Enabel

Tender Specifications

Public service contract for 'Buildings' Energy Performance tool '

Open procedure

Navision code: BEL22008-10019

Belgian development agency

enabel.be

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1 General remarks

1.1 Derogations from the General Implementing Rules

Section 4, '*Specific contractual and administrative conditions'* of these Tender Specifications (CSC/Cahier Spécial des Charges) holds the specific administrative and contractual provisions that apply to this public contract by way of derogation from the Royal Decree of 14.01.2013 or as a complement or an elaboration thereof.

These tender documents derogate from Art. article 25§2 of the General Implementing Rules (see point 4.7 "Performance bond (Art. 25-33)" p.26, to allow the participation of local tenderers.

1.2 Contracting authority

The contracting authority of this public contract is Enabel, the Belgian development agency, public-law company with social purposes, with its registered office at Rue Haute 147, 1000 Brussels in Belgium (enterprise number 0264.814.354, RPM/RPR Brussels). Enabel has the exclusive competence for the execution, in Belgium and abroad, of public service tasks of direct bilateral cooperation with partner countries. Moreover, it may also perform other development cooperation tasks at the request of public interest organisations, and it can develop its own activities to contribute towards realisation of its objectives.

For this contract, Enabel is represented by Heidi DE PAUW Country Director.

1.3 Institutional framework of Enabel

The general framework of reference in which Enabel operates is:

- The Belgian Law on Development Cooperation of 19 March 2013[1];

- The Belgian Law of 21 December 1998 establishing the Belgian Technical Cooperation as a public-law company[2];

- The Belgian Law of 23 November 2017 changing the name of the Belgian Technical Cooperation and defining the missions and functioning of Enabel, the Belgian development agency, published in the Belgian Official Gazette on 11 December 2017.

The following initiatives are also guiding Enabel in its operations and are given as main examples:

- In the field of international cooperation: the United Nations Sustainable Development Goals and the Paris Declaration on the harmonisation and alignment of aid;
- In the field of the fight against corruption: the Law of 8 May 2007 approving the United Nations Convention against Corruption, adopted in New York on 31 October 2003[3], as well as the Law of 10 February 1999 on the Suppression of Corruption transposing the Convention on Combating Bribery of Foreign Public Officials in International Business Transactions;
- In the field of Human Rights: the United Nations' Universal Declaration of Human Rights (1948) as well as the 8 basic conventions of the International Labour Organization[4] on Freedom of Association (C. n°87), on the Right to Organise and Collective Bargaining (C. n°98), on Forced

[1] Belgian Official Gazette of 30 December 1998, of 17 November 2001, of 6 July 2012, of 15 January 2013 and of 26 March 2013.
[2] Belgian Official Gazette of 1 July 1999.

[3] Belgian Official Gazette of 18 November 2008.
[4] http://www.ilo.org/ilolex/french/convdisp1.htm.

Labour (C. n°29 and 105), on Equal Remuneration and on Discrimination in Respect of Employment (C. n°100 and 111), on Minimum Age for Admission to Employment (C. n°138), on the Prohibition of the Worst Forms of Child Labour (C. n°182);

- In the field of environmental protection: The Climate Change Framework Convention of Paris, 12 December 2015;

- The first Management Contract contracting Enabel and the Belgian federal State (approved by the Royal Decree of 17.12.2017, Belgian Official Gazette 22.12.2017) that sets out the rules and the special conditions for the execution of public service tasks by Enabel on behalf of the Belgian State.
- Enabel's Code of Conduct of January 2019, Enabel's Policy regarding sexual exploitation and abuse of June 2019 and Enabel's Policy regarding fraud and corruption risk management of June 2019;

1.4 Rules governing the public contract

- The following, among other things, apply to this public contract:
- The Law of 17 June 2016 on public procurement[5];
- The Law of 17 June 2013 on justifications, notification and legal remedies for public contracts and certain contracts for works, supplies and services[6];
- The Royal Decree of 18 April 2017 on the awarding of public contracts in the classic sectors[7];
- The Royal Decree of 14 January 2013 establishing the General Implementing Rules for public procurement and for concessions for public works[8];
- Circulars of the Prime Minister with regards to public procurement.
- All Belgian regulations on public contracts can be consulted on www.publicprocurement.be.
- Enabel's Policy regarding sexual exploitation and abuse – June 2019;
- Enabel's Policy regarding fraud and corruption risk management – June 2019;
- [local legislation with regards to sexual harassment at the workplace or equivalent]
- Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation – 'GDPR'), and repealing Directive 95/46/EC.
- Law of 30 July 2018 on the protection of natural persons with regard to the processing of personal data. ;

All Belgian regulations on public contracts can be consulted on www.publicprocurement.be; Enabel's Code of Conduct and the policies mentioned above can be consulted on Enabel's website via https://www.enabel.be/content/integrity-desk.

[5] Belgian Official Gazette 14 July 2016.
[6] Belgian Official Gazette of 21 June 2013.
[7] Belgian Official Gazette 9 May 2017.
[8] Belgian Official Gazette 27 June 2017.

1.5 Definitions

The following definitions apply to this contract:

The tenderer: An economic operator submitting a tender;

The contractor/ service provider: The tenderer to whom the public contract is awarded;

The contracting authority: Enabel, represented by the Resident Representative of Enabel in Palestine,

The tender: Commitment of the tenderer to perform the public contract under the conditions that he has submitted;

Days: In the absence of any indication in this regard in the Tender Specifications and the applicable regulations, all days should be interpreted as calendar days;

Procurement documents: Tender Specifications including the annexes and the documents they refer to;

Technical specifications: A specification in a document defining the characteristics of a product or a service, such as the quality levels, the environmental and climate performance levels, the design for all needs, including accessibility for people with disabilities, and the evaluation of conformity, of product performance, of the use of the product, safety or dimensions, as well as requirements applicable to the product as regards the name by which it is sold, terminology, symbols, testing and test methods, packaging, marking or labelling, instructions for use, the production processes and methods at every stage in the life cycle of the supply or service, as well as the evaluation and conformity procedures;

Variant: An alternative method for the design or the performance that is introduced either at the demand of the contracting authority, or at the initiative of the tenderer;

Option: A minor and not strictly necessary element for the performance of the contract, which is introduced either at the demand of the contracting authority, or at the initiative of the tenderer;

Inventory: The procurement document which splits up the performance in different items and specifies the quantity or the method to determine the price for each of them;

General Implementing Rules (GIR): Rules laid down in the Royal Decree of 14 January 2013 establishing the General Implementing Rules for public procurement and for concessions for public works;

The Tender Specifications (Cahier spécial des charges/CSC): This document and its annexes and the documents it refers to;

BDA: Belgian Public Tender bulletin;

OJEU: Official Journal of the European Union;

OECD: Organisation for Economic Cooperation and Development;

E-tendering: Through the E-tendering platform tenderers can submit and open electronic tenders/requests to participate;

Corrupt practices: The offer of a bribe, gift, gratuity or commission to any person as an inducement or reward for performing or refraining from any act relating to the award of a contract or performance of a contract already concluded with the contracting authority;

Litigation: Court action.

Subcontractor in the meaning of public procurement regulations: The economic operator proposed by a tenderer or contractor to perform part of the contract. The subcontractor is understood as the economic operator with the capacity which the applicant or tenderer relies upon or to whom he entrusts all or part of his engagements.

Controller in the meaning of the GDPR: the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data.

Sub-contractor or processor in the meaning of the GDPR: a natural or legal person, public authority, agency or other body which processes personal data on behalf of the controller.

Recipient in the meaning of the GDPR: a natural or legal person, public authority, agency or another body, to which the personal data are disclosed, whether a third party or not.

Personal data: any information relating to an identified or identifiable natural person ('data subject'); an identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

1.6 Processing of personal data by the contracting authority and confidentiality

1.6.1 Processing of personal data by the contracting authority

The contracting authority undertakes to process the personal data that are communicated to it in response to the Call for Tenders with the greatest care, in accordance with legislation on the protection of personal data (General Data Protection Regulation, GDPR). Where the Belgian law of 30 July 2018 on the protection of natural persons with regard to the processing of personal data contains stricter provisions, the contracting authority will act in accordance with said law.

1.6.2 Confidentiality

The tenderer or contractor and Enabel are bound to secrecy vis-à-vis third parties with regards to any confidential information obtained within the framework of this public contract and will only divulge such information to third parties after receiving the prior written consent of the other party. They will disclose this confidential information only among appointed parties involved in the assignment. They guarantee that said appointed parties will be adequately informed of their obligations in respect of the confidential nature of the information and that they shall comply therewith.

PRIVACY NOTICE OF ENABEL: Enabel takes your privacy serious. We undertake to protect and process your personal data with due care, transparently and in strict compliance with privacy protection legislation.

See also: https://www.enabel.be/content/privacy-notice-enabel

1.7 Deontological obligations

1.7. Any failure to comply with one or more of the deontological clauses may lead to the exclusion of the candidate, tenderer or contractor from other public procurement for Enabel.

1.7.2. For the duration of the contract, the contractor and his staff respect human rights and undertake not to go against political, cultural or religious customs of the beneficiary country. The tenderer or contractor is bound to respect fundamental labour standards, which are internationally agreed upon by the International Labour Organisation (ILO), namely the conventions on union freedom and collective bargaining, on the elimination of forced and obligatory labour, on the elimination of employment and professional discrimination and on the abolition of child labour.

1.7.3. In accordance with Enabel's Policy regarding sexual exploitation and abuse, the contractor and his staff have the duty to behave in an irreproachable manner towards the beneficiaries of the projects and towards the local population in general. They must abstain from any acts that could be considered a form of sexual exploitation or abuse and they must abide by the basic principles and guidelines laid down in this policy.

1.7.4. Any attempt of a candidate or a tenderer to obtain confidential information, to proceed to illicit arrangements with competitors or to influence the evaluation committee or the contracting authority during the investigation, clarification, evaluation and comparison of tenders and candidates procedure will lead to the rejection of the application or the tender.

1.7.5. Moreover, in order to avoid any impression of risk of partiality or connivance in the follow-up and control of the performance of the public contract, it is strictly forbidden to the contractor to offer, directly or indirectly, gifts, meals or any other material or immaterial advantage, of whatever value, to appointees of the contracting authority who are concerned, directly or indirectly, by the follow-up and/or control of the performance of the contract, regardless of their hierarchical rank.

1.7.6. The public contractor commits to supply, upon the demand of the contracting authority, any supporting documents related to the performance conditions of the contract. The contracting authority will be allowed to proceed to any desk review or on-the-spot check, which it considers necessary to collect evidence to support the presumption of unusual commercial expenditure. Depending on the gravity of the facts observed, the contractor having paid unusual commercial expenditure is liable to have his contract cancelled or to be permanently excluded.

1.7.7. In accordance with Enabel's Policy regarding sexual exploitation and abuse of June 2019 and Enabel's Policy regarding fraud and corruption risk management complaints relating to issues of integrity (fraud, corruption, etc.) must be sent to the Integrity desk through the https://www.enabelintegrity.be website.

1.8 Applicable law and competent courts

The contract must be performed and interpreted according to Belgian law.

The parties commit to sincerely perform their engagements to ensure the good performance of this contract.

In case of litigation or divergence of opinion between the contracting authority and the contractor, the parties will consult each other to find a solution.

If agreement is lacking, the Brussels courts are the only courts competent to resolve the matter.

2 Subject-matter and scope of the public contract

2.1 Type of contract

This contract is a public service contract.

2.2 Subject-matter of the public contract

This public service contract consists in the performance of Buildings' Energy Performance tool, in conformity with the conditions of these Tender Specifications.

2.3 Lots[9]

The contract has one lot but include four (4) items, each of which is indivisible. The tenderer may submit a tender for the lot. A tender for part of the lotand specific item/s is inadmissible.

The description of the lot is included in <Part 5 ToR > of these Tender Specifications.

The contracting authority has chosen not to divide the contract into lots as dividing the items of the BEP Tool consultancy into separate lots is not feasible due to the high level of interdependency between components. Each item, including data collection, software development, EPC scheme, and capacity building, is technically and functionally linked, requiring seamless integration to ensure accuracy and consistency. The building typology and input parameters from Item 1 feed directly into the design and functionality of the tool in Item 2, which in turn underpins the EPC scheme in Item 3. Splitting these elements across different contractors would risk inconsistencies, misaligned methodologies, and integration failures. Additionally, accountability for validation, compliance with national energy policies, and long-term operational sustainability requires a single provider responsible for the full system. Fragmentation would dilute responsibility, complicate post-deployment support, and increase costs due to duplicated efforts and coordination challenges. Moreover, managing multiple contracts for interlinked tasks would further escalate administrative overheads and procurement expenses. To maintain coherence, ensure efficient implementation, and support institutional ownership, the assignment must remain under one unified contract.

2.4 Items

The contract consists of the following items:

Item 1: Preliminary Reviews and Data Collection

Item 2: Development of an Online Software Tool

Item 3: Development of an Energy Performance Certificate (EPC) Scheme

Item 4: Capacity Building Program **(Conditional Item)**

These items are pooled and form one single contract. It is not possible to tender for one or several items

[9] For contracts of a value equal to or greater than EUR 135 000 excl. VAT, the contracting authority is obliged to consider dividing the contract into lots unless a valid reason is given in the procurement documents.

and the tenderer must submit price quotations for all items of the contract.

2.5 Duration of the public contract[10]

The contract starts upon award notification and lasts expires upon final acceptance.

2.6 Variants ♣

Variants are not permitted.

2.7 Quantity

poss. Fixed blocks / conditional blocks: Where the contracting authority demonstrates the necessity thereof, it may package a contract in one or more fixed blocks and in one or more conditional blocks. Though contract conclusion pertains to the whole of the contract, it only binds the contracting authority for the fixed blocks. The performance of each conditional block depends on a decision by the contracting authority of which the contractor is notified in accordance with the modalities given in the initial procurement documents. The performance of the conditional block may not change the global nature of the contract.

[10] Please note: duration of the contract not to be confused with period of performance.

3 Subject-matter and scope of the public contract

3.1 Award procedure

This contract is awarded in accordance with Article 36 of the Law of 17 June 2016 via an open procedure.

3.2 Publication

3.2.1 Official notification

This contract is officially advertised in the Belgian Public Tender bulletin and in the Official Journal of the European Union.

3.2.2 Enabel publication

These Tender Specifications are also posted on the website of Enabel (https://www.enabel.be/public-procurement/).

The contract notice was also advertised through the OECD website.

The contract notice was also advertised locally on Jobs.ps and tenderjo.com websites.

3.3 Information

The awarding of this contract is coordinated by Karmel Al Salqan, Contract Support Manager. Throughout this procedure all contacts between the contracting authority and the (prospective) tenderers about this contract will exclusively pass through this service / this person. (Prospective) tenderers are prohibited to contact the contracting authority in any other way with regards to this contract, unless otherwise stipulated in these Tender Specifications.

Until July 29, 2025, inclusive, candidate-tenderers may ask questions about these Tender Specifications and the contract. Questions will be in writing to Ms Karmel Al Salqan (Karmel.alsalqan@enabel.be) and they will be answered in the order received. The complete overview of questions asked will be available at the address mentioned above as from August 4th, 2025.

Information session will happen on July 23, 2025.

Microsoft Teams Need help?

Join the meeting now

Meeting ID: 330 858 109 062 5

Passcode: ps9d4Ez6

Until the notification of the award decision no information will be given about the evolution of the procedure.

The procurement documents can be consulted free of charge at the following internet address:

https://www.enabel.be/wp/wp-admin/edit.php?post_type=tenders

The tenderer is to submit his tender after reading and taking into account any corrections made to the Tender Specifications that are published on the Enabel website or that are sent to him by e-mail. To do so, when the tenderer has downloaded the Tender Specifications, it is strongly advised that he gives his coordinates to the public procurement administrator mentioned above and requests information on any modifications or additional information.

The tenderer is required to report immediately any gap, error or omission in the procurement documents that precludes him from establishing his price or compare tenders, within ten days at the latest before the deadline for receipt of tenders.

3.4 Tender

3.4.1 Data to be included in the tender

The tender of the tenderer will consist of the physically separate sections mentioned below (see **Error! Reference source not found.** – **Error! Reference source not found.**):

- 11.1 Identification form
- **Error! Reference source not found. Error! Reference source not found.**
- **Error! Reference source not found. Error! Reference source not found.**
- **Error! Reference source not found. Error! Reference source not found.**,
- 12.2 Incorporation certificate,
- 12.4 Certification of clearance with regards to the payments of applicable taxes,
- **Error! Reference source not found. Error! Reference source not found.**
- **Error! Reference source not found. Error! Reference source not found.**
- **Error! Reference source not found. Error! Reference source not found.**,
- 0 11.6 CVs of all mentioned personnel
- **Error! Reference source not found. Error! Reference source not found.**
- **Error! Reference source not found. Error! Reference source not found.**
- European Single Procurement Document (ESPD)

The European Single Procurement Document is a self-declaration by economic operators providing preliminary evidence replacing the certificates issued by public authorities or third parties. As provided in Article 73 of the Law of 17 June 2016, it is a formal statement by the economic operator that it is not in one of the situations in which economic operators shall or may be excluded; that it meets the relevant selection criteria.

In accordance with Article 76 § 1 °2 of the Royal Decree of 18 April 2017, failure to comply with the obligation to submit a ESPD constitutes a substantial irregularity causing the tender to be null and void.

In accordance with Article 73 of the Royal Decree of 18 April 2017, where an economic operator wants to rely on the capacities of other entities (particularly subcontractors or independent subsidiaries) for economic and financial capacity criteria and technical and vocational capacity criteria (see In accordance with Article 73 of the Royal Decree of 18 April 2017, where an economic operator wants to rely on the capacities of other entities (particularly subcontractors or independent subsidiaries) for economic and financial capacity criteria and technical and vocational capacity criteria (see 3.8.1.2 Selection criteria), it shall prove to the contracting authority that it will have at its disposal the resources necessary, for example, by producing a commitment by those entities to that effect.

Where a candidate or tenderer relies on the capacity of other entities in the meaning of paragraph 1, the candidate or tenderer, as appropriate, answers the question given in part II, C, of the ESPD referred to in Article 38 of the Royal Decree of 18 April 2017. He also mentions for which part of the public contract he will rely on such capacity and which other entities he proposes.

The tender also comprises a separate ESPD for the entities in the meaning of paragraph 1.

The tenderer clearly designates in his tender which information is confidential and/or relates to technical or business secrets and may therefore not be divulged by the contracting authority.), it shall prove to the contracting authority that it will have at its disposal the resources necessary, for example, by producing a commitment by those entities to that effect. Where a candidate or tenderer relies on the capacity of other entities in the meaning of paragraph 1, the candidate or tenderer, as appropriate, answers the question given in part II, C, of the ESPD referred to in Article 38 of the Royal Decree of 18 April 2017. He also mentions for which part of the public contract he will rely on such capacity and which other entities he proposes.

The tender also comprises a separate ESPD for the entities in the meaning of paragraph 1.

The tenderer clearly designates in his tender which information is confidential and/or relates to technical or business secrets and may therefore not be divulged by the contracting authority.

Tenderers are advised to consult the general principles set out under Heading 1 of the Law of 17 June 2016, which are applicable to this award procedure.

The tenderer must use the tender form in annex. In case he does not use this form, he is fully responsible for the perfect concordance between the documents he has used and the form.

By submitting a tender, the tenderer automatically renounces to his own general or specific sales conditions, even if these are mentioned in any of the annexes to his tender.

The tender and the annexes to the tender form are drawn up in English.

By submitting a tender, the tenderer automatically renounces to his/her own general or specific sales conditions.

The tenderer clearly designates in his/her tender which information is confidential and/or relates to technical or business secrets and may therefore not be disseminated by the Contracting Authority.

Participants in a group of economic operators must designate one member of the group who will represent the group vis-à-vis the contracting authority. When the ESPD must be filled out, this is indicated in part II.B of the ESPD.

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3.4.2 Period the tender is valid

The tenderers are bound by their tender for a period of < 90> calendar days from the reception deadline date.

3.4.3 Determination of prices

All prices given in the tender form must obligatorily be quoted in EUROS.

This contract is a mixed contract, meaning that it combines elements of different pricing methods. Part of the contract follows a price-schedule structure, in which only the unit prices are fixed and the total amount

payable is determined by applying these unit prices to the quantities actually performed. Another part follows a lump-sum price structure, where a global price is agreed upon in advance to cover specific items as per the budget template.In accordance with Article 37 of the Royal Decree of 18 April 2017, the contracting authority may for the purpose of verifying the prices carry out an audit of any and all accounting documents and perform on-the-spot checks with a view of verifying the correctness of the indications supplied.

3.4.3.1 Elements included in the price

The tenderer is to include in his unit and global prices any charges and taxes generally applied to services, with the exception of the value-added tax.

The following are in particular included in the prices:

The administrative management and secretariat;

Travel, transportation and insurance;

All associated costs explained in the (Logistical Arrangements section) in the terms of reference;

Documentation pertaining to the services;

Delivery of documents or records associated with the performance;

The packaging;

Training required for operation;

Where applicable, the measures imposed by occupational safety and worker health legislation;

Customs and excise duties for equipment and products used;

3.4.4 How to submit tenders?

The tender will be drawn up in 1 printed copy on A4 paper (printing in black and white and on both sides of paper is encouraged).

▶ It is kindly requested to **avoid fancy binding systems and plastic covers** – one simple staple or binder clip is most appreciated. The financial offer **does not need** to be sealed in a separate envelope.

Two electronic copies (the original editable pdf file as filled before printing and a scan of the printed, signed and stamped original copy) must also be submitted in one or more PDF files on a physical elecrtonic support (CD-ROM, DVD-ROM, USB flash memory or SD card). Each tenderer may only submit one tender.

The tender and all accompanying documents have to be numbered and signed (original hand-written signature) by the tenderer or his/her representative. The same applies to any alteration, deletion or note made to this document. The representative must clearly state that (s)he is authorised to commit the tenderer. If the tenderer is a company / association without legal body status, formed by separate natural or legal persons (temporary group or temporary partnership), **the tender must be signed by each of these persons**.

The signed and dated original will be sent in a sealed envelope mentioning:

Without prejudice to any variants, the tenderer may only submit one tender only per contract.

The tenderer submits his tender as follows:

- One original copy of the completed tender will be submitted on paper. Moreover, the tenderer shall attach the copies requested by the tender guidelines to the tender (see Part 11). These copies may be submitted in one or more PDF files on a USB stick.

  It is submitted in a properly sealed envelope bearing the following information: Tender **BEL22008-10019 Buildings' Energy Performance tool '– Opening of tenders on August 11th, 2025**.

  It may be submitted:

a) By mail (standard mail or registered mail)

In this case, the sealed envelope is put in a second closed envelope addressed to:

Enabel office in Ramallah
Belgian Development Agency
Royal Center Building, 7th Floor
Al Balou', Mecca Street
Ramallah – Al Bireh – West Bank
T/F: (+972) 2 242 1137/8

OR

b) Delivered by hand with acknowledgement of receipt to one of the following two addresses:

Enabel office in Ramallah
Belgian Development Agency
Royal Center Building, 7th Floor
Al Balou', Mecca Street
Ramallah – Al Bireh – West Bank

Or

Enabel office in Jerusalem
Belgian Development Agency
Consulate General of Belgium
5 Baibars Street, Sheikh Jarrah
9711769 Jerusalem

3.4.5 Change or withdrawal of a tender that has already been submitted

When a tenderer wants to change or withdraw a tender already sent or submitted this must be done in accordance with the provisions of Articles 43 and 85 of the Royal Decree of 18 April 2017.

To change or withdraw a tender already sent or submitted, a written statement is required, which will be correctly signed by the tenderer or his representative. The subject-matter and the scope of the changes must be indicated in detail. Any withdrawal must be unconditional.

The withdrawal may also be communicated by fax or electronic means, provided that it is confirmed by registered letter deposited at the post office or against acknowledgement of receipt at the latest the day before the tender acceptance deadline.

When the tender is submitted via e-tendering, the tender is modified or withdrawn in accordance with Article 43, §2 of the Royal Decree of 18 April 2017.

Thus, modifying or withdrawing a tender after the submission report has been signed requires a new submission report to be signed in accordance with paragraph 1.

The subject-matter and the scope of the changes must be indicated in detail.

The withdrawal must be pure and simple.

Where the submission report issued following modification or withdrawal as referred to in paragraph 1 is not singed as referred to in paragraph 1, the modification or withdrawal is automatically void. This nullity applies only to the modifications or withdrawal, not to the tender itself.

3.4.6 Opening of Tenders

The tenders must be in the possession of the contracting authority before **August 11th, 2025, 12:00PM The tender opening is open to the public.**

The tender opening session will take place at the address given above for the submission of tenders on **August 11th, 2025, 12:30PM**.

3.4.7 Selection of tenderers

3.4.7.1 European Single Procurement Document (ESPD)

By submitting his tender together with the completed European Single Procurement Document (ESPD) the tenderer declares officially on his honour that:

- he is not in one of the mandatory or facultative exclusion cases, which must or may lead to his exclusion;
- he fulfils the selection criteria established by the contracting authority in this public contract

The European Single Procurement Document (ESPD) is a self-declaration by economic operators providing preliminary evidence replacing the certificates issued by public authorities or third parties. As provided in Article 73 of the Law of 17 June 2016, it is a formal statement by the economic operator that it is not in one of the situations in which economic operators shall or may be excluded; that it meets the relevant selection criteria.

The tenderer generates the ESPD via https://dume.publicprocurement.be/ and then attaches it to his tender.

A ESPD service manual (in French), including guidelines for enterprises, is available through:https://www.publicprocurement.be/sites/default/files/documents/man_espd_entreprise_fr_100.pdf

Where the tender is submitted by a group of economic operators, it must include an ESPD for each of the participants in the group:

Where a candidate or tenderer relies on the capacity of other entities. (particularly subcontractors or independent subsidiaries) for economic and financial capacity criteria and technical and vocational capacity criteria (see 3.4.7.3 Selection criteria) in the meaning of paragraph 1 of Article 73 of the Royal Decree of 18 April 2017, the candidate or tenderer, as appropriate, answers the question in part II, C, of the ESPD referred to in Article 38 of the Royal Decree of 18 April 2017. He also mentions for which part of the public contract he will rely on such capacity and which other entities he proposes.

The tender also comprises a separate ESPD for the entities in the meaning of paragraph 1 of Article 73 of the Royal Decree of 18 April 2017.

In accordance with Article 38 §2 of Article 73 of the Royal Decree of 18 April 2017, regarding part IV of the ESPD on the selection criteria, the contracting authority has decided to limit the information to be filled out to one single question, namely whether the economic operator fulfils the required selection

criteria, in accordance with the section "Global indication for all selections criteria" ("Indication globale pour tous les critères de sélection"). So, only this section must be completed.

The contracting authority will ask the tenderer, if necessary, at any time during the procedure, to provide all or part of the supporting documents, if necessary to ensure the smooth proceeding of the procedure. The tenderer is not required to submit any supporting documents or other evidence if and to the extent that the contracting authority has the possibility to directly obtain certificates or relevant information by accessing a free national database in a Member State.

With the exception of the exclusion grounds relating to tax and social security, the tenderer that is in one of the mandatory or optional exclusion situations can prove on his own initiative that he has paid or undertaken to pay compensation for any prejudice caused by the criminal offence or the fault, clarified totally the facts and circumstances by collaborating actively with the authorities in charge of the enquiry and taken concrete specific technical, organisational and personnel measures to prevent a new criminal offence or a new fault.

3.4.7.2 Exclusion grounds

The obligatory and facultative grounds for exclusion grounds are given in attachment to these Tender Specifications.

When the estimated value of procurement reaches/exceeds the European publication threshold

By submitting this tender, the tenderer certifies that he is not in any of the cases of exclusion listed in the Articles 67 to 70 of the Law of 17 June 2016 and the Articles 61 to 64 of the Royal Decree of 18 April 2017.

The contracting authority will verify the accuracy of this Declaration on honour for the tenderer with the best tender.

For that purpose, the contracting authority will ask the tenderer concerned to provide information or documents allowing the contracting authority to verify the tenderer's personal situation by the fastest means and within the term set by the contracting authority.

The contracting authority will itself ask for information or documents that it can obtain free of charge by digital means from the instances that manage the information or documents.

When the estimated value of procurement reaches/exceeds the European publication threshold

By submitting his tender together with the European Single Procurement Document (ESPD) the tenderer declares officially on his honour that:

1° he is not in one of the mandatory or facultative exclusion cases, which must or may lead to his exclusion;

2° he fulfils the selection criteria established by the contracting authority in this contract;

The tenderer can either complete the ESDP given in attachment, or generate his document via the website: https://ec.europa.eu/tools/espd/filter

The contracting authority will ask the tenderer, if necessary, at any time during the procedure, to provide all or part of the supporting documents, if necessary to ensure the smooth proceeding of the procedure. The tenderer is not required to submit any supporting documents or other evidence if and to the extent that the contracting authority has the possibility to directly obtain certificates or relevant information by accessing a free national database in a Member State.

With the exception of the exclusion grounds relating to tax and social security, the tenderer that is in one of the mandatory or optional exclusion situations can prove on his own initiative that he has paid or undertaken to pay compensation for any prejudice caused by the criminal offence or the fault, clarified

totally the facts and circumstances by collaborating actively with the authorities in charge of the enquiry and taken concrete specific technical, organisational and personnel measures to prevent a new criminal offence or a new fault.

3.4.7.3 Selection criteria à Below the thresholds when the ESPD is not applicable

Article 71 of the Law and Articles 65 -74 of the Royal Decree of 18 April 2017

Before the Contracting Authority can start investigating the regularity of the tenders and evaluating them on the basis of the award criterion/criteria, tenderers that do not meet certain minimum quality conditions shall be excluded from the procedure and their tender shall not be evaluated.

By means of the documents requested in **Error! Reference source not found.**, the tenderer must prove that he is sufficiently capable, from a technical point of view, to successfully perform this public contract.

Only tenders from tenderers who meet the selection criteria are taken into consideration in order to participate in the comparison of tenders on the basis of the award criteria set out below, subject to the regularity of these tenders.

In order to be selected for this contract, the tenderer must have at least three relevant contracts, at least one (1) assignment must include the development of an online building energy performance tool or online platform related to building energy efficiency simulations. (each with a minimum value of €50,000, with minimum total amount of €200,000 carried out in the past five years to the highest standard and to the client's full satisfaction. The number of references to be provided must not exceed 10. If more than 10 references are provided, only the first listed 10 will be considered.

In view of the qualitative selection of tenderers and in conformity with Art. 67 to 74 of the Royal Decree of 18 April 2017, for this contract the tenderer must add to his/her tender documents a selection file with the information requested in point 11 "Forms" with regards to his/her technical capacity.

A tenderer may, if necessary and for a specific contract, submit the capacities of other entities, whatever the legal nature of the relations existing between himself/herself and these entities. In that case, (s)he must prove to the Contracting Authority that, for the performance of the contract, (s)he shall have the necessary resources by presenting the commitment of these entities to make such resources available to the service provider. Under the same conditions, a group of candidates or of tenderers can submit the capacities of the group's participants or those of other entities.

Moreover, by means of the documents requested below, the tenderer must prove that he is sufficiently capable, from an economic and financial as well as from a technical point of view, to successfully perform this public contract.

Only tenders from tenderers who meet the selection criteria are taken into consideration in order to participate in the comparison of tenders on the basis of the award criteria set out below, subject to the regularity of these tenders.

3.4.7.4 Modalities relating to tender examination and regularity of the tenders

Before starting the evaluation and comparison of the tenders, the contracting authority examines their regularity.

The tenders must be drawn up in such a way that the contracting authority can make a selection without starting negotiations with the tenderer. For this reason, and in order to be able to assess the tenders fairly, it is essential that the tenders be completely in conformity with the provisions of the Tender Specifications, both formally and materially.

The substantially irregular tenders are excluded.

A substantial irregularity is such as to give a discriminatory advantage to the tenderer, to distort competition, to prevent the evaluation of the tenderer's tender or its comparison with the other tenders, or to render non-existent, incomplete or uncertain the commitment of the tenderer to perform the contract under the conditions laid down.

The following irregularities are deemed substantial:

1° failure to comply with environmental, social or labour law, provided that such non-compliance is punishable by law;

2° failure to comply with the requirements of Articles 38, 42, 43, § 1, 44, 48, § 2, clause 1, 54, § 2, 55, 83 and 92 of the Royal Decree of 18 April 2017 and of Article 14 of the Law, insofar as they contain obligations vis-à-vis the tenderers;

3° failure to comply with the minimum requirements and the requirements that are indicated as substantial in the procurement documents;

4° tenders that do not bear an original handwritten signature on the tender form.

The contracting authority will also declare void any tender that is affected by several non-substantial irregularities which, by reason of their accumulation or combination, are capable of having the same effect as described above (in accordance with Article 76 of the Royal Decree of 18 April 2017).

Conflicts of interest - Revolving door (Art. 51 Royal Decree 18/04/2017).

Without prejudice to Articles 6 and 69, clause1, 5° of the Law a conflict of interest is considered any situation in which a natural person who has worked for a contracting authority as an internal staff member, whether in a hierarchy relation or not, as a concerned civil servant, public officer or any other person linked whatsoever to the contracting authority, would later intervene under a public contract awarded by this contracting authority and where a relation exists between the former activities that the above person conducted for the contracting authority and the activities he or she conducts under the contract.

The application of above-mentioned provision is limited however to a two-year term from the resignation of said person or any other type of termination of the former activities.

3.4.7.5 Award criteria♣

The contracting authority will choose the regular tender that it finds being most economically advantageous, taking account of the following criteria♣:

Award criterion 1- Technical Offer: 60 %

(i) Proposed methodology (30 points)

§1 The tenderer proposes a methodology based on the instructions given in the Terms of Reference (see **Error! Reference source not found.**).

§2 The 30 points will be scored as follows:

1. Technical Approach and Understanding of the Assignment (10 points)

Demonstrates a clear interpretation of the Terms of Reference (ToR), with a solid grasp of the local context in Palestine, key stakeholders, and the interdependencies among the deliverables. The proposed methodology should reflect logical structuring, technical robustness, and innovative thinking, particularly in how it integrates the tool, Energy Performance Certificate (EPC), and data management into a cohesive implementation strategy. **Submissions that mirror or reproduce content from the ToR without demonstrating independent analysis, innovation, or contextualization will not be evaluated favourably**

2. Work Plan and Timelines (5 points)

Presents a comprehensive and realistic work plan outlining the major steps under each of the four items. Timelines should be well aligned with the required deliverables and with the total duration of the assignment, showing a clear path to completion while addressing key dependencies.

3. Lessons Learned and Sustainability (5 points)

Demonstrates effective use of previous experience, especially in developing similar online tools, and how those insights have shaped the current approach. The proposal should clearly articulate how lessons learned will help overcome anticipated challenges in Palestine's specific context and support the long-term sustainability of the tool.

4. Equipment, Quality Assurance, and Validation Measures (5 points)

Describes the tools, technologies, and testing methods to be employed, including whether equipment is owned, rented, or leased. Specifies who will operate the equipment, for what purposes, and at which project stages. Clearly outlines internal quality assurance protocols, testing strategies for the developed tool, and stakeholder validation processes to ensure all deliverables meet expected standards and functionality.

5. Team composition and Coordination (5 points)

Outlines the composition of the consultancy team, detailing the roles and responsibilities of each member and how they interact. If international experts are involved, it specifies whether field missions are planned, including the number, timing, and objectives of each mission. Describes coordination mechanisms with stakeholders across all phases, emphasizing clarity in frequency, mode, timing, and purpose of interactions.

(ii) Qualification and experience of key experts proposed (30 points)

The key experts are those whose involvement is considered to be instrumental to achieve the contract objectives. Their positions and responsibilities are defined in point 5 "Terms of Reference" and they are subject to evaluation. Their evaluation is based on their educational background (10 points), the total number of years of experience (5points) and the relevance and extent of experience in in similar assignments (15 points).

Only tenderers obtaining a total score of at least 40 points for criteria 1 and 2 will be evaluated for the price criterion.

Award criterion 2 - Price: 40 %

With regards to the 'price' criterion, the following formula will be used:

$$\text{Points tender A} = \frac{\text{amount of lowest tender}}{\text{amount of tender A}} * 40$$

3.4.7.6 Final score

The scores for the award criteria will be added up. The contract will be awarded to the tenderer with the highest final score, after the contracting authority has verified the accuracy of the Declaration on honour of this tenderer and provided the control shows that the Declaration on honour corresponds with reality.

……

3.4.7.7 Awarding the public contract

Article 36 and 81-82 of the Law of 17 June 2016

The contract will be awarded to the tenderer who has submitted the most economically advantageous tender. after the contracting authority has verified the accuracy of the ESPD of this tenderer and provided the check shows that the Declaration on honour corresponds with reality..

Notice though that, in accordance with Art. 85 of the Law of 17 June 2016, there is no obligation for the contracting authority to award the contract.

The contracting authority may either decide not to award the contract, either redo the procedure, if necessary through another award procedure.

The contracting authority also reserves the right to award only certain lot(s) and to decide that the other lots will be the subject matter of one or more new contracts, if necessary according to another award procedure in accordance with Article 58 §1, third paragraph.>>

3.4.8 Concluding the public contract

Art. 88 of the Royal Decree on Awarding

In accordance with Art. 88 of the Royal Decree of 18 April 2017, the contract occurs through the notification to the selected tenderer of the approval of his tender.

Notification is via digital platforms, e-mail or fax and, on the same day, by registered post.

So, the full contract consists of a contract awarded by Enabel to the chosen tenderer in accordance with:

- These Tender Specifications and its annexes;
- The approved BAFO of the contractor and all of its annexes;
- The registered letter of notification of the award decision;
- Any later documents that are accepted and signed by both parties, as appropriate.

In an objective of transparency, Enabel undertakes to publish each year a list of recipients of its contracts. By introducing his tender, the successful tenderer declares that he agrees with the publication of the title of the contract, the nature and object of the contract, its name and location, and the amount of the contract.

4 Specific contractual and administrative conditions

This chapter of these Tender Specifications holds the specific provisions that apply to this public contract by way of derogation from the 'General Implementing Rules for public procurement and for concessions for public works' of the Royal Decree of 14 January 2013, hereinafter referred to as 'GIR', or as a complement or an elaboration thereof. The numbering of the articles below (between brackets) follows the numbering of the GIR articles. Unless indicated, the relevant provisions of the General Implementing Rules (GIR) apply in full.

These tender documents do derogate from Art. 25-33 of the General Implementing Rules (see point 4.8 "Performance bond (Art. 25-33)").

4.1 Managing official (Art. 11)

The managing official is Ms Sireen Abu Jamous , e-mail: Sireen.abujamous@enabel.be.

Once the contract is concluded, the managing official is the main contact point for the service provider. Any correspondence or any questions with regards to the performance of the contract will be addressed to him/her, unless explicitly mentioned otherwise in these Tender Specifications.

The managing official is responsible for the follow-up of the performance of the contract.

The managing official is fully competent for the follow-up of the satisfactory performance of the contract, including issuing service orders, drawing up reports and states of affairs, approving the services, progress reports and reviews. He or she may order any modifications to the contract with regards to its subject-matter provided that they remain within its scope.

However, the signing of amendments or any other decision or agreement implying derogation from the essential terms and conditions of the contract are not part of the competence of the managing official. For such decisions the contracting authority is represented as stipulated under The contracting authority.

Under no circumstances is the managing official allowed to modify the terms and conditions (e.g. performance deadline) of the contract, even if the financial impact is nil or negative. Any commitment, change or agreement that deviates from the conditions in the Tender Specifications and that has not been notified by the contracting authority, will be considered null and void.

4.2 Subcontractors (Art. 12 to 15)

The fact that the contractor entrusts all or part of his commitments to subcontractors does not relieve him of liability to the contracting authority. The latter does not recognise any contractual relation with third parties.

The contractor remains, in any case, solely liable to the contracting authority.

The service provider undertakes to have the contract performed by the persons indicated in the tender, except for force majeure. The persons mentioned or their replacements are all deemed to effectively be involved in the performance of the contract. Any replacements must be approved by the contracting authority.

When the contractor uses a subcontractor to carry out specific processing activities on behalf of the contracting authority, the same data protection obligations as those of the contractor are imposed on that subcontractor by contract or any other legal act.

In the same way, the contractor will respect and enforce to his subcontractors, the provisions of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation, GDPR). The contracting authority may conduct an audit of the processing carried out in order to validate compliance with this legislation.

4.3 Confidentiality (art. 18)

The knowledge and information gathered by the tenderer under the framework of this public contract is strictly confidential.

Under no circumstances can the information collected, regardless of its origin and nature, be transferred to third parties in any form.

The tenderer is therefore bound by the duty of discretion.

In accordance with Article 18 of the Royal Decree of 14 January 2013 establishing the general rules for public procurement, the tenderer undertakes to consider and process in a strictly confidential manner any information, all facts, any documents and/or any data, whatever their nature and support, which have been communicated to him, in any form and by any means, or to which he has access, directly or indirectly, in the context or on the occasion of this public contract. Confidential information covers, in particular, the very existence of this public contract, without this list being limited.

Therefore, he undertakes to:

- Respect and enforce the strict confidentiality of these elements and to take all necessary precautions in order to preserve their secrecy (these precautions cannot in any case be inferior to those taken by the tenderer for the protection of his own confidential information);

- Consult, use and/or exploit, directly or indirectly, all of the above elements only to the extent strictly necessary to prepare and, if necessary, to carry out this public contract (particularly in accordance with the privacy legislation with respect to personal data processing);

- Not reproduce, distribute, disclose, transmit or otherwise make available to third parties the above elements, in whole or in part, and in any form, unless having obtained prior and written consent of the contracting authority;

- Return, at the first request of the contracting authority, the above elements;

- In general, not disclose directly or indirectly to third parties, whether for advertising or any other reason, the content of this public contract.

4.4 Protection of personal data

4.4.1 Processing of personal data by the contracting authority

The contracting authority undertakes to process the personal data that are communicated to it in response to the Call for Tenders with the greatest care, in accordance with legislation on the protection of personal data (General Data Protection Regulation, GDPR). Where the Belgian law of 30 July 2018 on the protection of natural persons with regard to the processing of personal data contains stricter provisions, the contracting authority will act in accordance with said law.

4.4.2 PROCESSING OF PERSONAL DATA BY A SUBCONTRACTOR

OPTION 1: PROCESSING OF PERSONAL DATA BY A SUBCONTRACTOR

During contract performance, the contractor may process personal data of the contracting authority exclusively in the name and on behalf of the contracting authority, for the sole purpose of performing the services in accordance with the provisions of the Tender Specifications or in execution of a legal obligation.

For any processing of personal data carried out in connection with this public contract, the contractor is required to comply with Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (GDPR) and the Belgian law of 30 July 2018 on the protection of natural persons with regard to the processing of personal data.

By simply participating in the contracting process, the tenderer certifies that he will strictly comply with the obligations of the GDPR for any processing of personal data conducted in connection with that public contract.

The personal data that will be processed are confidential. The contractor will therefore limit access to data to the strictly necessary personnel for the performance, management and monitoring of the public contract.

For the performance of the public contract, the contracting authority will determine the purposes and means of processing personal data. In this case, the contracting authority will be responsible for the processing and the contractor will be its processor, within the meaning of Article 28 of the GDPR.

Processing carried out on behalf of a controller must be governed by a contract or other legal act that is binding on the processor with regard to the personal data controller and that sets out that the subcontractor acts only on the instruction of the person in charge of the processing and that the confidentiality and security obligations regarding the processing of personal data are also the responsibility of the subcontractor Article 28 §3 of the GDPR).

To this end, the tenderer must fill out, sign and submit to the contracting authority the subcontracting agreement given in Annex [X] . Filling out and signing this annex is therefore a condition of regularity of the tender.

4.5 Intellectual property (Art. 19 to 23)

The contracting authority acquires the intellectual property rights created, developed or used during performance of the contract.

To ensure strategic control, sustainability, and national data sovereignty, all intellectual property rights (IPRs) and outputs developed under this assignment shall be fully vested in PENRA. The following terms define the ownership, transfer, and usage of all deliverables and associated rights.

Ownership: All developed products (software, databases, documents, EPC design, training materials) shall be under the full ownership of PENRA. This includes:

- Source code (front-end and back-end)
- Technical documentation
- EPC operational framework and workflows
- Training materials and manuals

- Validation reports

Transfer of Rights: The service provider is required to handover all IPRs to PENRA upon completion, ensuring that PENRA can modify, replicate, maintain, and expand the tool or its components without further consent or payment.

Exclusive Use: The EPC scheme and tool are to be hosted, operated, and accessed only by authorized personnel, and PENRA will determine who can use or adapt the system.

Hosting & Access: The service provider sets up and maintains the IT infrastructure but the ownership of the system and data remains with PENRA, ensuring sovereignty over national energy data and tools.

Without prejudice to clause 1 and unless otherwise stipulated in the procurement documents, when the subject-matter of the public contract consists of the creation, manufacture or the development of designs or of logos, the contracting authority acquires the intellectual property thereof, as well as the right to trademark them, to have them registered and to have them protected.

For domain names created under the contract, the contracting authority also acquires the right to register and protect them, unless otherwise stipulated in the procurement documents.

When the contracting authority does not acquire the intellectual property rights, it obtains a patent licence of the results protected by intellectual property law for the exploitation modes that are mentioned in the procurement documents.

The contracting authority lists the exploitation modes for which it intends to obtain a licence in the procurement documents.

4.6 Performance bond (Art. 25 to 33)

The performance bond is set at 5% of the total value, excluding VAT, of procurement. The value thus obtained is rounded up to the nearest 10 euros.

In accordance with the legal and regulatory provisions, the performance bond may be constituted either of cash or of public funds or may take the form of a joint performance bond.

The performance bond may also take the form of a surety bond issued by a credit institution meeting the requirements of the law on the statute and control of credit institutions, or by an insurance company meeting the requirements of the law on control of insurance companies and approved for branch 15 (bonds).

<By way of derogation from Article 26, the performance bond may be posted through an establishment that has its registered office in one of the countries of destination of the services. The contracting authority reserves the right to accept or refuse the posting of the bond through that institution. The contractor shall mention the name and address of this institution in the tender.

This derogation is founded on the idea of providing possible local tenderers with an opportunity to submit a tender. This measure is made essential by the specific requirements of the contract.

The contractor must, within 30 calendar days from the day of contract conclusion, furnish proof that he or a third party has posted the bond in one of the ways set out below:

1° in the case of cash, by transfer of the amount to the bpost bank account number of the Deposit and Consignment Office. Complete the following form as well as possible https://finances.belgium.be/sites/default/files/01_marche_public.pdf (PDF, 1.34 Mo), and forward it by e-mail to info.cdcdck@minfin.fed.be

2° in the case of public funds, by depositing such funds, for the account of the Deposit and Consignment Office, with the State Cashier at the head office of the National Bank in Brussels or at one of its provincial agencies or with a public institution with an equivalent function

3° in the case of a joint surety, by deposit via an institution that lawfully carries out this activity of a deed of joint surety with the Deposit and Consignment Office or with a public institution with an equivalent function

4° in the case of a guaranty, by the deed of undertaking of the credit institution or the insurance company.

5 Bank cheque

This proof must be provided as applicable by submission to the contracting authority of:

1° the deposit receipt of the Deposit and Consignment Office or of a public institution with an equivalent function; or

2° a debit notice issued by the credit institution or the insurance company; or

3° the deposit certificate issued by the State Cashier or public institution with an equivalent function; or

4° the original copy of the deed of joint surety stamped by the Depot and Consignment Office or by a public institution with an equivalent function; or

5° the original copy of the deed of undertaking issued by the credit institution or the insurance company granting a guaranty.

These documents, signed by the depositor, must state why the performance bond was posted and its precise usage, consisting of a concise indication of the subject-matter of the contract and a reference to the procurement documents, as well as the name, first names and full address of the contractor and, where relevant, that of the third party that made the deposit on the contractor's account, bearing the statement 'lender' or 'mandatary' as appropriate.

The period of 30 calendar days specified above is suspended during the period of closure of the contractor's business for paid annual holidays and the days off in lieu stipulated by regulation or by a collective binding labour agreement.

Proof that the required performance bond has been posted must be sent to the address that will be mentioned in the contract conclusion notification.

Request by the contractor for the acceptance procedure to be carried out:

1° For the provisional acceptance: This is equal to a request to release the first half of the performance bond

2° For the final acceptance: This is equal to a request to release the second half of the performance bond, or, in case no provisional acceptance applied, to release the whole of the performance bond.

4.7 Conformity of performance (Art. 34)

The services must comply in all respects with the procurement documents. Even in the absence of technical specifications in the procurement documents, the works, supplies and services must comply in all aspects with good practice.

4.8 Zero tolerance Sexual exploitation and abuse

In application of Enabel's Policy regarding sexual exploitation and abuse of June 2019 there will be zero tolerance towards any misconduct that could impact the professional credibility of the tenderer.

4.9 Changes to the public contract (Art. 37 to 38/19)

4.9.1 Replacement of the contractor (Art. 38/3)

Provided that he meets the selection and exclusion criteria set out in this document, a new contractor may replace the contractor with whom the initial contract was agreed in cases other than those provided for in Art. 38/3 of the General Implementing Rules (GIR).

The contractor submits his request as quickly as possible by registered post, stating the reasons for this replacement and providing a detailed inventory of the state of the supplies and services already delivered, the new contractor's contact details and the documents and certificates which the contracting authority cannot access free of charge.

The replacement will be recorded in an amendment dated and signed by all three parties. The initial contractor remains liable to the contracting authority for the performance of the remainder of the contract.

4.9.2 Revision of prices (Art. 38/7)

For this contract, price revisions are not permitted.

4.9.3 Indemnities following the suspensions ordered by the contracting authority during performance (Art. 38/12)

The contracting authority reserves the right to suspend the performance of the contract for a given period, mainly when it considers that the procurement contract cannot be performed without inconvenience at that time.

The performance period is extended by the period of delay caused by this suspension, provided that the contractual performance period has not expired. If it has expired, the return of fines for late performance will be agreed.

When activities are suspended, based on this clause, the contractor is required to take all necessary precautions, at his expense, to protect the services already performed and the materials from potential damage caused by unfavourable weather conditions, theft or other malicious acts.

The contractor has a right to damages for suspensions ordered by the contracting authority when:

- The suspension lasts in total longer than one twentieth of the performance period and at least ten working days or two calendar weeks, depending on whether the performance period is expressed in

working days or calendar days;

- The suspension is not owing to unfavourable weather conditions;
- The suspension occurred during the contract performance period.

Within thirty days of their occurrence or the date on which the contractor or the contracting authority would normally have become aware of them, the contractor reports the facts or circumstances succinctly to the contracting authority and describes precisely their impact on the progress and cost of the contract.

4.9.4 Unforeseen circumstances

As a rule, the contractor is not entitled to any modification of the contractual terms due to circumstances of which the contracting authority was unaware.

A decision of the Belgian State to suspend cooperation with a partner country is deemed to be unforeseeable circumstances within the meaning of this article. Should the Belgian State break off or cease activities which implies therefore the financing of this public contract, Enabel will do everything reasonable to agree a maximum compensation figure.

4.10 Preliminary technical acceptance (Art. 42)

The contracting authority reserves the right to request an activity report at any time of the assignment from the service provider (meetings held, persons met, institutions visited, summary of results, problems encountered and unresolved issues, deviations from the planning and deviations from the ToR…).>>

4.11 Performance modalities (Art. 146 et seq.)

4.11.1 Deadlines and terms (Art. 147)

The services must be performed within 18 months as from the day after the date on which the service provider received the contract conclusion notification letter, the period of mandatory items (1-3) must be performed with 12 months. The closure of the service provider's business for annual holidays is not included in this calculation.

The order form is addressed to the service provider either by registered letter, or by fax, or by any other means through which the date of dispatch can be determined unambiguously.

Any further correspondence pertaining to the order form (and to the performance of the services) follows the same rules as those for the dispatch of the order form when a party wants to establish proof of its intervention.

In the event the acknowledgement of receipt of the order form is received after the period of two working days, upon written demand and justification of the service provider, the performance period may be extended pro rata of the delay of the acknowledgement of receipt of the order form. When the service that placed the order, upon examination of the written demand of the service provider, estimates that the demand is founded or partially founded, it will inform the service provider in writing of which extension of the period is accepted.

When the order form is clearly incorrect or incomplete and implementation of the order becomes impossible, the service provider immediately notifies the service that placed the order about this in writing in order to find a solution to allow for normal implementation of the order. If necessary, the service provider shall ask for an extended service performance period under the same conditions as those foreseen in case of late reception of the order form.

In any event, complaints about the order form are not admissible any more if they are not submitted within 15

calendar (*) days from the day following the date on which the service provider has received the order form.

(*) Shorter period, justified in the Tender Specifications for certain contracts (e.g. taking into account the performance periods for the services set in the Tender Specifications, complaints may not be admissible…).

The services must be performed within a period that is to be expressed in calendar days, which the tenderer shall mention in his tender. This period starts as from the day following the date on which the service provider received the contract conclusion notification letter. Since the performance period is an award criterion, not including it in the tender will bring about the substantial irregularity of the tender. All days are indistinguishably included in the period.

The order form is addressed to the service provider either by registered letter, or by fax, or by any other means through which the date of dispatch can be determined unambiguously.

Any further correspondence pertaining to the order form (and to the performance of the services) follows the same rules as those for the dispatch of the order form when a party wants to establish proof of its intervention.

In the event the acknowledgement of receipt of the order form is received after the period of two working days, upon written demand and justification of the service provider, the delivery period may be extended pro rata of the delay of the acknowledgement of receipt of the order form. When the service that placed the order, upon examination of the written demand of the service provider, estimates that the demand is founded or partially founded, it will inform the service provider in writing of which extension of the period is accepted.

When the order form is clearly incorrect or incomplete and implementation of the order becomes impossible, the service provider immediately notifies the service that placed the order about this in writing in order to find a solution to allow for normal implementation of the order. If necessary, the service provider shall ask for an extended service performance period under the same conditions as those foreseen in case of late reception of the order form.

In any event, complaints about the order form are not admissible any more if they are not submitted within 15 calendar (*) days from the day following the date on which the service provider has received the order form.

(*) Shorter period, justified in the Tender Specifications for certain contracts (e.g. taking into account the performance periods for the services set in the Tender Specifications, complaints may not be admissible…).

4.11.2 Place where the services must be performed and formalities (Art. 149)

The services will be performed at the following address:

The service is envisaged to take place a cross different cities in the West Bank – Palestine.

4.12 Inspection of the services (Art. 150)

If during contract performance irregularities are found, the contractor will be notified about this immediately by fax or e-mail, which will be confirmed consequently by registered letter. The contractor is bound to perform the non-complying services again.

The service provider advises the managing official by registered post or e-mail showing the exact date of dispatch, at which date the services can be controlled.

4.13 Liability of the service provider (Art. 152-153)

The service provider takes the full responsibility for mistakes and deficiencies in the services provided.

Moreover, the service provider indemnifies the contracting authority against damages for which it is liable towards third parties due to late performance of the services or due to failure of the service provider.

4.14 Means of action of the contracting authority (Art. 44-51 and 154-155)

The service provider's default is not solely related to services as such but also to the whole of the service provider's obligations.

In order to avoid any impression of risk of partiality or connivance in the follow-up and control of the performance of the contract, it is strictly forbidden to the service provider to offer, directly or indirectly, gifts, meals or any other material or immaterial advantage, of whatever value, to the employees of the contracting authority who are concerned directly or indirectly by the follow-up and/or control of the performance of the contract, regardless of their hierarchical rank.

In case of violation, the contracting authority may impose a lump-sum fine to the service provider for each violation, which can be to up to three times the amount obtained by adding up the (estimated) values of the advantage offered to the employee and of the advantage that the contractor hoped to obtain by offering the advantage to the employee. The contracting authority will decide independently about the application and the amount of this fine.

This clause is without prejudice to the possible application of other measures as of right provided in the GIR, namely the unilateral termination of the contract and/or the exclusion from procurement by the contracting authority for a determined duration.

4.14.1 Failure of performance (Art. 44)

§1 The contractor is considered to be in failure of performance under the contract:

1° when the delivery is not carried out in accordance with the conditions specified in the procurement documents;

2° at any time, when the delivery has not progressed in such a way that it can be fully completed on the due dates;

3° when he does not observe written orders, which have been given in due form by the contracting authority.

§2 Any failure to comply with the provisions of the contract, including the non-observance of orders of the contracting authority, is recorded in a report (‘process verbal’), a copy of which will be sent immediately to the contractor by registered mail.

The contractor must repair the defects without any delay. He may assert his right of defence by registered letter addressed to the contracting authority within fifteen days from the date of dispatch of the report (process verbal). Silence on his part after this period shall be deemed as acknowledgement of the reported facts.

Any defects detected that can be attributed to the contractor render him liable to one or more of the measures provided for in Articles 45 to 49, 154 and 155.

4.14.2 Fines for delay (Art. 46 and 154)

The fines for delay differ from the penalties referred to in Article 45. They are due, without the need for notice, by the mere lapse of the performance period without the issuing of a report and they are automatically applied for the total number of days of delay.

Regardless of the application of any fines for delay, the contractor indemnifies the contracting authority against damages for which it is liable towards third parties due to late performance of the contract.

4.14.3 Measures as of right (Art. 47 and 155)

§1 When, upon expiry of the term given in Article 44, §2, the contractor has not taken action or has presented means deemed unjustified by the contracting authority, the contracting authority may apply the measures as of right described in paragraph 2.

However, the contracting authority may apply measures as of right without waiting for the expiry of the term given in Article 44, §2, when the contractor has explicitly recognised the defects detected.

§2 The measures as of right are:

1° Unilateral termination of the contract. In this case the entire performance bond, or if no bond has been posted an equivalent amount, is acquired as of right by the contracting authority as lump sum damages. This measure excludes the application of any fine for delay in performance in respect of the terminated part;

2° Performance under regie of all or part of the non-performed contract;

3° Conclusion of one or more replacement contracts with one or more third parties for all or part of the contract remaining to be performed.

The measures referred to in 1°, 2° and 3° will be taken at the expense and risk of the defaulting contractor. However, any fines or penalties imposed during the performance of a replacement contract will be borne by the new contractor.

4.15 End of the public contract

4.15.1 Acceptance of the services performed (Art. 64-65 and 156)

The managing official will closely follow up the services during performance.

The services will not be accepted until after fulfilling audit checks, technical acceptance and prescribed tests.

According to the situation, provisional acceptance is provided upon the completion of service delivery of the contract and, on expiry of a warranty period, final acceptance is provided marking full completion of the contract.

The contracting authority disposes of a verification term of thirty days starting on the final or partial end date of the services, set in conformity with the modalities in the procurement documents, to carry out the acceptance formalities and to notify the result to the service provider. This term commences provided that the contracting authority possesses, at the same time, the list of services delivered or the invoice. Upon expiry of the thirty-day term following the date stipulated for completion of the entirety of the services, depending on the case, an acceptance report or a refusal of acceptance report will be drawn up.

Where the services are completed before or after this date, it is the responsibility of the service provider to notify the managing official by registered letter, and at the same time to ask for the acceptance procedure to be carried

out. Within thirty days after the date of receipt of the service provider's request, an acceptance or a refusal of acceptance report will be drawn up, depending on the case.

The acceptance specified above is final.

4.15.2 <<Acceptance costs

Travel costs and costs for the stay of the managing official will be borne by the service provider.

When drawing up his tender, the tenderer shall take into account the following acceptance costs:

<In-depth overview of acceptance costs that shall be borne by the service provider>.

IF RELEVANT: Provision to be made in full concordance with Article 1.3.4.4 above

4.15.3 Invoicing and payment of services (Art. 66 to 72 – 160)

The contractor sends (one copy only of) the invoices and the contract acceptance report (original copy) to the following address:

The contractor sends (one copy only of) the invoices and the contract acceptance report (original copy) to one of the following addresses:

Enabel office in Ramallah
Belgian Development Agency
Royal Center Building, 7th Floor
Al Balou', Mecca Street
Ramallah – Al Bireh – West Bank

Or

Enabel office in Jerusalem
Belgian Development Agency
Consulate General of Belgium
5 Baibars Street, Sheikh Jarrah
9711769 Jerusalem

Only service delivery that has been performed correctly may be invoiced.

The contracting authority disposes of a verification term of thirty days starting on the end date for the services, set in conformity with the modalities in the procurement documents, to carry out the technical acceptance and provisional acceptance formalities and to notify the result to the service provider.

The amount owed to the service provider must be paid within thirty days with effect from the expiry of the verification term or with effect from the day after the last day of the verification term, if this is less than thirty days. And provided that the contracting authority possesses, at the same time, the duly established invoice.

When the procurement documents do not provide for any separate debt claim, the invoice will constitute the debt claim.

The invoice must be in EUROS.

In order for Enabel to obtain the VAT exemption and customs clearance documents as quickly as possible, the original invoice and all ad hoc documents will be transmitted as soon as possible before provisional acceptance.

No advance may be asked by the contractor. and the payment is made after final acceptance of each service delivery as follows<<…>>

The payments under this contract will be distributed as follows:

Payment No.	Item No.	Final approved deliverables	Amount (euro)
Payment No. 1	Item (1)	Deliverable 1.1	As per unit prices in the finance offer and
Payment No. 2	Item (2)	Deliverable 2.1	

Payment No. 3	Item (2)	Deliverables 2.2 & 2.3	approved quantity performed
Payment No. 4	Item (3)	Deliverables 3.1 & 3.2 & 3.3	
Payment No. 5	Item (4)	Deliverables 4.1 – 4.6	
Payment No. 6	Item (4)	Deliverable 4.7	

4.16 Litigation (Art. 73)

The competent courts of Brussels have exclusive jurisdiction over any dispute arising from the performance of this public contract. French or Dutch are the languages of proceedings.

The contracting authority will in no case be held liable for any damage caused to persons or property as a direct or indirect consequence of the activities required for the performance of this contract. The contractor indemnifies the contracting authority against any claims for compensation by third parties in this respect.

In case of 'litigation', i.e. court action, correspondence must (also) be sent to the following address:

Enabel, public-law company

Legal unit of the Logistics and Acquisitions service (L&A)

To the attention of Ms Inge Janssens

rue Haute 147

1000 Brussels

Belgium

5 Terms of reference

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6 Background and rationale

6.1 Enabel in Palestine

Since 2000, the government of the Kingdom of Belgium, through the Belgian Development Agency (Enabel) has been supporting the Palestinian government with a wide range of programs in the sector of education, ranging from curriculum development to school construction and including ICT, TVET, and the sector-wide support with the Joint Financial Arrangement (JFA).

The focus of the Palestine Cooperation Strategy 2022-2026 is to empower youth in an environmentally sustainable Palestine. The objectives of the main two pillars under portfolio are:

- Young people in Palestine develop into active and critical citizen, ready for local and global challenges, through improved education, training, guidance and access to employment.
- The Palestinian population makes use of the opportunities of a sustainable environment.

The second pillar/General Objective of the Palestine portfolio is dedicated to climate action, based on support to the development of an emerging green and circular economy and the implementation of the National Determined Contributions (NDC), with the view to contribute to a sustainable and inclusive Palestinian society, and reduce environmental hazards and dependency on non-renewable natural resources. Specific thematic priorities are as follows:

- The development, greening and strengthening of value chains and opportunities for socio-economic entrepreneurship and job creation in an emerging green economy (stone and marble industry in the south of the West Bank, agro-processing in the north of the West Bank, and construction value chain in Gaza).
- The development of sustainable cities, public services and territories.
- A focus on specific niches such as: waste management; reducing, recycling and reuse; renewable energy; and energy efficiency.

The specific objective is: “The conditions of the Palestinian ecosystems and their population are improved by reducing ecological footprint and GHGs emissions through the promotion of both green economy and green Municipalities, focusing on energy efficiency, renewable energy, and sustainable waste management, in a set of regions”.

6.2 Top-up project

The envisaged outcome of this assignment is a core component of the **Top-up Palestine – “Development of green corridors in Palestinian city centres and of a building energy performance rating tool”**. The Top-up project is complementary to Enabel interventions in Palestine and funded the Brussels Capital Region.

By achieving the two main results under the Top-Up namely a) development of public spaces, and b) development of Building energy performance rating tool, the project would be complementing the following specific results of the second Pillar of Enabel Country Portfolio:

- Result 1: “A conducive environment for green and circular economy and for green cities is promoted at national and local levels” (West Bank), in particular the following activities:
    - 1.3 “Reinforce the green building code, regulations and standards”.
    - 1.4 “Develop a positive environment to green buildings in the selected regions”.

- Result 3: “Green cities in Palestine are promoted through resilient urban planning, green inclusive services, and green buildings, taking into account the needs of vulnerable groups (women and youth) (West Bank and Gaza), in particular the following activity:
    - Support the development of public spaces in the urban areas in the selected clusters (Nablus, Tubas, Hebron, Bethlehem and Gaza).

6.3 Catalysts to promote sustainability in Palestine

6.3.1 Climate change and Palestine’s NDCs

Palestine it is one of the most vulnerable countries to climate change, considering its location in the Mediterranean region, a hot spot for climate change and its impact. Rising temperatures, changes in precipitation patterns, and increased frequency and intensity of extreme weather events are all expected to have significant impacts on Palestinian communities, particularly in the areas of water availability, agriculture, and public health.

Despite the major challenge posed by the ongoing Israeli occupation and political instability in the region, the Palestinian Government is committed to pursuing climate actions and working towards a more sustainable future for its people. The Government has developed a climate change policy that seeks to mitigate greenhouse gas emissions, adapt to the impacts of climate change, and promote sustainable development.

Palestine submitted its Nationally Determined Contribution (NDC) plan to the United Nations Framework Convention on Climate Change (UNFCCC) in 2016. The period between joining the UNFCCC in March 2016 and submitting the INCR and NAP in November 2016 was less than eight months, highlighting the importance of climate change within Palestine’s national agenda.

The NDC plan outlines Palestine’s commitment to reducing greenhouse gas (GHG) emissions and adapting to the impacts of climate change. The nation decided to revise its NDC targets in 2021 and increased its ambitions, a key ambition being raising its conditional greenhouse gas emissions reduction targets to 26.6% (instead of 24.4%) in an independence scenario and 17.5% (instead of 12.5%) in a status-quo scenario by 2040, compared to business as usual.

The National Adaptation Plan to Climate Change (NAP) for Palestine draws a road map for climate change adaptation, including a range of initiatives aimed at reducing energy consumption, increasing the use of renewable energy sources, improving water management, promoting sustainable agriculture, and building climate resilience in vulnerable communities.

Twelve sectors were identified as “highly vulnerable” to climate change and out of these 12, action plans for 6 sectors (in 2021) including agriculture, energy, health, transport, waste, and water were developed in order to facilitate successful implementation of Palestine’s NDC.

The plan also considers mitigation measures to the negative impacts on crucial sectors for economic growth, including agriculture, energy, and industry, which would bear the worst impacts of climate change.

The NAP presents actions that will be undertaken locally and will be scaled up and implemented more widely. In many cases, these plans lack endorsement and/or implementation at subnational level.

Among the actions for the different sectors are for example the promotion of green buildings, harvesting rainwater, improved energy efficiency by 20% and 20-33% of electricity to be generated from renewable energy by 2040, primarily from solar photovoltaic (SPV).

6.3.2 Green buildings and energy efficiency

According to the Palestinian Central Bureau of Statistics (PCBS), the building sector is one of the largest energy consumers in Palestine, accounting for approximately 27% of the country's total energy consumption in 2019. This includes both residential and commercial buildings, as well as public infrastructure such as schools and hospitals.

Meanwhile, according to the Palestinian Energy and Natural Resources Authority (PENRA), the energy sector is a significant contributor to greenhouse gas (GHG) emissions in Palestine. In 2018, the energy sector accounted for approximately 60% of Palestine's total GHG emissions. This is partially due to the fact that the primary fuel sources for electricity generation in Palestine and Israel are fossil fuels, mainly natural gas and diesel.

Buildings are therefore a significant source of greenhouse gas (GHG) emissions in Palestine. According to a report by the United Nations Development Programme (UNDP), buildings and construction activities in Palestine are responsible for approximately 22% of the country's total GHG emissions. The main sources of GHG emissions from buildings in Palestine are energy consumption for heating, cooling, and lighting, as well as construction materials and waste.

Efforts are being made to promote the use of renewable energy sources such as solar water heaters and photovoltaic systems to meet the energy needs of buildings in a sustainable and low-carbon manner. However, renewable and green energy shall not substitute itself to parsimony in energy use. While solar photovoltaic panels are a relatively clean source of energy compared to fossil fuels, there are still some environmental and social issues associated along the production and disposal supply chain: raw material extraction, such as silicon, copper, and rare metals, which can have environmental impacts, including habitat destruction, water pollution, and soil contamination, an energy-intensive production (which can be polluting if the energy used to manufacture the panels is itself not green), land use and end-of-life disposal as well as severe social risks related to conflicts, human right violations and illegal trade.

Improving the energy efficiency of buildings is therefore a crucial aspect of sustainable architecture and an important leverage for mitigation of climate change, worldwide and in Palestine.

To reduce energy consumption in buildings and promote energy efficiency, PENRA is working on developing and implementing building codes and standards that promote energy-efficient design and construction practices. With the financial support of Belgium, Enabel has supported in 2022 the drafting of the second edition of the Energy Efficient Building Code for Palestine, in coordination with the Ministry of Local Government and PENRA, and of the Green Building Guidelines, with the Palestinian Higher Green Building Council (PHGBC).

These future regulations should further be complemented through monitoring, certification schemes and quality controls as to increase the 'demand' for green buildings products and services.

However, currently, no environmental standard nor level of energy performance is made mandatory in Palestine. No calculation of the energy performance is even routinely made nor requested as part of building permits, while no specific standard tool for rating the energy performance of buildings has been developed in Palestine yet. There is therefore now a need to support the operationalization of these policies, by developing practical tools, schemes, processes, and templates adapted to the context and the guidelines policies, and test and showcase them on concrete pilot projects, before being able to disseminate their use to the public and mainstream their requirement.

7 Main objectives of the consultancy

7.1 General objective of the consultancy

The scope of this consultancy is to conceptualize and develop a **Building Energy and Economic Performance Rating Tool**, tailored to Palestine context and policies, aiming to advance energy efficiency of buildings. The tool, by its design and outputs, shall help to:

- Ensure an easy, transparent, and objective way of calculating, estimating and comparing the energy performance of buildings,
- Facilitate the mainstreaming of this calculation as part of a national policy of energy efficiency, and initiate its introduction as a mandatory requirement as part of processes such as building permits, selling or renting of property, or retrofitting of existing buildings,
- Make energy efficiency become a marketing tool, as a high rating can appeal to potential tenants or buyers who are interested in sustainability and reducing energy costs,
- Provide reliable statistical data as a benchmark on the existing housing stock and current practices in new construction,
- Raise the awareness, as it would provide information to building owners, promoters, occupants, architects and other stakeholders about the current energy performance of existing buildings, the anticipated performance of buildings under design, the potential for energy savings through retrofitting works and the period of return on investment, and help stakeholders make more informed decisions about energy use.
- Contribute to developing the institutional framework in Palestine to facilitate the effective implementation and adoption of PEB tool.
- Participate in the pilot application of the tool on a selected group of buildings and deliver both theoretical and hands-on training to relevant personnel to ensure proper use and integration of the tool.

7.2 Functional concept and design logic

It is envisaged to serve as a user-friendly browser-based Building Energy Performance (BEP) Tool customized for Palestine, which enables stakeholders, including lending banks, project developers, and individuals, to assess the energy performance of buildings and evaluate the cost-effectiveness of energy efficiency and renewable energy measures. The tool will support informed decision-making by providing accessible, localized data and performance comparisons to enhance sustainable building practices in Palestine.

(BEP) tool shall be designed to comprehensively assess all critical factors influencing a building's energy performance and the lifecycle costs of energy efficiency measures, from the thermal characteristics of the building envelope to the integration of renewable energy technologies. By leveraging this tool, project developers can design buildings that consume significantly less energy than typical business-as-usual (BAU) buildings. Financial institutions, in turn, can use the tool's outputs to establish funding criteria, incentivizing projects that surpass predefined energy performance thresholds relative to BAU benchmarks.

The core calculation engine shall adhere to the most updated international standards and norms for calculating building energy requirements (e.g., ISO 52000 series, ASHRAE standards, etc), based on hourly climate data. The tool will involve an **Energy Performance Certificate scheme** that demonstrates building energy performance against baseline building and recommends measures to improve its energy performance. It shall follow the energy labelling system for buildings made mandatory by the European Union, known as the Energy Performance of Buildings Directive (EPBD), which uses a scale from A to G. The

rating system will be based on the simulation results of the tool including building envelope, HVAC systems, lighting, expressed in specific energy consumption and CO2 emissions.

The PEB tool will enable public users to determine the energy rating of their buildings and assess various energy efficiency scenarios, while highlighting potential long-term energy and cost savings. Additionally, the tool will include exclusive features, such as the official EPC certificate, accessible only to certified users, including EPC Experts, EPC Auditors, and Scheme Operators.

7.3 Specific objectives/ description of items

The consultancy is delineated into four principal items, each addressing a fundamental aspect of the development and operationalization of a building energy performance rating tool for Palestine. These items encompass distinct yet interdependent objectives, collectively ensuring a comprehensive and cohesive approach to the assignment.

7.3.1 Item 1: Preliminary Reviews and Data Collection

This item aims to build the knowledge base and datasets needed to support the energy rating tool. It includes reviewing relevant policies, developing a representative building typology for Palestine while focusing on the most important building types, identifying typical energy systems and user behavior, and establishing national energy benchmarks. The goal is to ensure the tool is grounded in local building practices, energy consumption patterns, and climate conditions.

7.3.2 Item 2: Development of an Online Software Tool

The objective of this item is to design and deliver a user-friendly, web-based energy rating tool tailored to Palestine's context. The tool will enable users to assess building energy performance, compare scenarios, and estimate potential savings and emissions reductions. It will provide decision-makers and practitioners with a standardized method for evaluating and improving building energy efficiency.

7.3.3 Item 3: Development of an Energy Performance Certificate (EPC) Scheme

This item focuses on creating an official energy certification scheme for buildings in Palestine. The EPC will be an integrated part of the tool and shall provide standardized ratings for new and existing buildings. The objective is to institutionalize energy performance labeling and define clear procedures, responsibilities, and governance structures under the authority of PENRA.

7.3.4 Item 4: Capacity Building Program (Conditional Item)

The final item aims to build the capacity of Palestinian professionals in utilizing the Building Energy Rating Tool and effectively implementing the Energy Performance Certificate (EPC) scheme. Through structured training programs and pilot projects, a diverse group of professionals from relevant institutions will be certified as EPC experts, auditors, and operators, laying the foundation for long-term adoption, quality assurance, and sector-wide capacity in building energy performance assessment. The capacity building program will be shaped based on the results and recommendations of the operational sustainability plan.

8 Service framework

8.1 Geographical coverage

Enabel implements projects across multiple geographical zones, including the West Bank and Jerusalem. This assignment will focus on developing an online building energy rating tool tailored to the distinct

climatic zones of the West Bank. Physical activities, such as data collection, audits, and stakeholder consultations, will be conducted in key reference cities that will be selected in the first phase of the project. Therefore, the service provider must ensure the physical availability of needed experts in target locations as needed to fulfill the assignment's objectives.

8.2 Coordination framework

The Building Energy Performance (BEP) tool is intended to be operated and managed by the Palestinian Energy and Natural Resources Authority (PENRA). Its successful development and deployment will require continuous, structured coordination with key national authorities and stakeholders at every stage of the project including planning, design, development, piloting, and operation. Such coordination is essential to ensure institutional ownership, technical consistency, and the long-term sustainability of the tool.

8.2.1 Coordination structure

The development and deployment of the tool shall involve continuous and structured coordination with key national authorities and stakeholders throughout all phases of the project including data collection, tool development, piloting, and operation. The service provider shall maintain effective coordination, structured at three levels:

At the strategic level, high-level engagement with policy and decision-makers is essential to ensure that the tool aligns with national energy efficiency and sustainability goals. This level of coordination supports institutional buy-in and ensures the tool's outputs are embedded in broader policy frameworks. (PENRA) will lead policy and regulatory alignment, ensuring the tool complies with national energy efficiency goals. The Environment Quality Authority (EQA) will oversee environmental and sustainability standards, while the Ministry of Local Government (MoLG) will facilitate later the integration into municipal permitting systems and will ensure consistency with the developed energy efficient code.

At the technical level, ongoing collaboration with sectoral experts and technical staff from relevant institutions is critical to ensure the design, methodology, and functionalities of the tool reflect current practices, standards, and available technologies. This level also includes coordination on data sharing, energy performance benchmarks, and validation processes. The Palestinian Green Building Council (PHGBC), (PENRA), (MoLG), private consultancy firms, and municipalities will play key role in developing building typologies and cost dbase, while (PENRA) will contribute to official validation of the results.

At the operational level, coordination emphasizes the hands-on aspects of tool development and implementation. This involves facilitating data exchange, collecting user feedback, testing tool components, and ensuring seamless integration with existing systems and workflows. Regular communication with focal points from key stakeholders will be critical. Additionally, this level will include collaboration with key stakeholders for pilot testing and feedback incorporation, engagement with private sector actors i.e. architects, engineers, and developers, to ensure practical relevance.

8.2.2 Modalities of coordination

The coordination shall be maintained through:

- **Steering committee meetings:** Periodic meetings with representatives from all relevant key stakeholders to review progress, resolve issues, and ensure strategic oversight.
- **Technical working groups:** Thematic groups involving experts and technical staff from relevant key stakeholders to check and validate the technical aspects.

- **Bilateral consultations:** Targeted consultations and working sessions with individual entities to address specific requirements i.e. consultations with building owners and engineering firms for data collection.
- **Workshops and public forums:** Engagement sessions to ensure transparency, solicit feedback from a wider audience, and build stakeholder buy-in. workshops will be held as well to validate each step of the process such as defined typology, and cost parameters.
- **Formal agreements and MoUs:** (PENRA), the owner of the tool, will be supported by the service provider to conclude agreements or MoUs, if needed, to maintain effective operation beyond the final deployment of the tool.

8.3 Reporting compliance and submission protocol

The service provider shall execute all tasks assigned under each item and incorporate them into the corresponding deliverables, regardless of whether such tasks are explicitly detailed in the deliverable descriptions. Failure to fulfill any required task or specifications described under each item shall render the deliverables incomplete, and the Contracting Authority shall bear no financial obligation for such incomplete deliverables.

If not mentioned elsewhere, the service provider shall submit an inception report and a final summary report. The inception report, detailing the proposed methodology and addressing all clarifications requested in the items' description, must be submitted within two weeks of receiving the award letter. The final summary report shall be submitted no later than one month following the completion of the assignment.

All reports and documents must be formally submitted to the Contracting Authority through designated representatives of the service provider. The service provider is responsible for ensuring timely submission of all deliverables to prevent delays in necessary actions. In the absence of specified deadlines in the Terms of Reference or tender documents, standard norms and professional practices shall apply.

All communications and information exchanges between the Contracting Authority and the service provider throughout the contract period must be conducted in writing or via email, in English, and addressed to the service provider's designated point of contact and the Contracting Authority's designated contact person, respectively.

8.4 Logistical arrangements

The Service Provider shall be fully responsible for all logistical arrangements required for the successful development and operation of the online building energy rating tool. This includes, but is not limited to, the following:

- **Travel and accommodation:** any travel, lodging, and transportation expenses required for the project team to meet with relevant stakeholders, perform site visits, conduct energy audits, etc., are the responsibilities of the service provider.
- **IT infrastructure:** the service provider shall ensure that all necessary hardware, software, and infrastructure (e.g., computing devices, servers, internet access) required for the tool's development, testing, and deployment, are provided and maintained at no additional cost. **The Service Provider shall be solely responsible for bearing all costs associated with the provision and maintenance of the necessary IT infrastructure to ensure the full functionality of the tool, including but not limited to infrastructure supporting high usage volumes, advanced analytics**

capabilities, and compliance with government-level security requirements, for a minimum duration of one (1) year.

- **Personnel and office space:** the service provider shall ensure that the required personnel (developers, engineers, project managers, etc.) are available and any office space or resources needed for the development and delivery of the tool will be provided by the service provider.
- **Data collection tools and equipment:** the service provider (at no additional costs) is responsible for the provision of any devices or software needed for energy performance assessments, and tools needed for data gathering and energy audits.
- **Stakeholder engagement and capacity building:** all costs associated with conducting seminars, workshops, training programs are under the responsibility of the service provider, including venues, transportation, hospitality, and field visits, etc.
- **Miscellaneous costs:** all other costs including printing, translation, permits, or other incidental expenses related to project execution will also be borne by the service provider.

9 Detailed scope of work

9.1 List of expected services/deliverables

Scope of work	Deliverable
Item 1: Preliminary Reviews and Data Collection	1.1 Gap analysis report
	1.2 Building typology report
Item 2: Development of an Online Software Tool	2.1 Back-end (excel-based) energy rating tool and design report
	2.2 Functional online building energy rating tool
	2.3 Technical documents
Item 3: Development of an Energy Performance Certificate (EPC) Scheme	3.1 (EPC) scheme development report
	3.2 Roll-out plan
	3.3: Energy efficiency policy for buildings
Item 4: Capacity Building Program **(Conditional Item)**	4.1 Sustainability plan
	4.2 Preparation and training documents
	4.3 Training completion report – EPC expert training
	4.4 Training completion report – EPC Auditor training
	4.5 Training completion report – Scheme operator training

4.6 Real-case training report
4.7: EPC campaign report

9.2 Item 1: Preliminary reviews and data collection

9.2.1 Kick-off workshop

At the outset of the assignment, the service provider shall organize and facilitate a comprehensive kick-off workshop, engaging all relevant stakeholders including governmental representatives, technical experts, project partners, and other key actors. This workshop will serve as the official launch of the development process for the online energy rating tool. It shall aim to introduce the project's overarching objectives, outline the proposed methodology and workplan, and establish the channels and protocols for ongoing communication and collaboration.

Moreover, the workshop shall provide a platform for capturing insights, lessons learned, and recommendations from local experts and stakeholders who have prior experience in similar initiatives. These inputs will be critically assessed and, where relevant, integrated into the development process to ensure the tool is adapted to the local context, reflects practical realities, and aligns with best practices.

9.2.2 Gap Analysis

A comprehensive analysis of existing gaps is essential to identify the key challenges that may impact the deployment, operation, sustainability, and adoption of the (BEP) tool. The selected service provider shall undertake an in-depth gap analysis aimed at achieving the following objectives:

- Identify existing policy, regulatory, and institutional gaps affecting energy efficiency certification.
- Assess technical and infrastructural limitations to effectively operate the online tool in the long run.
- Evaluate stakeholder capacity and awareness regarding energy performance assessment.
- Determine financial and operational sustainability challenges.

The analysis shall include, at least, the following documents in terms of policies and guidelines:

- **National Energy Efficiency Action Plan for 2020-2030 and 2025-2030** – Outline strategic objectives and national targets for reducing energy consumption in buildings.
- **Energy Efficient Building Code** – Establishes mandatory minimum energy performance standards for construction and retrofitting projects.
- **Green Building Guideline** – Provides best practices and recommendations for sustainable building design, operation, and maintenance.

Key Considerations for Alignment:

1. **Alignment with national policies and legal compliance**
    - The tool must support and reflect Palestine's national energy efficiency targets, such as the mandated percentage reduction in energy consumption by 2030.

- Compliance with all legal and regulatory requirements set forth by governing bodies must be ensured.

2. **Integration with the energy efficient building code**

    - The Energy Efficient Building Code defines important parameters i.e. climatic zones, verified technical data, including building envelope specifications, HVAC system efficiencies, climatic conditions, and energy market trends. The service provider must ensure that all data used in the rating tool's calculations is accurate and up to date.

3. **Adoption of best practices from green building guidelines**

    - The Green Building Guideline offers principles for sustainable design, including passive cooling techniques, renewable energy integration, and resource-efficient construction. These should be integrated into the rating system where applicable.

This gap analysis shall serve as a foundation for designing an effective (EPC) governance model (P. 82) and for developing sustainability plan (P. 91) to ensure the long-term viability of the tool.

9.2.3 Development of Palestine building typology

The building typology should present a collection of reference buildings that accurately represent the entire building stock, encompassing a set of typical construction types found in Palestine. **The focus will be on the most dominant building types in the West Bank,** which represent existing typical architecture and technical building systems. The tool shall be applicable to different (single-zone categories), including:

- Residential buildings
- Educational buildings
- Healthcare buildings
- Commercial buildings
- Hotels
- Public and administration buildings

The building typology shall encompass all sub-categories of the building types listed above, considering that variations in climatic conditions may result in the use of different technical systems within the same building type.

Key aspects of building typology

The figure below illustrates the key characteristics of reference buildings categorization for developing building typology

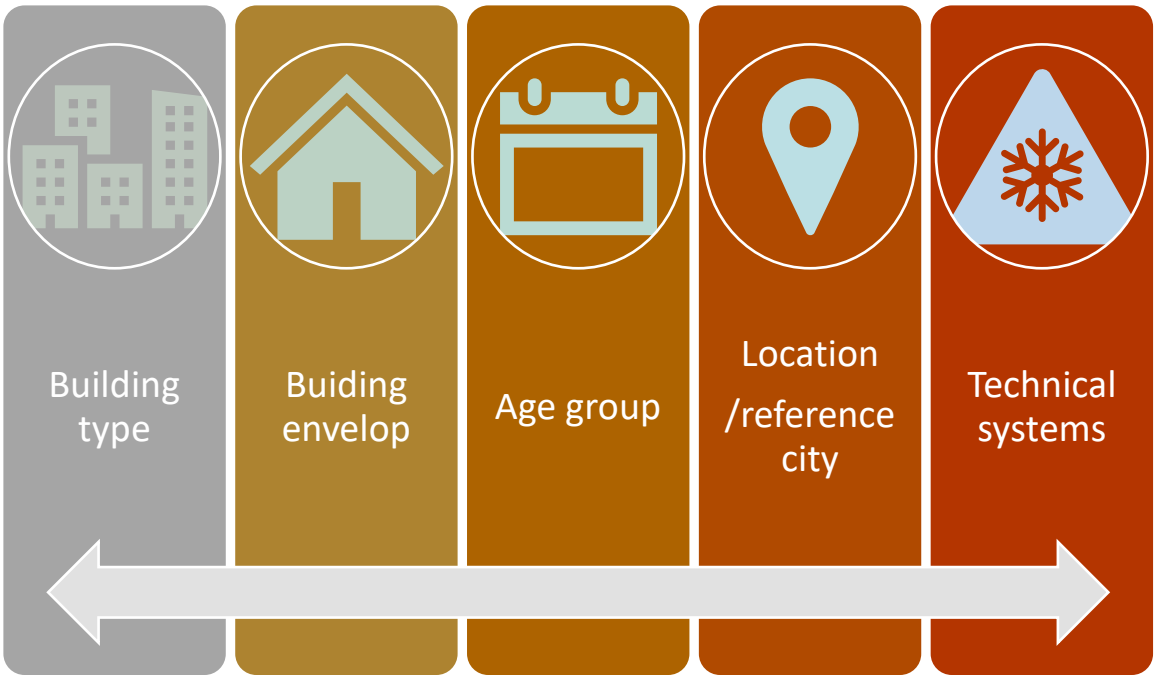


Figure 1. Key aspects of building typology

9.2.3.1 Approach for developing typology database

To calculate and identify market-representative construction specifications as the basis for calculating energetic reference values, a comprehensive database with relevant technical specifications will be created. The aim of this database is to define typical building configurations that are as representative as possible for Palestine context.

The technical specifications shall include all relevant input parameters of the tool for calculating Building Energy Performance (BEP). The service provider shall take the following steps to develop representative building typology database.

A. **Template preparation:** a template gathering all relevant data and information shall be prepared and approved. This template includes, but not limited to, general building information, building geometries, technical specifications of the building envelope, and specifications of technical building systems. Described below for more details.

B. **Data collection:** literature research shall be conducted to explore a variety of sources, such as scientific publications, policies and action plans, manuals and codes, and available databases (if any). The goal is to assess the market penetration of different technologies in the new construction market and identify the most common characteristics. The service provider shall also reach out to various stakeholder groups, including key stakeholders, project developers, consultants, architects, and construction companies, to obtain both qualitative and quantitative technical specifications and data from specific case studies. **The service provider shall propose the number of buildings per building category that will be analyzed for developing the building typology.**

C. **Real case studies:** Relevant data from **two (2)** real building projects (case studies) shall be gathered for each identified building type. The data collected shall be carefully analyzed to be used for data verification and later for tool testing.

D. **Data validation:** all gathered input parameters must be validated through discussions with key stakeholders, i.e typical u-values, insulation thicknesses, window types, HVAC systems, and other relevant parameters were discussed.

E. **Data accessibility:** The collected data and information shall be organized and made accessible to users of the tool.

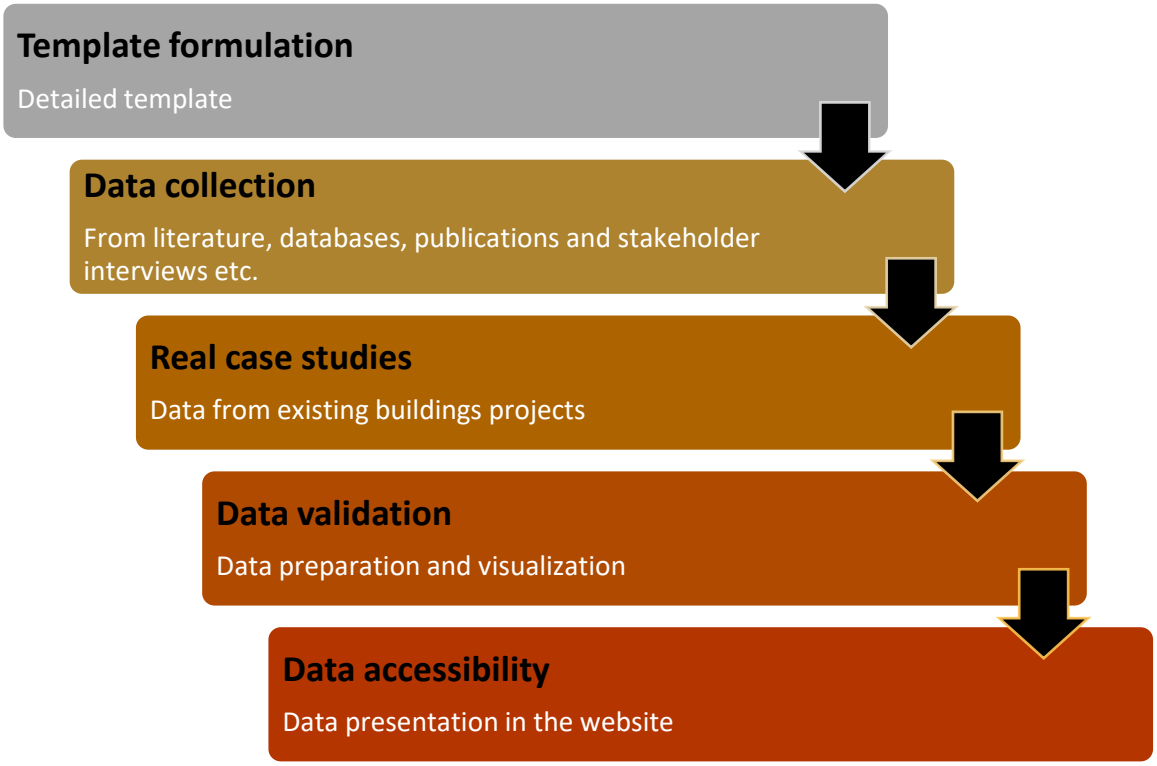


Figure 2. Steps to develop building typology

9.2.3.2 Content of typology database

A. General information

Project name
Reference ID
City
Age group
Building type
No. of users
Existing systems i.e. heating, cooling, hot water, mechanical ventilation, lightning, renewable energy systems

B. Building Characteristics and Technical Specifications

This section shall include all relevant data necessary for accurately estimating the building's energy demand. Input parameters section (P. 70) illustrates the minimum required information on building geometry, building envelope characteristics, and specifications of technical building systems.

The service provider is solely responsible for validating the input parameters (i.e. additional parameters required) to ensure all necessary data is included for accurate calculating of energy demand, CO_2 emissions, and investment costs in accordance with the latest international standards for calculating building energy requirements.

9.2.4 Energy sources and associated CO2 emissions

The service provider shall identify and categorize the various types of energy carriers utilized to meet the energy demand in buildings across Palestine, taking into account both conventional and renewable energy sources. The assessment shall include, but is not limited to, electricity from the national grid, diesel generators, solar photovoltaic (PV) systems, solar thermal energy, liquefied petroleum gas (LPG), kerosene, and any other locally available energy carriers contributing to heating, cooling, lighting, and other building energy needs. Additionally, the study shall quantify the associated carbon dioxide equivalent (CO_2-eq) emissions for each energy carrier (gCO2-eq/kWh).

9.2.5 Cost database

A comprehensive cost database shall be developed, covering the costs associated with construction, energy carriers, renewable energy systems, HVAC, and building envelope components (e.g., windows, insulation). The service provider must validate and expand main cost parameters, illustrated in the table below, to ensure accurate financial analyses, including capital, operational, systems maintenance and retrofitting costs, as well as 20-year savings projections. The structure and content of the cost database must align with the financial outputs of the tool, detailed in the finance section (P. 76).

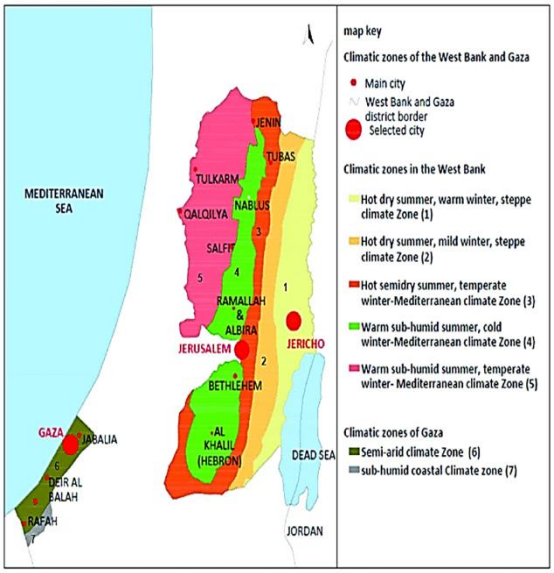
Component/systems		Note
Construction		Categorized by building types
Insulation		For all technologies, methods
Window		For all available types
Space heating systems		For all available systems
DHW	Boiler-decentral	For all available systems
	Boiler-central	The system is supplied by the space heating system, but storage and connections should be considered.
	Thermal solar systems	For all available systems
Space cooling systems		For all available systems
Mechanical ventilation		For all available systems
Lighting		For all available technologies
Renewable energy (PV)		The cost of the whole system based on the system sizing

Feed-in tariffs	According to current policies, if applicable
Energy	All units of different available sources shall be normalized to KWh
Renovation	Specific percentage of capital shall be applied in case of renovation
Maintenance	For all building elements and technical systems including renewable energies

9.2.6 Climatic screening

- **Climatic zones**

  Palestine has a diverse climate due to its geographical location and topography, which affects building energy demand in different ways, each climate zone has a different impact on building energy consumption due to variations in temperature, humidity, and solar radiation. Palestine has 7 climatic zones, therefore considering Palestine's climatic zones is essential for precise building energy demand calculations, particularly for heating and cooling.



- **Reference cities**

  To perform accurate energy demand calculations, representative city for each climatic zone in West Bank should be selected based on **long-term weather data** (temperature, solar radiation, humidity, wind speed).

  Selection criteria for reference cities:

  - **Data availability:** Meteorological stations in these cities provide reliable climate data.
  - **Geographical coverage:** They represent the key variations in West Bank climate.
  - **Building design relevance:** Architects and engineers use these locations for benchmarking.

  The five **(5)** cities will be made available in the tool for energy demand calculation, based on real climatic data.

- **Climatic parameters**

The service provider shall conduct a comprehensive climatic analysis for each designated reference city to support the accurate calculation of energy demand and the optimal sizing of solar energy systems. This analysis will play a critical role in determining the appropriate dimensions and specifications of HVAC and solar energy systems, which in turn will significantly influence the overall energy consumption of the building.

To ensure precision in the assessment, the following key climatic parameters must be thoroughly examined, as they have a direct impact on the performance and efficiency of both HVAC and solar power installations:

- The historical temperature range, including extreme temperature variations recorded over time, cooling degree days (CDD) and hot degree days (HDD), as well as the daily average temperature. These factors are essential in assessing heating and cooling requirements.
- The average relative humidity, as it affects indoor air quality, thermal comfort, and the efficiency of HVAC systems.
- Solar radiation levels, including global, direct, and diffuse radiation, as these determine the potential solar energy generation and influence the efficiency of photovoltaic panels and other solar-powered systems.

9.2.7 Identification of user profile

To ensure the highest level of accuracy in energy modeling, the service provider maintains and updates user profile data for various building types, incorporating real-world usage patterns wherever possible. These profiles are designed to reflect typical energy usage behaviors over a 24-hour period and are categorized by building type (e.g., residential, commercial, office, educational, etc.).

The key components of these user profiles include:

- **Percentage of internal heat gains:** this accounts for heat emitted by occupants, appliances, and equipment, influencing heating and cooling loads.
- **Percentage of other electricity demand:** (excluding explicitly calculated HVAC and lighting loads), covers plug loads from devices, electronics, and other non-HVAC/lighting energy consumers.
- **Percentage of domestic hot water (DHW) demand:** it reflects hot water usage patterns for showers, sinks, laundry, and other sanitary needs.
- **Lighting profile:** it defines the temporal distribution of lighting usage based on occupancy and natural light availability.

9.2.8 Identification of reference input parameters

To determine the representative energy reference values for buildings, a set of reference buildings must be established. Each reference building should represent a specific building type, such as a detached single-family house (SFH), along with its defining characteristics, including geometry, location, urban context, age classification, and typical system parameters.

For each building category, all input parameters shall be identified as reference values based on the values available from the developed building typology database. Those parameters shall be the default values in the tool for the respective building type; hence they will be used to calculate the refence energy values through the developed tool.

The service provider should provide a methodological approach for identifying the reference values based on the developed database (data collection and energy audits) i.e. average values, etc., and the results shall be verified and approved by the relevant stakeholders.

9.2.9 Technical workshops

In addition to the ongoing consultation process and the continuous coordination with key stakeholders, the service provider shall organize at least two workshops or seminars. These events shall serve as essential platforms for engaging key stakeholders in both the co-design of the methodological approach (before implementation) and the subsequent validation of the results achieved through the assignment.

Deliverable 1.1: Gap analysis report

The report will be drafted in English and sent electronically as an editable document file (e.g. .docx, .rtf) and a single portable document file (.pdf). The report shall include the following sections:

- Background and objectives.
- Methodology.
- Revised existing policies, codes, and manuals.
- Identified gaps vs the objectives of the study.
- Alignment of the tool with existing policies and guidelines.
- Recommendations to inform the development of sustainability plan and governance model of EPC scheme.
- Documentation of conducted seminars and workshops.

Deliverable 1.2: Building typology report

The report and associate annexes will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf). The report shall include the following sections:

- Background and objectives.
- Methodology.
- Full list of analyzed buildings categorized by the building type, with full record of envelope parameters and technical specifications.
- Validated parameters i.e. u-values, HVAC systems and efficiencies.
- Validated results of energy audits.
- Officially validated baseline parameters and systems for each identified building type.
- Officially validated baseline energy demand and CO_2 emissions for each identified building type.
- Documentation of conducted seminars and workshops.

Mandatory Annexes:

- Comprehensive dbase including input parameters
- Cost database.
- List of energy sources and associated CO2 emissions.
- User profile report.

9.3 Item 2: Development of a software tool

The tool shall be developed as a free, user-friendly browser application designed specifically for Palestine, available mainly in English language while the service provider might be requested to make it available in Arabic language as well. It should provide valuable insights into a building's energy performance, helping users assess the cost-effectiveness of renewable energy solutions and energy efficiency measures.

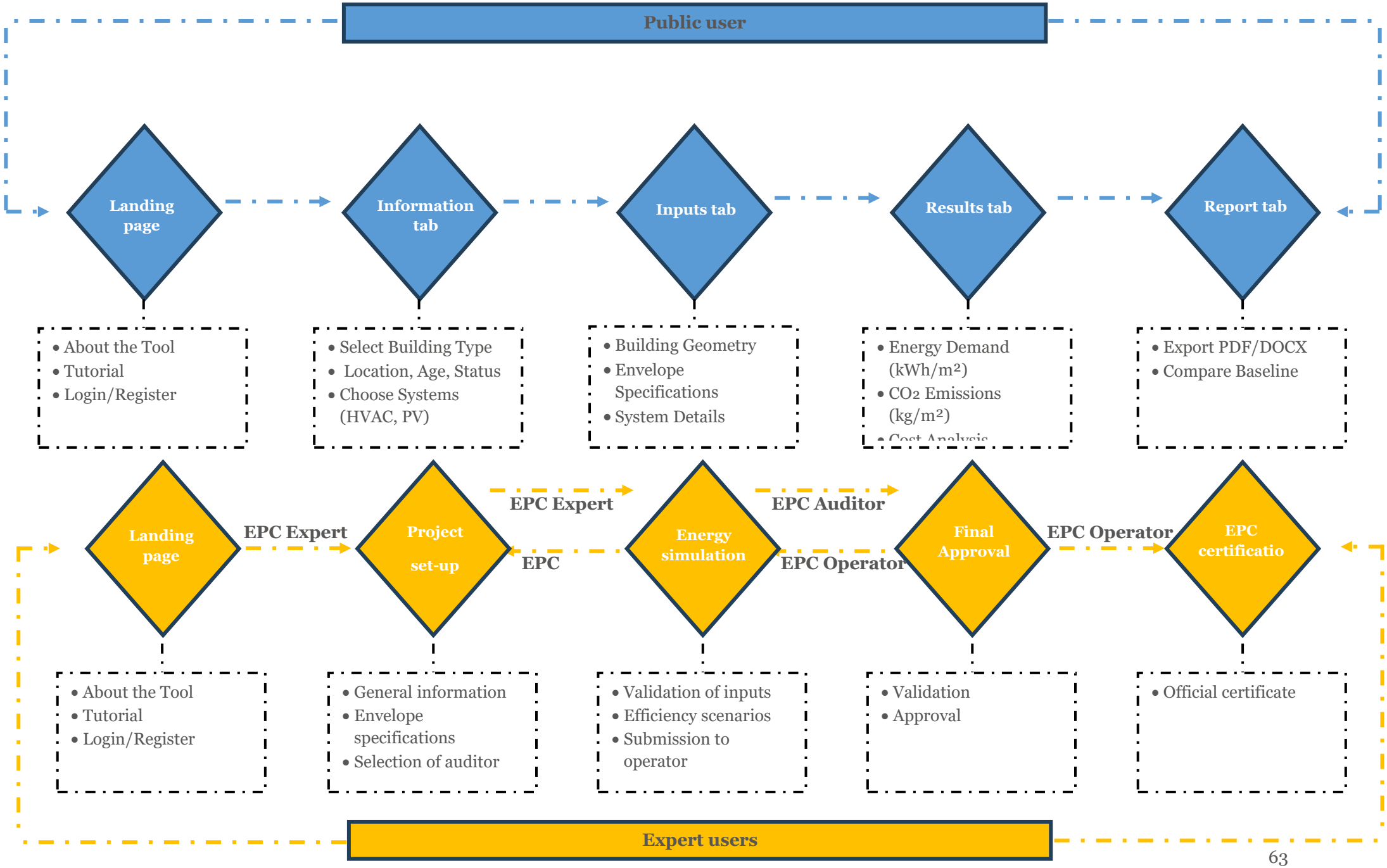
The tool is envisaged to furnish project developers, owners, and other stakeholders with the ability to easily find answers to key questions such as:

- How much energy can the building save by implementing energy efficiency measures or renewable energy solutions?
- What is the potential cost saving associated with these improvements?
- What is the energy class of the building compared to the reference building?

Covering all critical aspects from the building envelope to renewable energy integration, the tool shall offer a comprehensive evaluation of energy performance and lifecycle costs in simple three-step process:

1. **Enter general information**: provide basic project details, including the project name and building type.
2. **Input building-specific data**: define building geometry, wall and window specifications, and building systems. The tool shall pre-fills fields with baseline data based on the selected building type, allowing for quick customization.
3. **Explore results**: analyze energy consumption, carbon emissions, and cost savings through intuitive graphs. The results will also feature an energy performance rating scale, enabling you to compare your project's efficiency against national benchmarks.

The Flowchart below illustrates the public user flow including public and certified users:


Public user
Landing page
Information tab
Inputs tab
Results tab
Report tab
• About the Tool
• Tutorial
• Login/Register
• Select Building Type
• Location, Age, Status
• Choose Systems (HVAC, PV)
• Building Geometry
• Envelope Specifications
• System Details
• Energy Demand (kWh/m²)
• CO₂ Emissions (kg/m²)
• Export PDF/DOCX
• Compare Baseline
Landing page
EPC Expert
Project set-up
EPC Expert
Energy simulation
EPC Auditor
Final Approval
EPC Operator
EPC certificatio
EPC
EPC Operator
• About the Tool
• Tutorial
• Login/Register
• General information
• Envelope specifications
• Selection of auditor
• Validation of inputs
• Efficiency scenarios
• Submission to operator
• Validation
• Approval
• Official certificate
Expert users

9.3.1 Development process

The service provider bears sole responsibility for validating the proposed IT requirements and infrastructure. This includes experts' profile, assessing tools, equipment, coding, web technologies, and servers to ensure the development of an interactive energy rating system that delivers the specified outputs and incorporates all required features as outlined in the Terms of Reference (ToR). The service provider shall propose a full package of IT-setup, including any additional expert profile.

9.3.1.1 Back-end system

A. Development of (Excel-format tool)

The back-end system will handle data processing, business logic, and communication with the front end. The back-end shall, at least, meet the following requirements:

- Core functionalities of the web-based tool including data input, calculation engine, and simulation results.
- Preferably built using Python, Node.js, or Java, C# for robustness and security.
- A secure and scalable database to store building data, user information, and energy ratings.
- Energy calculation algorithms based on applied codes and standards.
- The database must be protected against unauthorized modification of formulas or macros.
- Data encryption for sensitive information.

B. Testing

1) Functional testing

The service provider shall verify that all components of back-end system function as intended, including user inputs, energy calculation algorithms, and simulation results through:

- Conducting thorough testing of the tool's functionalities to ensure seamless performance and accuracy.
- Ensuring the tool's data processing, including climate and baseline building data, is seamlessly connected and accessible through the website.

2) Comparative testing

The service provider shall ensure the validity and reliability of the generated results, particularly energy demand estimations, through rigorous verification against established simulation tools and real-case studies. The following measures shall be implemented:

1. Cross-verification with energy rating software
    - Results from the online tool shall be compared against industry-standard simulation software such as EnergyPlus, EDGE, etc.
    - This comparison shall, at a minimum, be conducted for the baseline building of each category to ensure consistency.
2. Validation against real-case studies
    - The tool's outputs shall be validated against real buildings with documented energy usage, such as those from energy audits.
3. Acceptable margin of deviation

- The discrepancies in energy demand estimations shall not exceed **±10%.**
- Justification and corrective actions shall be documented for any deviations beyond this threshold.

C. Refinement

- Refine algorithms and assumptions based on testing outcomes to improve accuracy and presentation of the results.
- Document any deviations from expected results and implement corrections.

D. Validation

- Key stakeholder and third-party experts (local experts) and institutions shall be engaged to validate the methodology and simulation results.
- Develop a comprehensive validation report, summarizing:
  - The testing methodology and tools used
  - Test cases and outcomes
  - Identified issues and corrective actions taken
  - Validation approach and documentation

9.3.1.2 Front-end system

A. Development of customized website

The full description of the requested minimal design and features are detailed in the following sections:

- The front end shall be developed using modern web technologies (e.g., HTML5, CSS3, JavaScript, React.js/Angular/Vue.js).
- The interface shall be responsive and accessible on desktop and mobile devices.
- User-friendly forms shall be designed for data input, including dropdowns, validation checks, and dynamic fields.
- Modular and flexible architecture that allows for the easy integration of new features.
- Interactive dashboards shall display energy ratings, graphs, and allow for exporting reports and generate customized EPCs.
- User authentication (email/password or OAuth) with role-based access control (admin, experts, public user).

B. Server setup and deployment

The service provider is fully responsible for setting up the necessary server infrastructure, including configuration and software installations, to support the deployment of the tool (fully compatible with PENRA website).

- Handling C#/.NET, PHP, MySQL, and JavaScript code, and ensuring compatibility with the PENRA website.
- Setting up and configuring the MySQL database, including importing initial data and creating backups.
- The tool shall be hosted on a secure, high-availability server (cloud-based or on-premises).
- Setting up the necessary service accounts.
- Integration requirements shall be identified and supported by the service provider.
- Domain registration and SSL certification shall be configured for secured access.
- Adherence to data protection local and international regulations.

C. Testing

1) Functional Testing

The service provider shall verify that all components of the tool function as intended, including user inputs, energy calculation algorithms, reporting modules, and any integrated third-party data services.

- Conduct thorough testing of the tool's functionalities to ensure seamless performance and accuracy.
- Conduct unit testing, integration testing, and end-to-end testing to ensure the tool performs as per specifications.
- Managing the interaction between servers, facilitating the smooth transfer of calculation requests and results.
- Test how the tool handles invalid or missing inputs.

2) User acceptance testing (UAT)

The service provider shall evaluate the tool from the perspective of end users to ensure usability, clarity of results, and overall user satisfaction.

- Select a representative group of end users, i.e. PENRA staff, architects, owners to conduct structured testing sessions with guided scenarios and collect feedback.
- Gather feedback on usability, clarity of outputs, and any discrepancies observed.
- Iterate based on findings to improve user interface and output presentation.

3) Performance testing

The service provider shall assess the tool's responsiveness and stability under different usage loads.

- Perform load testing and stress testing to identify potential bottlenecks or failures under high traffic or data-intensive operations.

D. Validation process

- Engage third-party experts (local experts) and institutions shall be engaged to validate the tool's methodology and outputs.
- Develop a comprehensive validation report, summarizing:
    - The testing methodology and tools used
    - Test cases and outcomes
    - Identified issues and corrective actions taken
    - Final confirmation of tool readiness for deployment **(official validation shall be secured from PENRA).**

E. Handover and Documentation

After finalizing the development phase, the service provider shall provide a full handover package, which includes:

1) Documents:

- System architecture
- Database schema
- Complete source code for both front-end and back-end
- Excel tool with user guide.
- Set-up and deployment instructions.

2) **Technical training:** prior to the deployment of the tool, the service provider will conduct specialized training targeting system administrators, IT experts, and developers assigned by PENRA on how to maintain the effective operation of the tool, add new features, adjust reference parameters, ect. The training shall be provided for at least three (3) full days, 7 hours each. **Full step-by-step manuals shall be submitted and approved.**

9.3.1.3 Operational sustainability measures

A. Technical support

To ensure the effective and continued operation of the tool, the reservice provider will be responsible for addressing any operational issues, user inquiries, software bugs, and system glitches. The technical support shall be provided for a period of **twelve (12) months** including the following:

- **Software maintenance and bug fixes:** the service provider will ensure regular updates to address any identified bugs, security vulnerabilities, or performance issues. This includes a response plan for emergency fixes in case of critical system failures.
- **System monitoring and optimization:** the service provider will conduct ongoing monitoring of the tool's performance to ensure it operates efficiently and remains responsive to user needs. This will involve periodic performance tests, updates to optimize the tool's speed and accuracy, and regular security audits and penetration testing.
- **Training and documentation:** throughout the maintenance period, the service provider will conduct on-the-job training sessions for relevant experts. Comprehensive technical documentation and guidelines will also be developed and provided to PENRA for future reference.

The handover of the tool will be contingent upon PENRA staff and operating partners demonstrating the capability to independently manage and operate the tool.

B. Future expansion and scalability

The tool will be designed to accommodate any updates on input parameters, and potential features to enhance usability and provision of accurate and reliable outputs over time, this would include potential integration of:

- New modules, i.e. water efficiency rating.
- New types of envelope parameters, technologies and systems.
- Expansion to other cities and/or climate zones.
- Linkage with municipal e-permitting systems and future green finance tools.

C. Long-term reliability

The tool will be hosted on a robust, secure, and scalable platform to ensure its availability and reliability over the long term. The service provider shall coordinate with PENRA to select the hosting environment, which will meet the following criteria:

- **Cloud-based hosting:** To ensure flexibility, scalability, and resilience, the hosting platform will be cloud-based, enabling PENRA to easily scale resources according to growing user demand and evolving tool functionalities.
- **Data security and backup:** The hosting solution will comply with internationally recognized data protection standards. Regular automated backups will be conducted to prevent data loss and to ensure business continuity.
- **Uptime guarantee:** The hosting service will be guaranteed to maintain a minimum uptime of 99.9% to ensure that the tool is always accessible to users.

- **Maintenance and support:** The hosting provider will offer 24/7 technical support, with a defined service level agreement (SLA) for issue resolution and system updates.

9.3.2 User interface design requirements

The tool's interface should be designed to be intuitive, user-friendly, and accessible, ensuring ease of use for a wide range of users, including building owners, energy consultants, and policymakers. The key design principles should include:

A. Simple and clean layout

- A well-organized dashboard with clear navigation.
- Minimalistic design with intuitive icons and tooltips for guidance.

B. Step-by-step input process

- A structured workflow that guides users through the data entry process logically.
- Pre-filled fields, drop-down menus, and smart suggestions where applicable to reduce manual input, (baseline values according to the inserted building type).

C. Visual representation of results

- Graphs, charts, and rating indicators to display energy performance in an easily interpretable format.
- Color-coded rating system for quick assessment of energy efficiency.

D. Responsiveness and accessibility

- Fully responsive design for seamless use on desktops, tablets, and mobile devices.
- Compliance with accessibility standards (e.g., WCAG).

E. User guidance and support

- Built-in help sections, FAQs, and tooltip explanations for complex inputs.
- An optional guided tour or tutorial for first-time users.

F. Data integrity and usability

- Auto-save functionality to prevent data loss.
- Clear confirmation messages and validation checks to ensure data accuracy.
- Ability to save several projects per user account.

G. Interactivity and customization

- The ability to compare different scenarios or building types (e.g., retrofits, energy source changes).
- Options for export reports and results in user-friendly formats (e.g., PDF, Excel).

9.3.3 User Flow and Interface Structure

9.3.3.1 Landing page

The landing page serves as the main entry point for users, offering an intuitive and user-friendly interface designed for easy navigation. It includes a modern, professional design with a focus on sustainability and energy efficiency, reinforcing the purpose of the tool.

Key Features of the Landing Page

A. Header and navigation menu

- A clear, responsive header featuring the platform’s logo and name.
- A navigation bar with quick access to:
    - Home

- About (explaining the tool's purpose and benefits)
- Testing Feature
- Login and Registration
- Help/FAQ

B. Hero section (main banner)

- A visually engaging banner with a call-to-action (CTA) encouraging users to test their building's energy efficiency.
- Background imagery or illustrations related to sustainable buildings, energy ratings, or smart technology.
- A prominent "Get Started" button directing users to the tool's testing feature.

C. Testing feature (quick assessment tool)

- An interactive section allowing users to input basic building details (e.g., size, materials, energy sources).
- Immediate estimated energy performance with partial results.
- A prompt encouraging full registration for detailed analysis and certification.

D. Building typology

- Assigned tab to allow users to navigate and review available and analyzed building typologies.
- The page shall be designed to display reference buildings as per selected cities and/or building category.
- Indicative photos of real building shall be available for each reference building with associated general information, input parameters, and final energy demand.

E. User authentication (login and registration tabs)

- Login Tab: for returning users to access their dashboards and previous assessments.
- Registration Tab: A streamlined sign-up process requiring:
  - Name
  - Email
  - Password
  - Optional business/company details (for professional users).

F. How It Works

- Links to tutorial video and user manual

G. Footer

- Contact information and support options.
- Links to privacy policy and terms and conditions.
- Social media links and any relevant certifications or affiliations.

9.3.3.2 General information tab

In this tab the user shall provide general information on the building/project, the entries shall call the specific default inputs in the next tab according to the selections made as per the following entries:

- Project name
- Location
- Building type
- Age group

- Number of users
- Status: renovation/new construction: in case of renovation selection, the tool shall calculate additional costs of renovation that were previously identified per m^2.
- Reference building: automated or own inputs

In this tab, the user shall be allowed to:

- **Select the available/needed systems** i.e. cooling, heating, DHW, lighting, PV, etc, the selected systems will be displayed in the next tab (inputs).
- **Select manual inputs for final energy demand:** The user will need only to enter the energy demand for each energy source.
- **Input his own costs:** additional sections in the (inputs tab) will be available for the user to insert the costs of the envelope measures, HVAC, and RE.
- **Selection of base or advance mode:** the base mode allows for non-technical or less experienced user to focus on the most relevant input parameters, while some very specific and detailed inputs are hidden. The tool sets default values for these parameters, based on the pre-selection in this tab, that meets most requirements. The advanced mode allows the user to adapt every input parameter. The selection of advanced parameters shall be identified and approved by project stakeholders.

9.3.3.3 Inputs tab

In this tab, the user will enter more specific data on the building geometry, walls, windows, and building's systems. To simplify the entry process, these fields should be populated with baseline data based on the selected building type. The user will be able to change the inputs and explore different EE and RE scenarios to improve energy efficiency of the building. Input parameters (P. 70) section illustrates the main entries.

9.3.3.4 Results tab

The results tabs, detailed in the main simulation results section (P. 75), will include graphs displaying energy consumption, carbon emissions, and costs. It will contain an energy performance rating scale; this scale provides an indication of where the building stands compared to the corresponding baseline building. **The user shall be able to download the generated results in pdf, or docx format including charts, tables, etc.**

9.3.3.5 Detailed report tab

This tab shall provide the user with detailed description of the project including the general information, input parameters, detailed results on energy consumption, CO_2 emissions, investment costs, energy rating based on baseline building. **The tool shall provide the option of downloading the report in pdf, or docx format.**

9.3.3.6 Energy performance certificate tab

This advanced tab, restricted to certified experts, is fully described in Item 3 (P. 81).

9.3.4 Input parameters

The following table summarizes the initial input parameters (base and advanced mode). *The service provider is solely responsible for validating the input parameters (i.e. additional parameters required) to ensure all necessary data is included for accurate calculating of energy demand, CO_2 emissions, and total costs in accordance with the latest international standards for calculating building energy requirements.*

A. Building geometries									
Building levels (floors)	Number of dwellings	Net floor height (m)	Net floor area (m^2)	Roof area opaque (m^2)	Façade area opaque (excluding windows) (m^2)	Share of façade to orientation (m^2)	Window area (m^2)	Share of windows to orientation (m^2)	Area floor slab (m^2)

B. Building Envelope					
Wall					
Type/composition: when selected, pre-defined U-value shall be displayed	Option for renovation	Option to calculate U-value based on the layers **(U-value shall be identified to all layers)**	Specific heat capacity ($J/(m^2K)$)	U-value ($W/(m^2K)$)	Thermal heat bridge ($W/(m^2K)$)
Roof					
Type/composition: when selected, pre-defined U-value shall be displayed	Option for renovation	Option to calculate U-value based on the layers **(U-value shall be identified to all layers)**	Specific heat capacity ($J/(m^2K)$)	U-value ($W/(m^2K)$)	Thermal heat bridge ($W/(m^2K)$)
Slab					
Type/composition: when selected, pre-defined U-value shall be displayed	Option for renovation	Option to calculate U-value based on the layers **(U-value shall be identified to all layers)**	Specific heat capacity ($J/(m^2K)$)	U-value ($W/(m^2K)$)	Thermal heat bridge ($W/(m^2K)$)
Window					

Option for renovation	Type (material)	G-value	U-value (W/(m²K))	Thermal heat bridge (W/(m²K))	Shading type
Air change rate					
Free ventilation (1/h)			Infiltration (1/h)		
C. Specifications of technical building systems					
Space heating					
Space heating system			Efficiency class heating system		
Space cooling					
Space heating system			Efficiency class heating system		
DHW					
Primary technology		Efficiency class heating system		Type of solar system	
Mechanical ventilation					
Type of ventilation system			Air change rate (1/h)		
PV					
Capacity of the solar system (KW)		Inclination and azimuth angels		Required area (m2), **auto generated**	
Lighting system					

Type of lighting technology			Lighting sensors	
Other operating parameters				
Internal heat gains (people, appliances) (w/m2)	Additional electricity consumption (without light, HVAC) **Automated amount in KWh/a based on the chosen level of consumption**	Conditioned area for heating and cooling	Conditioned area (cooling)	Set point temperature for cooling and heating
D. Manual inputs (displayed when selected in general information tab)				
Costs inputs		Baseline inputs		Final energy demand inputs

9.3.5 Methodology of calculations

The calculations should provide a comprehensive analysis of energy demand, greenhouse emissions, and economic feasibility, **based on hourly energy simulation.**

The tool should calculate energy demand, including useful, final, and primary energy, along with greenhouse gas (GHG) emissions and overall costs for various energy efficiency measures in buildings. These calculations will account for investments in HVAC systems, photovoltaic (PV) and solar thermal systems, insulation, and shading measures. Additionally, maintenance costs, energy expenditures, revenue from PV feed-in over the calculation period will be included.

9.3.5.1 International norms and standards

The online Building Energy Rating Tool shall adhere to the most updated and internationally recognized standards and norms for calculating the final energy demand of buildings, ensuring accuracy, consistency, and comparability. **The service provider shall propose:**

- The most-updated norms and standards that provide accurate estimation of buildings energy demand in Palestine i.e. ISO 52000 series, ASHRAE standards, EN standards.
- Detailed calculations for the useful energy demand including:
    - Envelope elements
    - Heating and cooling
    - Hot water
    - Internal heat gains
    - Other electricity
- Detailed calculations for the final energy demand including:
    - Space heating
    - DHW
    - Space cooling
    - Mechanical ventilation
    - Photovoltaic
    - Lighting
- Detailed calculations CO_2 emissions (gCO2-eq/kWh) from various energy carriers.
- Measures for national adaptations
    - Alignment with Palestinian Energy Efficient building code
    - Incorporating climate-specific factors such as high cooling loads, solar gains, and insulation requirements.
    - Alignment with National Energy Efficiency Action Plan for 2020-2030.

9.3.5.2 Primary energy factors

The service provider mut conduct thorough analysis and consultations with relevant stakeholders, i.e. consultants, experts to identify the primary energy factor per each energy carrier based on the available information on the efficiency of conversion.

9.3.5.3 Climatic calculations

The tool must consider the local climatic conditions and perform the simulation based on **hourly climate data** to generate accurate results. *The service provider should propose the source of data that will be used*

in the simulation process. It is the responsibility of service providers to collect data from approved stations and to validate the reliability and consistency of the inputs.

9.3.5.4 Costs

The subsequent cost calculations should be based on construction costs, system investment costs, and energy prices. The costs should be obtained from relevant authorities and local experts and must take in consideration inflation rate in Palestine.

A. Envelope (*external walls, roof, and floor)*

The calculation of the envelope cost should reflect the insulation costs of the roof, external walls and slabs, windows, and the cost to increase the general airtightness of the building's envelope.

The cost of insulation should be estimated by calculating the thickness of insulation through two parameters 1) Lambda (the specific heat coefficient) of insulation material, 2) the difference in U-value.

For windows, if there is a wide variety of windows, cost/m^2 can be interpolated based on U-values.

B. Systems (cooling, heating, mechanical ventilation, DHW, lighting)

The investment cost of the systems shall encompass multiple components, including distribution, storage, and the installation process. These costs are directly influenced by the power output required to meet the building's energy demand.

For decentralized domestic hot water (DHW) systems, the investment cost must be assessed by considering both peak demand per apartment and the total number of apartments within the building. Peak demand is a critical factor because it determines the required system capacity to ensure adequate supply without excessive energy consumption. The cost calculation should account for all necessary components, including water heaters, storage tanks (if applicable), and distribution infrastructure.

The costs associated with thermal solar systems should be determined based on the required collector area, which is an input provided by the user. The total cost is derived by multiplying the collector area by the specific collector area price. This price includes the entire system cost, whether it is a thermosyphon system or a central system with integrated storage within the building.

Photovoltaic (PV) system investment costs are determined based on the total system capacity, which is specified by the user. The cost structure typically includes solar panels, inverters, mounting systems, and installation costs.

The service provider must present a detailed methodology for calculating the investment costs of both the building envelope and HVAC systems. The calculations set-up (equations) should consider the wide range of available system types, energy carriers, and efficiency levels.

C. Renovation

When the renovation option is selected for any element in the system, a renovation cost factor should be applied to account for the additional costs associated with upgrading or replacing the existing infrastructure. The renovation cost factor reflects the reality that replacing a system is often more expensive than a new installation due to the added complexity of dismantling and disposing of the existing components before the new system can be installed.

9.3.6 Main simulation results

Based on the calculation engine, the online building energy tool shall generate comprehensive, user-friendly outputs to support decision-making for policymakers, building owners, and energy auditors. The outputs must include both tabular data and intuitive visualizations to effectively communicate detailed energy-related, and financial analysis.

9.3.6.1 Energy and Environment

A. Energy consumption

The tool shall generate detailed analysis of the building energy demand covering the following categorizations:

- ***Primary energy by energy use kWh/(m²*a):*** presents the annual primary energy demand per square meter.
- ***Final energy by energy use kWh/(m²*a):*** presents the annual final energy demand per square meter.
- ***Final energy by energy carrier kWh/(m²*a):*** presents the annual final energy demand per square meter.
- ***Useful specific demand kWh/(m²*a):*** presents the annual primary energy demand per square meter.

B. Emissions

The tool shall generate detailed analysis of CO_2 emissions showing the annual amount of CO_2 per square meter. The amounts *$kgCO_2/(m^2*a)$* shall be categorized per energy use as well.

The list below summarizes energy use that energy demand and CO_2 emissions will be categorized based upon.

	Energy use
1	Space heating
2	DHW
3	Space cooling
4	Lighting
5	Ventilation
6	Other electricity
7	PV

9.3.6.2 Finance

The tool shall generate detailed analysis of the costs associated with the construction and energy efficiency measures (EE), and utilization of renewable energy (PV). The analysis shall give an overview of the investment costs and savings from applied measures**.**

- ***Total cost:*** presents the total cost over 20 years that is required for supplying the building with energy demand according to the input parameters. The costs shall include at least the following metrics:
    - *Investments:* the costs associated with insulation and systems.
    - *Energy:* the cost of energy carriers, considering the energy generated by PV.
    - *Maintenance:* costs for maintenance of the systems.
    - *PV feed in tariff*

- ***Specific cost:*** the total costs for each metric, above-mentioned, per m^2.

- ***Investment cost:*** presents total costs categorized by two main categories, construction costs and detailed costs of insulation and systems.

1. Non-energy related costs
    - Construction costs
2. Energy related costs:
    - Walls
    - Roof
    - Floor
    - Windows
    - Shading elements
    - Heating system
    - DHW system
    - Cooling system
    - Ventilation system
    - Lighting
    - PV

- ***Metrics and KPIs***
    - Payback Period
    - Capital investment costs (Capex)and operational investment costs (Opex)
    - Internal rate of return (IRR)
    - Life cycle assessment (LCA)

9.3.6.3 Energy performance rating

Based on the results of energy demand or Co_2-eq emissions of the building, the tool shall present the energy class of the building inline with the agreed energy performance classifications. The energy performance classifications shall be accessible through designated button or hover selector.

9.3.6.4 Comparison with baseline and pre-conditions

The tool shall allow users to compare simulation results (energy consumption, CO_2 emissions, and costs analysis) against two key benchmarks:

- **Baseline building**
- **Existing building conditions** (in case of renovation)

The tables shall present the simulated outputs and those of the benchmarks, and the difference from each benchmark in (%).

The tool shall allow users to compare the results of different scenarios against the benchmarks and visualized according to the below sections

9.3.6.5 Automated diagnostic feedback

The online energy rating tool shall incorporate a diagnostics engine capable of analyzing building input parameters and performance metrics to generate clear, contextual feedback on underperformance areas in comparison to benchmark or reference buildings.

- The tool shall identify and rank the most significant contributing factors to low performance (e.g., poor thermal insulation, inefficient HVAC, excessive lighting energy use).
- It shall provide an explanation for each factor in plain, non-technical language.

9.3.6.6 Results usability and visualization

The online building energy tool shall incorporate a user-friendly design with clear and intuitive visualization of results. The interface must present graphs, tables, and key performance indicators (KPIs) in an accessible and aesthetically appealing manner. The following usability and visualization principles must be adhered to:

A. Clarity and simplicity

- Ensure all graphs and tables are easy to interpret, avoiding unnecessary complexity.
- Use clear labels, legends, and units of measurement to prevent misinterpretation.
- Provide a structured layout that prioritizes essential data, with drill-down options for more details.

B. Design and color scheme

- Use a professional, high-contrast color scheme aligned with accessibility standards.
- Differentiate data series using distinct but harmonious colors, ensuring clarity for color-blind users.
- Implement a responsive design that adapts to different screen sizes (desktop, tablet, mobile).

C. Interactive elements and tooltips

- Enable interactive features such as hover-over tooltips that provide additional insights on data points.
- Use dynamic filtering options to allow users to customize their views of energy performance data.
- Include zoom and pan functionality in graphs for detailed analysis.

D. Tables and data presentation

- Each requested result, detailed above, shall be presented by charts for the simulation results, and by tables for comparison with baseline building, and existing conditions.
- Ensure tables are neatly formatted with alternating row colors for readability.
- Provide export options (Excel, PDF) to facilitate further data processing.

E. Guides and Help Features

- Integrate an interactive user guide and help tooltips to explain features and calculations.
- Offer a glossary of key terms related to building energy analysis.

9.3.7 Development of detailed user-manual

The service provider shall develop detailed user manual to ensure that end-users can effectively navigate, understand, and utilize the tool to assess and improve building energy performance.

9.3.7.1 Design and Format

- **Language:** Primarily in Arabic, with an English version for technical stakeholders.
- **Accessibility:** Available in both digital (PDF, web-based) and printable formats.
- **Structure:** Clear, logical flow with numbered sections, headings, and subheadings.
- **Visualization:** Use of diagrams, screenshots, flowcharts, and icons to enhance comprehension.

- **Consistency:** Uniform formatting (font, colors, branding) aligned with the tool's interface.

9.3.7.2 Content Outline

- **Introduction:** clarifying the purpose, logic and benefit of the tool.
- **Tool navigation:** detailed explanation of required inputs including additional information about the parameters, factors, and HVAC systems. It shall cover all parameters that need to be identified in the input tabs and shall explain all built-in parameters in the tool.
- **Methodology of calculation:** explaining detailed calculations of useful energy demand, final energy demand, CO2 emissions, primary energy factors, and costs.
- **Main results:** Interpreting energy rating and cost analysis results.
- **Glossary of terms:** All terms shall be identified and explained.

9.3.8 Technical workshops

In addition to the ongoing consultation process and the continuous coordination with key stakeholders, the service provider shall organize at least two workshops or seminars. These events shall serve as essential platforms for engaging key stakeholders in both the co-design of the methodological approach (before implementation) and the subsequent validation of the results achieved through the assignment.

Deliverable 2.1: Functional excel-based energy rating tool and design report

The design report and associate annexes will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf).

The report shall include the following sections:

- Design logic.
- Methodology of calculations.
- Procedures and results of functional and comparative testing.
- Official validation for deployment.
- Documentation of conducted seminars and workshops.

Fully functional, as per the specifications, excel-based energy tool will be submitted as protected excel workbook with macros and formulas:

- Provide the base calculation engine of the web tool.
- Allows manual input and results generation.
- Protected structure, printable summaries.
- Suitable for offline usage and initial testing.

Deliverable 2.2: Functional online building energy rating tool

Fully deployed web-application, as pre the specifications:

Core Features:

- User-friendly interface with step-by-step input process.
- Pre-filled fields based on building typology (Item 1).
- Energy demand calculations (useful, final, primary energy).
- CO_2 emissions analysis.
- Cost-benefit analysis (investment, maintenance, savings over 20 years).
- Energy performance rating (A–G scale).
- Comparison with baseline buildings.
- EPC scheme integration.

Technical Components:

- Front-end.
- Secure authentication (role-based access).
- Exportable reports (PDF, Excel).

Mandatory Annexes

- System architecture.
- Database schema.
- Complete source code for both front-end and back-end.
- Set-up and deployment instructions.

Deliverable 2.3: Technical documents

All reports will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf).

A. **Validation and testing report:** addressing the four core testing procedures including functional, comparative, user acceptance, and performance testing.
   - Methodology.
   - Testing results.
   - Documentation of any deviations and refinements.
   - Official Validation by key stakeholders.

B. Detailed narrative report clarifying the development process, methodology, results, challenges and recommendation, Documentation of conducted seminars and workshops.

C. **Documented subscriptions of IT infrastructure one (1) year**

D. **Detailed technical training report (IT experts, developers, administrators)**

E. **User manual:** detailed user manual, as per the specifications, available in both Arabic and English language.

9.4 Item 3: Development of energy performance certificate scheme (EPC)

The assignment includes the development of Energy Performance Certificate (EPC) as standardized document that rates the energy efficiency of a building on a defined scale. The rating is determined based on the simulation results of the tool that relies on the input parameters of the envelope and existing systems. The EPC scheme shall apply to new constructions and existing buildings, for all identified building types in the tool. The EPC scheme is fully integrated within BEP tool and allows for dynamic adjustments based on the used or adjusted input parameters.

9.4.1 Energy labelling

The energy classification system will utilize a 7-point rating scale, ranging from A (most efficient) to G (least efficient). This scale will be calibrated against national benchmarks established under Item 1 and aligned with the requirements of the Energy Performance of Buildings Directive (EPBD). The labelling process shall entail setting discussions with national experts and governmental entities to define the most applicable EPI, based on Palestine context.

9.4.2 *Ownership and management*

The Energy Performance Certificate (EPC) scheme shall be established under the authority and full ownership of PENRA.

The management and operation of the EPC scheme may be delegated to a semi-autonomous agency or public-private partnership (PPP) structure to ensure flexibility, technical expertise, and effective outreach. This could include:

- Data entry and verification
- Accrediting and training EPC experts and auditors
- Updating the built-in list of EPC auditors
- Coordinating with stakeholders such as municipalities, utilities, and construction bodies
- Maintaining the technical functionality of the system

The service provider shall, in cooperation with stakeholders, establish a clear governance model that defines the leading authority, managing and operating partners,roles, reporting lines, data access protocols, and dispute resolution mechanisms to ensure transparency and accountability. The developed governance model will inform the design, modality, target audience, and topics of the technical training program.

9.4.3 Operational framework

The Energy Performance Certificate (EPC) is envisaged to be an integral component of the online energy rating tool designed to standardize, automate, and streamline the assessment and certification of energy performance in buildings across Palestine. Access to the EPC scheme will be restricted to certified/trained EPC experts, EPC auditors, and scheme operators who have been authorized by the owner of the tool.

The service provider shall establish an operational framework that outlines the operational procedures, roles, and responsibilities to ensure accurate, consistent, and reliable energy performance certification process.

9.4.3.1 Access control and user roles

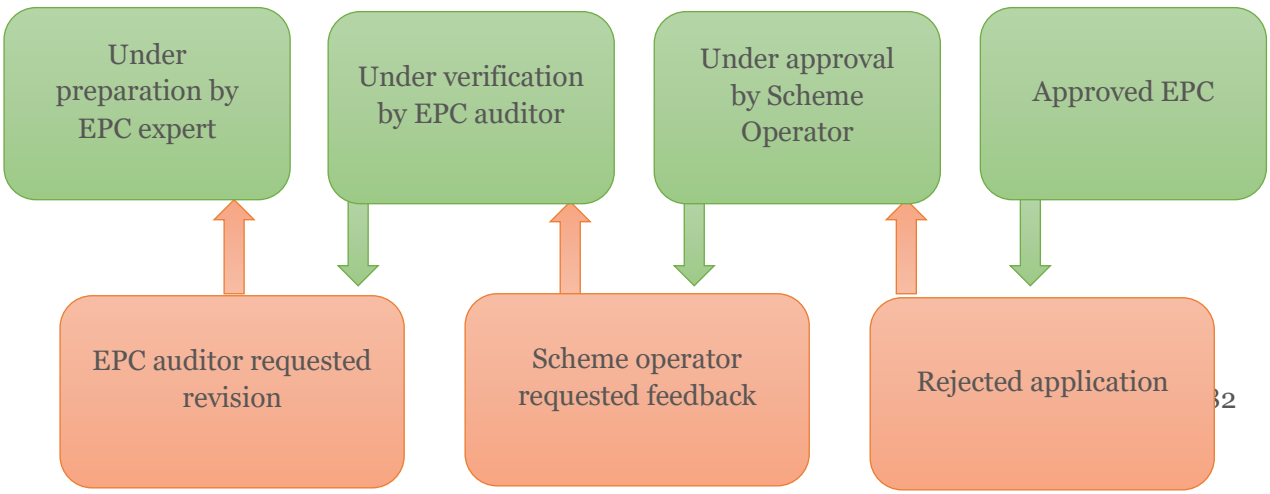
To ensure data security, quality assurance, and professional accountability, the EPC shall operate under a role-based access control (RBAC) model:

- Certified EPC Experts
- Certified EPC auditors
- Scheme operator

In cooperation with the stakeholders, the technical roles and authorization shall be identified and applied in the system.

9.4.3.2 EPC workflow

A clear workflow shall be defined and applied to the tool to enable seamless operational procedure and to track the status of each project. The tool shall furnish an automized workflow, based on the actions taken by the expert involved in the process. The following chart is a sample workflow to be automized in the EPC scheme.



9.4.4 Design and content of EPC

9.4.4.1 EPC Design

The EPC design must adhere to the following principles:

- **Clear visual layout:** Use a structured, easy-to-read layout with visual aids (e.g., bar charts, color coding, and performance scales).
- **Standardized format:** Ensure consistency across all issued certificates regardless of building type or location.
- **Branding:** Include logos of the issuing authority, relevant national ministries, Enabel, and Brussels Capital Region.
- **Digital compatibility:** Design should be optimized for both digital display and printable PDF format.
- **Digital signature support:** The design must accommodate secure digital stamping and signatures for the certifying authority and involved experts.
- **QR Code–Based Certificate Authentication System:** the tool shall implement a secure QR code mechanism embedded in each certificate

A. Layout

- **Header:**
  - Agreed logos
  - Certificate title ("Energy Performance Certificate").
  - Unique certificate ID and issuance date.
  - Validity of the certificate
- **Body:**
  - Segmented into clear sections (general info, KPIs, recommendations, glossary terms).
  - Visual elements (e.g., color-coded rating scale, graphs for energy demand).
- **Footer:**
  - Issuing authority contact details.
  - QR code.

B. Visual Elements

- **Rating scale (A+ to G)**: color gradient (e.g., green to red) to indicate performance.
- **Key graphics**: bar charts for energy demand, pie charts for energy source distribution.
- **Icons**: symbols for building type, energy sources, and efficiency measures.

C. QR Authentication System

1) **Unique QR Code Generation:**
   - For every certificate, the system shall generate a unique, secure QR code.
   - QR code must be embedded in the final certificate output (PDF and/or physical printout) in a visible, scannable location.

2) **QR Code Content:**
   - Certificate ID number
   - Building address
   - Date of issue and validity period
   - Certificate status (valid, expired, revoked)
   - Name of involved experts
   - Building energy classification

3) **Functional requirements:**
   - The QR-linked data must be retrieved from a central, tamper-proof database or digital ledger that logs all issued certificates.
   - A mobile-friendly verification page shall load upon QR scan, showing the above data with a clear status indicator (e.g., valid certificate, invalid or revoked).
   - QR code generation must prevent duplication.
   - Administrative controls must allow revocation or reissuance of certificates.
   - QR codes must encode only a unique, secure identifier (e.g. token or UUID).
   - Scanning the QR code shall trigger a request to the authorized server/database only.
   - All data requests must be verified against the official EPC database.
   - This feature must be fully integrated into the certification workflow and automatically triggered upon the approval of EPC.

9.4.4.2 EPC content

A. General building information

- Building name, location, and type (residential/commercial), picture.
- Construction status: (new building-renovation), year of construction.
- Floor area, number of units, and primary use.
- Building envelope (u-values)
- HVAC systems (type)
- Renewables (capacity in kWp)
- Accreditation: name and signature of EPC expert, EPC auditor, and certifying authority.

B. Key performance indicators (KPIs)

- Energy rating: letter grade (A+ to G) with numerical score (kWh/m²/year).
- Final energy demand by energy use.
- Emissions: CO_2 emissions ($kgCO_2/m^2$/year).
- Economic indicator: investment costs, savings, PBP, IRR. LCA.

C. Recommendations for improvement

In this section, the tool shall generate energy efficiency measures and/or utilization of renewable energy, that are formulated by the energy auditors, to achieve higher energy label based on the simulated energy demand. The tool shall rank proposed energy efficiency recommendations by the most cost efficient and highest energy saving impact, while providing clear practical steps for each recommendation. In this section the following information shall be included.

- Summary table of proposed recommendations with associated KPIs mentioned above, ranked by the most cost efficient and highest impact on energy efficiency.
- Detailed Plain-language explanation of each recommendation.

9.4.5 Testing procedures

In close coordination with (PENRA), the service provider shall conduct a comprehensive series of testing protocols to rigorously evaluate and validate the Energy Performance Certificate (EPC) scheme across multiple critical dimensions. The testing phase shall encompass the following key objectives:

1. **Functional validation and accuracy assurance**
    - Verification of the full operational functionality of the EPC scheme.
    - Rigorous testing shall be conducted to confirm the accuracy and reliability of the EPC results, including cross-validation against established energy performance benchmarks, accuracy of energy labeling results, and manual verification processes where applicable.
2. **Workflow integrity and role-based system validation**
    - Assessment of the end-to-end workflow of the EPC scheme to ensure seamless integration and interaction between different user roles.
    - System testing shall confirm that role-based access controls, data submission protocols, and approval mechanisms function efficiently without procedural bottlenecks or system failures.
3. **Compliance with documentation and design standards**
    - Validation of adherence to predefined formatting, structural, and informational requirements.
    - Verification of mandatory data fields, graphical representation standards, and other essential elements.

9.4.6 Roll-out plan

Upon successful completion of testing and final validation is obtained from key stakeholders, the service provider shall proceed with a structured roll-out plan, incorporating phased deployment, technical training, and real-world pilot assessments to ensure system robustness before full-scale implementation. The plan shall include the following dimensions while preparing KPIs and responsibility matrix.

1. **Integration of green financing mechanisms with EPCs:**

The roll-out strategy shall capitalize on green financing instruments to catalyze market uptake of EPCs and associated building improvements. The plan will define a structured mechanism to link EPC ratings with financial incentives such as:

- Preferential green loans: offered at below-market interest rates to finance energy-efficient construction or retrofitting projects for buildings with high EPC ratings (e.g., A or B).

- Energy retrofit grants/subsidies: direct financial support from public or donor-backed programs aimed at upgrading buildings to meet specified EPC benchmarks.
- Tax incentives: deductions or rebates for building owners achieving predefined EPC targets.

These incentives will be operationalized through strategic collaboration with domestic banks, microfinance institutions, and international development partners. The plan shall identify what technical support/training shall be provided to financial institutions for designing EPC-compliant loans or financial facilitation.

2. **Regulatory enforcement for EPCs:**

The roll-out plan will include a legal and administrative review to establish EPCs as mandatory preconditions for:

- Building permit issuance (new constructions).
- Property transactions.
- Major renovations and retrofits.

Based on close consultations with PENRA, MoLG, and municipalities, the service provider shall provide detailed technical, administration action plan.

3. **EPC pricing and financial sustainability:**

The strategy shall be developed based on the following principles:

- Cost structure analysis: assessment of certification costs, including experts fees, software tools, auditing, and quality control.
- Market sensitivity testing: stakeholder engagement (builders, developers, households) to gauge acceptable price points.
- Tiered pricing scheme: differential pricing based on building size/type or sector (e.g., residential vs. Commercial).
- Subsidy mechanisms: targeted subsidies for low-income households or public buildings to ensure equity.

The resulting pricing strategy shall be integrated into a broader financial sustainability plan, outlining revenue generation mechanisms, budgetary needs, and reinvestment in EPC system maintenance and upgrades.

4. **Awareness and capacity building (short to medium-term):**

To promote broad-based adoption and understanding of EPCs, the roll-out plan shall define a multi-tiered awareness strategy targeting different audiences i.e. owners, government institutions, banks and financial institutions, professional users. Under this section, the service provider shall clarify modality, approach, activities for each tier.

9.4.7 Energy Efficiency Policy for Buildings in Palestine

The Energy Efficiency Policy for Buildings in Palestine shall serve as strategic framework to promote sustainable construction practices, reduce energy consumption, and mitigate greenhouse gas (GHG) emissions in the building sector. Aligned with Palestine's National Determined Contributions (NDCs) and the National Energy Efficiency Action Plan (NEEAP), this policy aims to institutionalize energy performance standards, enhance regulatory compliance, and foster a culture of energy efficiency across residential, commercial, and public buildings.

Policy Objectives

1. **Regulatory Compliance**: Establish mandatory energy performance standards for new constructions and major renovations, ensuring alignment with the Energy Efficient Building Code and Green Building Guidelines.
2. **Market Transformation**: Promote the adoption of energy-efficient technologies and renewable energy systems in buildings through incentives, awareness campaigns, and capacity-building programs.
3. **Certification and Labelling**: Implement the Energy Performance Certificate (EPC) scheme to provide transparent energy ratings and encourage demand for high-performance buildings.
4. **Data-Driven Decision Making**: Develop a robust database on building typologies, energy consumption patterns, and cost benchmarks to inform policy adjustments and targeted interventions.
5. **Climate Resilience**: Reduce the building sector's carbon footprint and enhance adaptive capacity to climate change impacts, such as rising temperatures and energy insecurity.

Policy Foundation and Alignment

1. The Energy Efficient Building Code (EEBC)
2. Green Building Guidelines
3. National Energy Efficiency Action Plan (NEEAP)
4. Developed Governance Model and EPC Roll-out Plan

Key Policy Components

The text provided under each component is intended as illustrative only; the service provider is expected to develop detailed, specific, actionable measures for each component, grounded in a thorough analysis of reference materials and informed by input from key stakeholders

1. **Mandatory Energy Performance Standards**
    - **New Constructions**: all building types shall be categorized in terms reference parameters i.e. building area, and specific requirements shall be applied to comply with minimum energy performance requirements based on Energy Efficient Building Code, including envelope insulation, HVAC efficiency, and lighting systems.
    - **Retrofits**: major renovations (exceeds specific % of building value) must achieve a specific % improvement in energy performance compared to pre-renovation levels.
    - **Enforcement**: municipalities will integrate energy performance checks into building permit processes, with penalties for non-compliance.
2. **Energy Performance Certification (EPC)**
    - **Enforcement**: apply EPC certification to all new buildings and progressively to existing ones undergoing major renovation. EPCs will be required for all buildings undergoing sale, lease, or public tender, with ratings (A–G) displayed in legal documents and advertisements.
    - **Validity**: certificates will be valid for 10 years for residential buildings and 5 years for commercial/public buildings.
3. **Financial Incentives**

- **Green Loans**: partner with banks to offer low-interest loans for energy-efficient retrofits, prioritized for buildings achieving EPC Class A or B.
- **Tax Rebates**: provide property tax reductions for certified green buildings.
- **Grants**: allocate funds for renewable energy installations (e.g., solar PV) in public buildings and low-income housing.

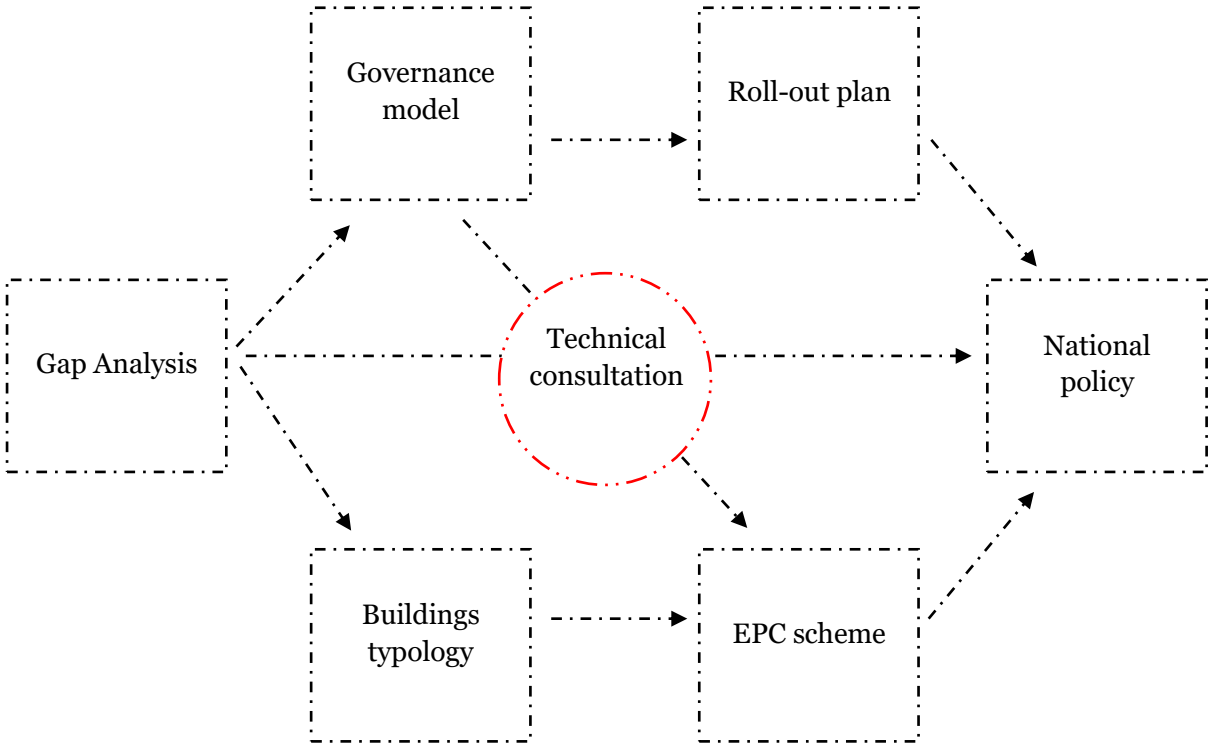
4. **Monitoring and Evaluation**

- **National Database**: Maintain a centralized platform (hosted by PENRA) to track EPC issuance, energy savings, and policy compliance.
- **KPIs**: Annual reporting on:
  - Percentage of new buildings complying with energy standards.
  - Number of EPCs issued and average energy rating improvement.
  - GHG emissions reduced per building type.

Endorsement of the policy

The service provider shall be responsible for formulating a comprehensive policy aligned with PENRA's vision to advance energy-efficient building practices. The proposed policy will be subject to PENRA's review and approval. Once approved, PENRA will undertake the necessary technical and legal measures to obtain national endorsement.

The following chart illustrates the logic of developing the policy:



9.4.8 Technical consultations

In addition to the ongoing consultation process and the continuous coordination with key stakeholders, the service provider shall organize at least two workshops or seminars. These events shall serve as essential platforms for engaging key stakeholders in both the co-design of the methodological approach (before implementation) and the subsequent validation of the results achieved through the assignment.

Deliverable 3.1: (EPC) scheme development report

The report will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf). The report shall describe at least the following sections:

- Objectives.
- Links with conducted gap analysis.
- Approach.
- Development of (validated) EPC governance model.
- Development of (validated) operational framework.
- Development of (validated) EPC template.
- Procedures and results of testing the EPC scheme.
- Official validation of the EPC scheme.
- Documentation of conducted seminars and workshops.

Deliverable 3.2: (EPC) roll-out plan

The report will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf). The report shall describe at least the following sections:

- Objectives.
- Approach.
- Detailed roll-out plan.
- Responsibility matrix.
- Official approval by PENRA

Deliverable 3.3: National energy efficiency policy for buildings

The report will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf). The report shall describe at least the following sections:

- Objectives.
- Approach.
- Fully detailed polices.
- Responsibility matrix.
- Official approval by PENRA

9.5 Item 4: Development of local capacity (Conditional Block)

9.5.1 Sustainability plan

The Consultant shall develop a Sustainability Plan to ensure the long-term operation, maintenance, and continuous improvement of the Tool. Based on the approved governance model, it will address the necessary resources, technical capacity, and maintenance and operation costs i.e. licenses, subscriptions, and service renewals. Additionally, the plan shall present potential revenue models, and funding sources, while identifying risks and proposing mitigation strategies to ensure the tool's continuous effectiveness and alignment with evolving energy efficiency standards.

9.5.2 Technical training program

9.5.2.1 Objectives

The primary objectives of this capacity-building initiative are:

- To equip Palestinian EPC experts, auditors, and scheme operators with comprehensive knowledge and practical skills to effectively utilize the BEP Tool for assessing building energy performance.
- To facilitate the integration of the BEP Tool into Palestine's building sector, promoting the adoption of energy efficiency measures and the issuance of EPCs.
- To support the development of a robust framework for energy performance certification in Palestine.

9.5.2.2 Approach

The service provider shall assume full responsibility for the comprehensive planning, coordination, execution, and oversight of all capacity building activities.

A. Development of Training Material:

The service provider shall develop the full package of training materials for EPC experts, EPC auditors, and scheme operators training courses. The content of the training materials shall be aligned with the objective of the capacity building programme. The training sessions shall cover, at least, a range of specialized topics including:

- Overview of energy efficiency and renewable energy concepts.
- Discussions on parameters that define climate-friendly buildings.
- An in-depth exploration of the developed Building Energy Performance (BEP) Tool through case studies and exercises.
- Detailed explanation of the EPC labeling scheme.
- The operational framework and workflow of the tool and EPC scheme.
- Piloting of EPC scheme

B. Selection of participants

In coordination with PENRA, the service provider will develop clear and transparent criteria for selecting participants, particularly architects and engineers from diverse backgrounds and specializations, while ensuring broad representation from engineering firms, relevant government bodies, and municipal engineering departments.

The service provider will publicize the training programs through suitable channels and manage the participants selection process according to established criteria, ensuring fair and inclusive access to training opportunities.

C. Training schedule

The training program will be structured according to the roles of experts defined by the EPC process workflow, including a) EPC expert training, b) EPC auditor training, and c) scheme operators training. To promote fair geographic representation and encourage active participation, the training will be conducted in three cities: Nablus, Ramallah, and Hebron. The total training duration will be 189 accredited hours, spread across 27 working days, as outlined below:

Topic	Location	Target	Training Hrs	No. of participant	Certification
EPC Expert	Ramallah	Engineers and architects from: • Engineering firms, • Governmental bodies, • NGOs • Municipalities	21 hrs, 3 days	20	• Completion certificate (full participation) • Certified EPC expert (passing the technical exam)
	Hebron		21 hrs, 3 days	20	
	Nablus		21 hrs, 3 days	20	
EPC Auditor	Ramallah	• Certified EPC experts	21 hrs, 3 days	15	• Completion certificate (full participation) • Certified EPC Auditor (passing the technical exam)
	Hebron		21 hrs, 3 days	15	
	Nablus		21 hrs, 3 days	15	
Scheme operator	Ramallah	• PENRA • Operation partner (if applicable)	21 hrs, 3 days	15	• Completion certificate (full participation) • Certified scheme operator (passing the technical exam)
Real-case training	Ramallah	• Certified EPC experts, • Certified EPC auditors, • Certified scheme operators	14 hrs, 2 days	TBD	• 3 certified buildings
	Hebron		14 hrs, 2 days	TBD	
	Nablus		14 hrs, 2 days	TBD	

D. Pre and post evaluation

1) **Pre-evaluation**

   Before the capacity-building program begins, pre-evaluation will be conducted to assess the baseline knowledge, skills, and capabilities of participants in the training topics.

2) **Post-evaluation**

   Upon completion of the training program, a post-evaluation will be conducted to measure the success and impact of the training, as well as identify areas for improvement. This shall include skills development, quality of training (trainer and materials), logistics (venue, quality of service, etc).

E. Documentation

After each training session, the service provider will provide detailed reports outlining key activities, participant feedback, and outcomes. At the end of the training program, a final comprehensive report will be submitted, summarizing overall achievements and lessons learned.

F. Certification

Completion certificates: these certificates will be awarded to all participants who **fully** attend the training sessions and will formally acknowledge the participants' dedication and commitment to enhancing their expertise in buildings energy efficiency.

Certified experts: upon successfully passing the technical exam at the end of training sessions, participants will be recognized as certified experts in the respective training topic. **The certification is conditional to formally participate in the EPC process.**

G. Logistic arrangements

The service provider will manage all logistical aspects, including venue rental, procurement of necessary stationery and printed materials, and the provision of meals and refreshments during the training sessions to ensure the smooth operation of the programs. Additionally, the service provider will arrange transportation for site visits to the piloted buildings.

9.5.3 EPC campaign

To ensure the successful adoption and sustained use of the online building energy rating tool across Palestine, a comprehensive and targeted awareness raising campaign will be implemented. This campaign will engage stakeholders at various levels local governments (municipalities), professionals, private sector, and the public owners.

Objectives:

- Raise awareness of building energy efficiency and the benefits of the online building energy rating tool for providing high energy and economic impact.
- Increase stakeholder understanding of how to use and benefit from the tool.
- Drive behavioral change toward adopting energy-efficient practices and buildings.
- Encourage the integration of the tool into policy, planning, and real estate market practices.
- Build trust in the accuracy, transparency, and local relevance of the tool.

Tools (Arabic language):

Public seminar: comprising engineering syndicates, architecture faculties, relevant municipal staff, private sector, banks. One (1) seminar.

Radio campaign: Weekly stories on popular local stations. Three (3) different stories, five (5) times per day for four (4) weeks each. Total duration 12 weeks.

Local TV: Interviews with experts and owners of certified buildings. Two (2) interviews.

Brochures: the brochures should be of the highest quality available in West Bank, 20,000 copies shall be distributed over different places including public buildings, architectural faculties, municipalities, engineering syndicate, etc.

Street billboards: in each selected city (5), two (2) billboards with motivating direct design including QR referring to the tool website shall be available in high-traffic areas for at least six (6) months. The billboards shall be of standard size of 3*4 meters.

Design and materials:

The design, materials, and content for all tools must be officially approved by PENRA, the TV and radio channels, locations, dates and times are subject to PERNRA approval as well.

9.5.4 Closing workshop

The service provider shall organize and facilitate a closing workshop that brings together all pertinent stakeholders, including but not limited to government institutions, donor organizations, financial institutions such as banks, and other relevant actors. The purpose of this workshop shall be to effectively disseminate the results achieved. This will be accomplished through the presentation of a) adapted methodology and achieved results, b) explanation of governance model and operational framework, c) sustainability and roll-out plans. Furthermore, the workshop will introduce participants to the benefits of PEB tool, while also clarifying the need for policies to foster the implementation and connection to climate finance initiatives and funding mechanisms for fostering the public adoption of the tool.

Deliverable 4.4: Training completion report – EPC auditor training

The documents will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf). The document, shall include:

- General information: time, location, number of participants (m/f), etc.
- Objectives.
- Main topics.
- Approach: tools, systems, techniques, etc.
- Results of pre and pos-evaluation results.
- Lessons learned and recommendations.
- Signed attendance sheets.
- List of certified experts.

Deliverable 4.5: Training completion report – Scheme operator training

The documents will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf). The document, shall include:

- General information: time, location, number of participants (m/f), etc.
- Objectives.
- Main topics.
- Approach: tools, systems, techniques, etc.
- Results of pre and pos-evaluation results.
- Lessons learned and recommendations.
- Signed attendance sheets.
- List of certified experts.

- Objectives.

Deliverable 4.6: Real-case training

The documents will be drafted in English and sent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf). The document, shall include:

- General information: time, location, number of participants (m/f), etc.
- Objectives.
- Approach: tools, systems, techniques, etc.
- Lessons learned and recommendations.
- Signed attendance sheets.
- 3 EPCs.

Deliverable 4.7: EPC campaign report

The documents will be drafted in English and s/ent electronically as an editable document file (e.g. .docx, .xls) and a single portable document file (.pdf). The document, shall include:

- Summary of all activities, deliverables, and outcomes.
- Media coverage and outreach metrics.
- Campaign design document: objectives, stakeholders, messages, channels, timeline.
- Full documentation for all used tools i.e records, photos, samples, contracts with local media, list of participants.
- PENRA official Approval

10 Human and Logistical Resources

10.1 Team composition

10.1.1 Team leader

The service provider shall appoint a coordinator or team leader within their organization to serve as the primary point of contact for all administrative and operational communications with the Contracting Authority. This individual, along with their designated substitute, if necessary, must meet the qualifications outlined in the selection criteria. Likewise, the Contracting Authority will designate a contact person.

10.1.2 Key staff

The service provider must assemble a qualified and experienced team **with adequate size and capacity** to meet the project's needs. All key personnel must hold university degrees in their respective fields, be registered with the relevant professional bodies, possess practicing certificates, carry professional indemnity insurance, and have proven success in similar projects within developing countries.

The service provider should provide detailed team composition and task assignments to ensure that all technical responsibilities are clearly assigned to named experts, even if the role is not indicated under this section. The table below outlines the required key staff.

Key staff	Items			
	Item 1: Preliminary review and data collection	Item 2: development of online energy rating tool	Item 3: Development of integrated EPC scheme	Item 4: Capacity building programme (Conditional Block)
Building Energy Efficiency Specialist/team leader	R	R	R	R
HVAC Expert	R			
Electrical engineer	R			
Energy auditor	R	R	R	R
Senior Civil Engineer/ Construction Expert	R			
Senior Architect/Designer	R			
Energy Policy and certification Expert	R		R	R
Financial/Economic Analyst	R	R		
Energy Modelling Expert	R	R		
Software Developer / Web Application Engineer		R		
UI/UX Designer		R		

The service provider is responsible for identifying and including any additional staff required to fulfil the project's needs that are not already specified in the Terms of Reference.

10.1.3 Qualifications of key staff

1) Building energy efficiency specialist/team leader

- Professional architect engineer.
- More than seven (7) years of postgraduate experience in building energy efficiency.
- Solid experience and knowledge of applied energy efficient building code, green building guidelines, and regulations in Palestine.
- Experience in building energy performance assessment including envelope analysis, systems, and typology development.
- Familiarity with related international standards (e.g., ASHRAE, ISO 52000 series).
- Experience in data collection methodologies for building stock analysis.
- Solid experience and knowledge of energy rating tools and software, and energy audit.
- Experience in energy performance calculations and benchmarking.
- Knowledge of Palestinian building regulations and construction practices.

2) HVAC expert

- Professional mechanical engineer.
- More than seven (7) years post graduate experience in mechanical design installation for different building types and systems.
- Demonstrate mastery of the principles linked to the bioclimatic approach to buildings in studies of mechanical networks (promotion of renewable energies).
- Experience in developing mechanical drawings, specifications, and quantities.
- Solid experience in evaluating the efficiency and performance of heating, ventilation, air conditioning (HVAC) systems.

3) Electrical engineer

- Professional electrical engineer.
- More than seven (7) years of postgraduate experience in electrical design and installation for different building types and systems.
- Demonstrate mastery of the principles linked to the bioclimatic approach to buildings in studies of electrical networks (promotion of energy efficiency and renewable energies).
- Experience in developing electrical drawings, specifications, quantities.
- Experience in evaluating the efficiency and performance of the building's electrical systems and identifying opportunities for improvements, and recommending upgrades or retrofits including:
    - lighting systems
    - renewable energy production
    - building automation and controls

4) Energy auditor

- Advanced university degree in energy engineering, or a related field.
- Certification in energy auditing is preferred.
- More than seven (7) years postgraduate experience in conducting comprehensive energy audits, energy measurements, and data analysis.
- Strong understanding of energy efficiency principles and building systems.
- Proficiency in using energy auditing tools such as thermal cameras, wattmeter and carrying out blow door tests, and software (e.g., energy modeling software, data loggers).
- Knowledge of Palestinian energy regulations, energy efficient code, green building guidelines, and building codes.
- Ability to read and interpret building plans and specifications.

5) Senior civil engineer/ construction expert

- Professional civil engineer.

- More than ten (10) years post graduate experience in civil construction of buildings.
- Experience in retrofitting projects (green buildings).
- Solid knowledge of building codes and applicable laws.
- Wide range of experience and knowledge of available building materials and associated compositions and costs.
- Familiarity with energy efficient building code in Palestine.

6) Senior architect/designer

- Professional Architect.
- More than ten (10) years of post-graduate combined experience in sustainable architectural designs and building energy efficiency.
- Excellent track record of designing energy efficient buildings.
- Solid knowledge of building codes and applicable laws.
- Wide range of experience and knowledge of available building materials and associated compositions and costs.
- Familiarity with energy efficiency building code in Palestine.

7) Energy policy and certification expert

- Advanced university degree in energy engineering, or in a related field.
- More than seven (7) years post graduate combined experience in building energy efficiency and energy certification systems (EPC, LEED, Golden certificate, EDGe, etc).
- Experience working with or developing energy certification schemes (national or international).
- Solid knowledge and experience of updated national and international energy efficiency policies and regulations.
- Experience in designing EPC framework, labelling of energy performance.
- Deep understanding of energy efficiency and building performance standards.
- Knowledge of building energy modeling tools and energy consumption metrics.
- Strong knowledge of Palestinian energy regulations, energy efficient code, green building guidelines, building codes, and sustainability policies.
- knowledge of ISO 52000 series, ASHRAE standards, and EU EPBD (Energy Performance of Buildings Directive).

8) Financial/economic analyst

- Economics background with a focus on energy policy, or engineering with economics specialization.
- More than seven (7) years of post-graduate combined experience in construction and energy market analysis.
- Experience with energy market assessments (pricing structures, tariff systems, subsidies).
- Strong ability to perform cost benefit analysis of energy efficiency measures and renewable energy systems, in financial and economic terms.
- Strong knowledge of energy efficiency measures and technologies, energy pricing in Palestine (e.g., residential, commercial, industrial tariffs), renewable energy options and related costs.
- Understanding of Palestinian policy and regulatory framework for energy.
- Understanding of online tool development process to communicate effectively with developers.

9) Energy modelling expert

- Advance degree in engineering, energy engineering, building physics, environmental engineering, or a related field.
- More than seven (7) years of post-graduate combined experience in energy modelling, building simulation, or development of energy rating tools.
- Demonstrated experience in developing or adapting excel-based energy assessment tools, particularly those used for rating buildings, calculating loads, or comparing scenarios.
- Experience in transforming engineering calculations and energy models into user-friendly excel interfaces (including automated dashboards, data validation, and macros).

- Prior involvement in national or regional energy performance frameworks or tools is highly desirable.
- Proficiency in building energy modelling software (e.g., EnergyPlus, EDGE, etc).
- Strong knowledge of ISO 52000 series, ASHRAE standards, or EU EPBD (Energy Performance of Buildings Directive).
- The ability to develop algorithms and simulation engine as a base for building online energy rating tool, based on international norms and standards.

10)Software developer / web application engineer

- Advance degree in Computer Science, Software Engineering, or Information Systems.
- More than seven (7) years of post-graduate combined experience in full-stack web application development.
- Proven record of developing and launching user-oriented web applications, based on simulation engines and defined algorithms.
- Proficient in front-end technologies and in back-end technologies.
- Strong experience with relational databases (e.g., PostgreSQL, MySQL) and NoSQL databases.
- Experience with different languages and tools (e.g., PHP, .NET C#, JavaScript, jQuery, and HTML/CSS).
- Experience with different frameworks (e.g., SpreadsheetGear, PHP Generator for MySQL, and FPDF) is highly desirable.
- Experience working on energy efficiency, building performance, or environmental applications is an advantage.

11)User Interface and User Experience (UI and UX) designer

- At least, bachelor's degree in graphic design, Interaction Design, Human-Computer Interaction (HCI), Computer Science, or a related field. Certifications in UI/UX Design are a plus.
- More than seven (7) years of post-graduate combined experience in UI/UX design, dashboards, or data-driven applications.
- Proven track record in designing web-based tools, interactive dashboards. Experience in energy efficiency tools is a plus
- Ability to translate complex energy data into simple, engaging interfaces.
- Strong graphic design and layout skills and proficiency in wireframing and prototyping tools.
- Demonstrated experience in usability testing and user feedback integration.
- Basic understanding of HTML, CSS, JavaScript to collaborate with developers.

10.2 Management of the Team

Efficient communication and sharing of experience must be maintained within the team. In case of unavailability of a team member, the service provider shall ensure prompt replacement with at least the same level of qualifications as those of the expert being replaced and who was initially proposed for the assignment in accordance with the terms of reference. The service provider is free to organize their resources as they wish around the key personnel. The service provider shall complete the team composition and task assignment in sufficient detail to ensure that all technical requirements fall under the responsibility of a named expert.

For each profile, the bidder must propose at least 1 person meeting the required qualifications, who must demonstrate excellent command of the English language (written and oral). The service provider must assemble a qualified and experienced team **with adequate size and capacity** to meet the project's needs.

ACTIVITY	MONTHS																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Item 1: Preliminary Reviews and Data Collection																		
1.1 Gap analysis report																		
1.2 Building typology report																		
Item 2: Development of an Online Software Tool																		
2.1 Back-end (excel-based) energy rating tool and design report																		
2.2 Functional online building energy rating tool																		
2.3 Technical documents																		
Item 3: Development of an Energy Performance Certificate (EPC) Scheme																		
3.1 (EPC) scheme development report																		
3.2 Roll-out plan																		
3.3 National energy efficiency policy for buildings																		
Item 4: Capacity Building Program (Conditional Item)																		
4.1 Sustainability plan																		
4.2 Preparation and training documents																		
4.3 Training completion report – EPC expert training																		
4.4 Training completion report – EPC Auditor training																		
4.5 Training completion report – Scheme operator training																		
4.6 Real-case training report																		
4.7 EPC campaign																		

11 Forms

11.1 Identification form

Name of the company, organization or joint venture and legal form		
Nationality of the tenderer and of staff (if different)		
Domicile / registered office **complete** address	Street name (compulsory)	
	House number (compulsory)	
	Zip code or neighbourhood	
	City or village	
	Country or territory	
Telephone number (with country code)		
National Social Security Office registration number or equivalent		
Enterprise or organization registration number		
Represented by the undersigned	Full Name	
	Title	
Contact person	Full Name	
	Title / function	

	Phone	
	E-mail	
If different: Project manager for this contract	Full Name	
	Phone	
	E-mail	
Bank account for payments	IBAN	
	BIC/SWIFT	
	Financial institution	
	Account holder name	

Full Name:		Place:	
		Date:	
Duly authorised to sign this tender on behalf of:		Signature and stamp:	

11.1.1 Subcontractors

Name and legal form	Address / Registered office	Object

* In accordance with Article 73 of the Royal Decree of 18 April 2017, where an economic operator wants to rely on the capacities of other entities (particularly subcontractors or independent subsidiaries) for economic and financial capacity criteria and technical and vocational capacity criteria (see 3.4.7.3 Selection criteria), it shall prove to the contracting authority that it will have at its disposal the resources necessary, for example, by producing a commitment by those entities to that effect.

Where a candidate or tenderer relies on the capacity of other entities in the meaning of paragraph 1, the candidate or tenderer, as appropriate, answers the question given in part II, C, of the ESPD referred to in Article 38 of the Royal Decree of 18 April 2017. He also mentions for which part of the public contract he will rely on such capacity and which other entities he proposes.

The tender also comprises a separate ESPD for the entities in the meaning of paragraph 1.

11.2 Tender Forms – prices

Financial offer

The tenderer must submit a tender for all items. A tender for separate items is inadmissible. *

Item	Unit	Quantity	Unit price Without VAT	Total
Inception report	Price included in Item 1			
Item 1				
1.1 Gap analysis report	Lump sum	1		
1.2 Building typology report	Analyzed building	200**		
	Audited building	12		
Sub total				
Item 2				
2.1 Back-end (excel-based) energy rating tool and design report	Lump sum	1		
2.2 Functional online building energy rating tool, in (English) language***	Lump sum	1		
2.3 Technical documents	Price included in 2,2			
Sub total				
Item 3				

Item		Unit	Quantity	Unit price Without VAT	Total
3.1 (EPC) scheme development report		Lump sum	1		
3.2 Roll-out plan		Lump sum	1		
3.3 National energy efficiency policy for buildings		Lump sum	1		
Sub total					
Item 4 (Conditional Item)					
4.1 Sustainability plan		Lump sum	1		
4.2 Preparation and training documents		Training module	4		
4.3 EPC expert training		Training hrs.	63		
4.4 EPC Auditor training		Training hrs.	63		
4.5 Scheme operator training		Training hrs.	21		
4.6 Real-case training		Training hrs.	42		
4.7 EPC campaign ****	Public seminar	Seminar	1		
	Radio campaign: each story/scenario 5 times a day for 4 weeks	story/scenario	3		
	Local TV	Interview	2		
	Brochures	Brochure	2000		
	Street billboard: 3*4 meters for 6 months	Billboard	10		
Sub total					
Additional Features					
A. Availability of the online tool and integrated ECP scheme in (Arabic)		Additional language	1		

Item	Unit	Quantity	Unit price Without VAT	Total
Sub total				
Total				

* The price shall cover all requested tasks mentioned in the description of the item and submissions under description of the deliverable associated with each respective budget item and shall align with the logistical arrangements outlined in **section 3.4.**

** The number of buildings to be analyzed is subject to significant variability, contingent upon the availability of relevant data and the specific methodological approach proposed by the tenderer for identifying the reference parameter. This may include, for example, a smaller subset of buildings analyzed in greater depth, accompanied by extensive consultation with key stakeholders and local subject matter experts, in order to validate the reference parameters in a manner that closely reflects the actual conditions of the reference buildings. The tenderer is required to provide a detailed description of the proposed methodology, explicitly stating the anticipated number of buildings to be analyzed and providing a clear, evidence-based justification for this figure.

*** Price includes the required IT infrastructure subscription for twelve (12) months.

**** Price includes all associated costs for design, printing, installation, contracting with media channels, distribution, etc.

The Contracting Authority reserves the right, at its sole discretion and without obligation to provide justification, to reduce the quantities of any items, or to omit any items entirely from the scope of the contract. The Tenderer expressly waives any right to object to, challenge, or seek compensation in relation to such modifications.

By submitting this tender the tenderer commits to performing this public contract in conformity with the provisions of the Tender Specifications/ – and explicitly declares accepting all conditions listed in the Tender Specifications and renounces any derogatory provisions such as his own general sales conditions.

The unit prices and the global prices for each item in the inventory are established relative to the value of these items in relation to the total value of the tender. All general and financial costs as well as the profits are distributed between the various items in proportion to their weight.
The value added tax is dealt with on a separate line in the summary bill of quantities or the inventory, to be added to the tender's value.
The tenderer commits to performing the public contract in accordance with the provisions of the Tender Specifications for the following prices, given in euros and exclusive of VAT:

EUR …
VAT percentage: ……%.
Should this tender be approved, the performance bond will be constituted under the conditions and deadlines stipulated in the Tender Specifications.
The confidential information and/or the information relating to technical or business secrets is indicated clearly in the tender.
In order to correctly compare the tenders, the duly signed information or documents mentioned <<below or under point 'Overview of the documents to be submitted' must be attached to the tender.

In annex ……., the tenderer attaches ……..to his tender.

Certified true and sincere,

Handwritten original signature(s):

11.3 Declaration on honour – exclusion criteria

Hereby, I / we, acting as legal representative(s) of above-mentioned tenderer, declare that the tenderer does not find himself in one of the following situations :

1) The tenderer or one of its 'directors[1]' was found guilty following a conviction by final judgement for one of the following offences:

   1° involvement in a criminal organisation

   2° corruption

   3° fraud

   4° terrorist offences, offences linked related to terrorist activities or incitement to commit such offence, collusion or attempt to commit such an offence

   5° money laundering or terrorist financing

   6° child labour and other trafficking in human beings

   7° employment of foreign citizens under illegal status

   8° creating a shell company.

2) The counterparty which fails to fulfil his obligations relating to the payment of taxes or social security contributions for an amount in excess of EUR 3 000, except if the counterparty can demonstrate that a contracting authority owes him one or more unquestionable and due debts which are free of all foreseeable liabilities. These debts are at least of an amount equal to the one for which he is late in paying outstanding tax or social charges.
3) The counterparty who is in a state of bankruptcy, liquidation, cessation of activities, judicial reorganisation or has admitted bankruptcy or is the subject of a liquidation procedure or judicial reorganisation, or in any similar situation resulting from a procedure of the same kind existing under other national regulations;
4) When Enabel can demonstrate by any appropriate means that the counterparty or any of its directors has committed serious professional misconduct which calls into question his integrity.

   Are also considered such serious professional misconduct:

a. A breach of Enabel's Policy regarding sexual exploitation and abuse – June 2019

b. A breach of Enabel's Policy regarding fraud and corruption risk management – June 2019

c. A breach of a regulatory provision in applicable local legislation regarding sexual harassment in the workplace

d. The counterparty was seriously guilty of misrepresentation or false documents when providing the information required for verification of the absence of grounds for exclusion or the satisfaction of the selection criteria, or concealed this information

e. Where Enabel has sufficient plausible evidence to conclude that the counterparty has committed acts, entered into agreements or entered into arrangements to distort competition

The presence of this counterparty on one of Enabel's exclusion lists as a result of such an act/agreement/arrangement is considered to be sufficiently plausible an element.

5) When a conflict of interest cannot be remedied by other, less intrusive measures;
6) When significant or persistent failures by the counterparty were detected during the execution of an essential obligation incumbent on him in the framework of a previous contract, a previous contract placed with another contracting authority, when these failures have given rise to measures as of right, damages or another comparable sanction.

   Also failures to respect applicable obligations regarding environmental, social and labour rights, national law, labour agreements or international provisions on environmental, social and labour rights are considered 'significant'.

   The presence of the counterparty on the exclusion list of Enabel because of such a failure serves as evidence.

7) Restrictive measures have been taken vis-à-vis the counterparty with a view of ending violations of international peace and security such as terrorism, human-rights violations, the destabilisation of sovereign states and de proliferation of weapons of mass destruction.

   The counterparty or one of its directors are on the lists of persons, groups or entities submitted by the United Nations, the European Union and Belgium for financial sanctions:

   For the United Nations, the lists can be consulted at the following address:

   https://finances.belgium.be/fr/tresorerie/sanctions-financieres/sanctions-internationales-nations-unies

For the European Union, the lists can be consulted at the following address:

https://finances.belgium.be/fr/tresorerie/sanctions-financieres/sanctions-europ%C3%A9ennes-ue

https://eeas.europa.eu/headquarters/headquarters-homepage/8442/consolidated-list-sanctions_en

https://eeas.europa.eu/sites/eeas/files/restrictive_measures-2017-01-17-clean.pdf

For Belgium:

https://finances.belgium.be/fr/sur_le_spf/structure_et_services/administrations_generales/tr%C3%A9sorerie/contr%C3%B4le-des-instruments-1-2

8) << If Enabel executes a project for another funder or donor, other grounds for exclusion may be added.

The tenderer formally declares being able, when asked and without delay, to provide the relevant certificates and other kinds of supporting documents, except if:

a. Enabel can directly obtain the supporting documents concerned by consulting a national database in a Member State that is accessible for free, provided the tenderer has given the required information (website address, responsible authority for providing the information, specific reference of the documents) so Enabel can obtain these, with concomitant permission to access them;

b. Enabel already has said documents.

The tenderer formally agrees with Enabel accessing the supporting documents substantiating the information provided in this document.

Date

Location

Signature

11.4 Integrity Statement of the tenderer

Hereby, I / we, acting as legal representative(s) of above-mentioned tenderer, declare the following:

1° Neither members of administration or employees, or any person or legal person with whom the tenderer has concluded an agreement in view of performing the public contract, may obtain or accept from a third party, for themselves of for any other person or legal person, an advantage appreciable in cash (for instance, gifts, bonuses or any other kind of benefits), directly or indirectly related to the activities of the person concerned for the account of Enabel.

2° The board members, staff members or their partners have no financial or other interests in the businesses, organisations, etc. that have a direct or indirect link with Enabel (which could, for instance, bring about a conflict of interests).

3° I have / we have read and understood the articles about deontology of this public contract (see 1.7.) as well as Enabel's Policy regarding sexual exploitation and abuse and Enabel's Policy regarding fraud and corruption risk management and I / we declare fully endorsing and respecting these articles.

If above-mentioned public contract is awarded to the tenderer, I / we declare, moreover, agreeing with the following provisions:

1° In order to avoid any impression of risk of partiality or connivance in the follow-up and control of the performance of the public contract, it is strictly forbidden to the public contractor (i.e. members of the administration and workers) to offer, directly or indirectly, gifts, meals or any other material or immaterial advantage, of whatever value, to the employees of Enabel who are concerned, directly or indirectly, by the follow-up and/or control of the performance of the contract, regardless of their hierarchical rank.

2° Any (public) contract will be terminated, once it appears that contract awarding or contract performance would have involved the obtaining or the offering of the above-mentioned advantages appreciable in cash.

3° Any failure to comply with one or more of the deontological clauses will lead to the exclusion of the contractor from this and other public contracts for Enabel.

Finally, the tenderer takes cognisance of the fact that Enabel reserves the right to lodge a complaint with the competent legal instances for all facts going against this statement and that all administrative and other costs resulting are borne by the tenderer.

First name:		Place:	

Last name:		Date:	
Duly authorised to sign this tender on behalf of:		Signature and stamp:	

11.5 List the references/similar experience

List below the experience under contracts in the role of contractor or subcontractor completed within the last **three years** prior to the applications submission deadline (**2020– present**). Start with the most recent.

Nº	Title Description of the main similar services performed	Amount Amount of consultancy contract (**not the works**!) and currency	Start date	End date	Contracting authority Name and contact of the public or private bodies who contracted the consultancy	Checklist Completion certificate joined to this tender?
1						
2						
3						
4						
5						

11.6 CVs of all mentioned personnel

The service provider must provide in his/her offer the updated **CVs of the key experts proposed** for implementing this services contract. The CV's (qualifications and experience of key experts) have to fulfil the profiles as requested in the ToRs. Each CV should be no longer than 5 pages.

12 Attachments

12.1 Power of attorney

The tenderer shall include in his tender the power of attorney empowering the person signing the tender on behalf of the company, joint venture or consortium.

In case of a **consortium** or a **temporary association**, the joint tender must specify the role of each member of the tendering party. A group leader must be designated and the power of attorney must be completed accordingly.

▶ Please insert after this page the power of attorney empowering the person signing the tender on behalf of the company, joint venture or consortium, signed by the person(s) mentioned in the incorporation certificate (only needed if the person signing the tender is different).

12.2 Incorporation certificate

The tenderer shall include in his tender the incorporation certificate[11] from the competent authority (for local tenderers: Israeli or Palestinian Registration Certificate).

▶ Please insert after this page

[11] In case of a consortium or a temporary association, the certificate must be submitted for all members of the tendering party.

12.3 Certification of clearance with regards to the payments of social security contributions

The tenderer must provide a certification[11] from the competent authority stating that (s)he is in order with its obligations with regards to the payments of social security contributions that apply by law in the country of establishment. This requirement does not apply to tenderers registered in the Palestinian territory.

▶ Please insert after this page

12.4 Certification of clearance with regards to the payments of applicable taxes

The tenderer must provide a **recent certification**[11] (up to 1 year) from the competent authority stating that the tenderer is **in order with the payment of applicable taxes** that apply by law in the country of establishment. For firms registered in Israel or the Palestinian territory, a valid deduction at source certificate must be provided.

▶ Please insert after this page

12.5 CVs of all mentioned personnel

The service provider must provide in his/her offer the **updated CVs of the key experts proposed** for implementing this services contract. The CV's (qualifications and experience of key experts) have to fulfil the profiles as requested. Each CV should be no longer than 5 pages.

▶ Please insert after this page CVs of all mentioned personnel
Please respect the order of the personnel as listed in the form

13 Checklist of documents to be joined to the tender

The tender should be submitted as a hard copy and with a soft copy USB inside.

The following documents need to be provided as part of the tender:

	Document	
Tender document	One original copy of the completed tender document (the present document) filled electronically (not by hand), then printed completely, signed, and stamped. The following forms need to be completed: 1. Form 11.1: Identification 2. Form 11.1.1: sub-contractors 3. Form 11.2: Prices 4. Form 11.3: Declaration on honour – exclusion grounds 5. Form 11.4: Integrity statement 6. Form 11.5: List the references/similar experience 7. Staff disposed 8. All the mentioned attachments above 9. ESPD form	
	Declaration from a competent authority of not being in a situation of bankruptcy or insolvency.	

	Incorporation certificate from the competent authority.	
	Active bank account for the last 2 years.	
	Power of attorney empowering the person signing the tender on behalf of the company, joint venture or consortium, signed by the person(s) mentioned in the incorporation certificate (only needed if the person signing the tender is different).	
	In case of a consortium or a temporary association, a copy of the joint venture agreement.	
	Non sentence certificate for the board members.	
	The ESPD and any annex(es) (for each participant for tender submitted by a group as well as for the entities, particularly the subcontractors, whose capacity is used for technical and professional capacity criteria) **Where an economic operator wants to rely on the capacities of other entities (particularly subcontractors) for economic and financial capacity criteria and technical and vocational capacity criteria (see 3.4.7.3 Selection criteria), it shall prove to the contracting authority that it will have at its disposal the resources necessary, for example, by producing a commitment by those entities to that effect.**	
	Valid deduction at source certificate/Certification of clearance with regards to the payments of applicable taxes	