is needed to communicate and maintain successive Nationally Determined Contribution (NDC). In this regard, the application of sound assessment methods and tools (stationed in-house) which focuses on sector-specific mitigation scenario analysis, plays an important role for transparency related activities in the context of communicating and tracking the progress made in implementing and achieving the NDC. The tool will enable the ministry to access, manage, update and run the model when needed for the purpose of communicating and updating the NDC or as ex-ante analysis for climate related policies (e.g. updating mitigation plans).

### **DESCRIPTION OF RESPONSIBILITIES**

Under the overall guidance of UNDP Malaysia and the Ministry of Environment and Water (KASA), the consultant will work closely with the Climate Change Division, KASA. The consultancy services aim to support information by developing a national energy system models for long-term strategic energy and climate policy analysis, with a focus both on the representation of the energy system in the model, the model itself and the interpretation of the model results. The analysis will provide a 'robust' analysis with regard to decarbonisation pathways for Malaysia and recommendation for its NDC with results that can be verified and explainable, with transparency on the underlying assumptions.

The model is intended as a useful tool for decision makers, particularly to address ex-ante analysis for Malaysia's long-term GHG mitigation assessment and to serve as national baselines (for climate change reporting as part of Malaysia's commitment under the Paris Agreement) which are the key elements of climate change policymaking and are used to support national climate change policy preparation, set national targets and goals, provide a benchmark for mitigation targets, estimate the mitigation impact and assess progress in implementation.

The consultant will thus, perform the following tasks:

- (a) Develop a national integrated energy system model for Malaysia with time horizon covering 2010 to 2050 ;
- (b) Provide model documentation;

- (c) Provide capacity building (hands-on) on the model with user guide provided as teaching materials (videos, PPTs, and any softcopy/hardcopy materials) and conduct at least 2 workshop sessions;
- (d) Provide a study report on decarbonisation pathways for Malaysia and recommendation for its NDC. For this reason, the 'model results' refers to:
  - (i) Results from baseline (i.e. Reference case baseline) and sectoral mitigation scenarios, by taking into account the national circumstances (sectoral breakdown etc.); and
  - (ii) Results from an alternative pathway, with description on the relative magnitude of emission reductions compared with total baseline emissions as a result of mitigation actions, with focus given in 2030.

## **METHODOLOGY**

The modelling approach for the development of a national integrated energy system model for Malaysia will be based on a modelling framework of a bottom-up optimisation model; TIMES (The Integrated MARKAL-EFOM System) model generator.

## **DELIVERABLES AND TIMELINE**

The Consultant shall be responsible for the delivery, content, technical quality and accuracy of the report. The outputs of the work are:

- (e) A national integrated energy system model for Malaysia with time horizon covering 2010 to 2050;
- (f) A detailed model documentation;
- (g) Capacity building (hands-on) on the model with user guide provided as teaching materials (videos, PPTs, and any softcopy/hardcopy materials) and at least conduct 2 workshop sessions; and
- (h) A study report on decarbonisation pathways for Malaysia and recommendation for its NDC.

## **TERMS OF PAYMENT**

The fee is payable upon satisfactory completion and acceptance of the deliverables by Ministry of Environment & Water and UNDP Malaysia. Please refer the below schedule of payments. Prices should be in USD inclusive of all expenses (professional fee, travel, vehicles and other relevant costs such as allowances, taxes) to deliver the outputs.

<b>Deliverable milestone</b>	<b>Deadline</b>	<b>Percentage</b>
Upon satisfactory submission and acceptance of workplan	15 October 2020	10%
Upon satisfactory submission and acceptance of the model and its documentation	31 January 2021	40%
Upon satisfactory submission and acceptance of first draft full report	28 February 2021	20%
Teaching module: On-line training module (at least 3 sessions)	31 March 2021	10%
Upon satisfactory submission and acceptance of teaching material (videos, PPTs, and any softcopy/hardcopy materials)	31 March 2021	10%
Upon satisfactory submission and acceptance of final draft full report	15 May 2021	10%

## **DURATION**

The project is expected to be completed in 8 months after signing of work contract by successful bidder. The deliverables and timeline are as per the Financial Proposal form. The consultancy will take place from 1 October 2020.

## **EXPERTISE REQUIRED**

### **Composition Of Team**

The contractor team shall have a **maximum number of 3 key personnel**. Additional members beyond the team composition and scope of work indicated in the terms of reference will not be considered and evaluated in the technical and financial evaluation. CVs of key personnel should be included in the technical proposal. Eligibility criteria for the personnel are as follows:

#### **1. Team Leader**

##### **Education**

- PhD in engineering /energy economics; and
- Expert in advanced energy-economic-environment modelling including in the application of TIMES model (model development at national or regional level).

##### **Experience**

- Must have at least 15 years of proven experience in energy system modelling and policy analysis, particularly in energy, climate policy analysis and sustainable energy transition;
- Must have at least 10 years of experience in using TIMES/MARKAL model in consultancy projects/research including in developing countries' in the area of climate change impacts, scenario analysis and low carbon pathways/low carbon economy (at a national level);
- Must have at least 3 project experiences in developing an energy system model at a national/regional level;
- Strong research background in the related field (energy system modelling and policy analysis, particularly in energy, climate policy analysis and sustainable energy transition) with publication (as main author or co-author) of at least 30 papers in journal papers; and
- Advanced knowledge within the area of energy system model that has/had been applied for Malaysia is an asset.

#### **2. Team Members (2)**

##### **Education**

- Each member should have Master's degree in either of the following -environmental sciences, engineering, energy and economics, natural resources management or other closely related field.

**Experience**

- Each team member must have a proven record of working with TIMES energy system model and developing energy and climate policy scenarios at national, regional or global level.
- Any experiences on their work contribution to government policy modelling and analysis is a preferable asset.

**Language Requirement**

Fluency in both written and spoken English.

**FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL<sup>7</sup>****(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery<sup>8</sup>)**

[insert: Location].

[insert: Date]

To: [insert: Name and Address of UNDP focal point]

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated [specify date], and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions :

**A. Qualifications of the Service Provider**

*The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following :*

- a) Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations;*
- b) Business Licenses – Registration Papers, Tax Payment Certification, etc.*
- c) Latest Audited Financial Statement – income statement and balance sheet to indicate its financial stability, liquidity, credit standing, and market reputation, etc. ;*
- d) Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contract references;*
- e) Certificates and Accreditation – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.*
- f) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.*

**B. Proposed Methodology for the Completion of Services**

*The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be*

<sup>7</sup> This serves as a guide to the Service Provider in preparing the Proposal.

<sup>8</sup> Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

*appropriate to the local conditions and context of the work.*

**C. Qualifications of Key Personnel**

*If required by the RFP, the Service Provider must provide :*

- a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and
- c) Written confirmation from each personnel that they are available for the entire duration of the contract.

**D. Cost Breakdown per Deliverable\* (To be separated with password protected)**

	Deliverables	Percentage of Total Price (Weight for payment)	Price (USD)
1	Upon satisfactory submission and acceptance of workplan	10%	
2	Upon satisfactory submission and acceptance of the model and its documentation	40%	
3	Upon satisfactory submission and acceptance of first draft full report	20%	
4	Teaching module: On-line training module (at least 3 sessions)	10%	
5	Upon satisfactory submission and acceptance of teaching material (videos, PPTs, and any softcopy/hardcopy materials)	10%	
6	Upon satisfactory submission and acceptance of final draft full report	10%	
	Total	100%	

*\*This shall be the basis of the payment tranches*

**E. Cost Breakdown by Cost Component [This is only an Example]: (To be separated with password protected)**

Description of Activity	Remuneration per Unit of Time	Total Period of Engagement	No. of Personnel	Total Rate
<b>I. Personnel Services</b>				
1. Team leader				
2. Team member				
3. Team member				
<b>II. Out of Pocket Expenses</b>				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Reproduction				

5. Equipment Lease				
6. Others				
<b>III. Other Related Costs</b>				

*[Name and Signature of the Service Provider's  
Authorized Person]*

*[Designation]*

*[Date]*