



Accountant General – Assets Department

Government Construction Unit

Request For Information (RFI) – Solutions and methods to reduce embodied carbon emissions throughout the building lifecycle

The construction unit within the Accountant General department in the Ministry of Treasury (henceforth: "**Construction Unit**" or "**Addresser**") hereby publishes a request for information, as defined in regulation 14a of the obligatory tendering statutes, 1993 (henceforth: "**obligatory tendering statutes**"), with reference to **solutions and methods to reduce embodied carbon emissions throughout the building lifecycle** (henceforth: "**the Request**"), as follows:

1. The Construction Unit is responsible, among other things, for the construction of new government offices. A substantial portion of the projects is conducted using PFI, in which bidders apply methods to plan said buildings (as predefined in specifications defined by the Construction Unit) and maintaining it in return for quarterly payment over 22-25 years.
2. Already today, the Construction Unit aims to build zero-energy buildings in relation to the use phase so that buildings are built in a highly efficient manner, and any needed energy can be generated on-site from sustainable sources.
3. However, the building's carbon footprint is not composed solely of the use phase. There exists an embodied carbon footprint in mining construction material and its production methods, the building process, and decisions about the building's end of life.
4. Based on findings by the World Green Building Council, carbon emissions from raw materials and during the use phase, as part of total greenhouse gas emissions from the construction sector, constitute 11% and 28%, respectively. While moving towards sustainable, zero-emission buildings, the ratios change, and the component of carbon emissions embodied in the raw materials and the construction process becomes more dominant. In certain countries in which a substantial percentage of electricity generation is based on renewable energy, this component is already larger than the use phase (calculated over 50 years).
5. It is estimated that the embodied carbon in new buildings built from now until 2050 will equal the amount of carbon emitted during their use until that year. As the energy efficiency trend accelerates and the integration of renewable energies into the fuel mix increases, this ratio changes, and the main component of greenhouse gas emissions will become the raw material production and the construction phase.
6. Furthermore, during the building's lifetime, renovation, system replacement, and infrastructure replacement take place as well. These also increase the use of raw materials, which, in turn, lead to a rise in greenhouse emissions during production and construction, necessitating the development of efficient solutions which allow the use of recycled or renewable materials, servicing, digitalization, or any other low carbon footprint solution.

7. As part of the government's goal to eliminate greenhouse gas emissions in Israel by 2050, as presented by the Prime Minister during the Climate Summit in Britain in December 2020, the Construction Unit is interested in examining the products, services, and technologies offered today in Israel or are planned to be developed in Israel, or are relevant to Israel, which can promote the goal of eliminating carbon emissions throughout the lifetime of the building. Though many emissions linked to the production and construction of raw materials happen outside of Israel, due to the nature of global emissions and the environmental benefit of reducing them abroad, the Construction Unit would like to inspect these solutions – connected to raw material production – as well.
8. In this publication, the Addresser would like to receive information relating to existing and planned solutions relevant in Israel with a low/zero/negative carbon footprint throughout the entire lifecycle of the building, including in renovation stages (by "negative carbon footprint," the solution shall promote sequestration of atmospheric carbon in the ground or in any other fixated medium, be it in the building or another site). The solutions can address, for example, the planning of the building, the construction specifications, the products and services required during the lifetime of the building, work method during the lifetime of the building, methods for measuring and verifying carbon emissions or reductions, etc.
9. Globally, systems for measuring and verifying embodied carbon emissions are being developed. Some have a national scope and some international, and they relate to construction and to infrastructure projects. These systems range from self-proclamations of manufacturers (EPD or documentation based upon ISO14021) up to industry standards (such as BREEAM, greenroads, CEEQUAL, and more). As part of this call, we ask for details pertaining to existing products in Israel or those which could be relevant to Israel, which comply with standards of this type, as well as details pertaining to measuring methods and verifications which exist or could be relevant in Israel.
10. It should be emphasized that the reply to this request can address all the uses described in sections 8-9 above, or only some of them.
11. The reply to this request must be provided in accordance with appendix A and in accordance with the following specifications:
 - 11.1 The reply to this request will be delivered via email titled "**Reply to early request for information regarding Solutions and methods to reduce embodied carbon emissions throughout building lifecycle**" to the email listed below **until 19.8.21 by 13:00**. The respondent must make sure they have received receipt confirmation by email.
 - 11.2 The reply must be delivered in a Word file or PDF.
 - 11.3 The contact person for all matters relating to this call is Avi Blau – via email avibl@mof.gov.il
 - 11.4 Respondents may direct their question to the contact person by 15.7.21 at 13:00.
12. The Construction Unit maintains, within its unique discretion:
 - 12.1 To change the last date for submitting responses to this Request.
 - 12.2 To use the information gained by Request for any need, including forming a list of potential suppliers.
 - 12.3 To address, however needed, to whomever responded to this Request, with a further request to complete the information and for clarification, to present

presentations and examples, in order to conduct a pilot, set a meeting, and visit their sites or the site of their clients.

12.4 To publish via tender and/or other ways, specifications which will be based on the information gathered during this process.

12.5 To use in any way the information received in response to this Request, including transferring it to additional bodies in order to inspect options to conduct procurement in this topic, the respondents will not have any claims concerning copyrights.

13. To remove doubt, this Request is not an RFP and is not a tender, therefore, it shall not be viewed as an obligation to whomever replies. This Request is meant solely to receive information, and the Construction Unit will then consider its further actions in accordance with professional and relevant considerations.
14. Furthermore, it shall be emphasized that a reply to this Request does not constitute any advantage or right to participate in a tender, which may be held in the future, and will not obligate that the responder participates in a tender or liaise with the responder in any other way.
15. All expenses involved in the preparation and submission of the reply to this Request are solely the responsibility of the respondent and at their expense. It should be emphasized that the respondent will not be granted any compensation, indemnification, reimbursement, or any payment from the Construction Unit for submitting a response to the Request.
16. The respondent must explicitly note in Appendix B which parts of the reply are considered a trade secret. It will be emphasized that the Construction Unit may, upon its consideration and for any use, make use of information which it views as not composing a trade secret, including forwarding it to other bodies.
17. In reply to this Request, the respondent declares as follows:
 - 17.1 That they agree to all the request's conditions and commit to not sue or demand anything from the Construction Unit or any other body pertaining to the use of the information sent by them in reply to this Request.
 - 17.2 That information sent via the reply to this request does not damage any third party, including their copyright, and that they alone will be responsible for any demand or lawsuit originating in a claim that said information violates 3rd party copyrights, and that they will compensate the Construction Unit immediately upon demand that the Construction Unit has to pay as a result of such claim or court order, including legal expenses.
18. The documents pertaining to this Request are the sole property of the Construction Unit and are loaned to the respondents for the sole purpose of submitting a reply to this call. The respondents are not allowed to copy or use this Request for any other purpose.

Appendix A – Reply Details

1. Name:	
2. Type of organization (company / association / partnership, etc.):	
3. Tax registration number:	
4. Respondent address:	
5. Name of representative and role:	
6. Contact person of respondent	Name: Phone: Email:
7. Name of solution:	
8. Client list, if existing:	
9. The solution concept: Details of the technology /method /business model on which the solution is based, including required infrastructure – required physical space, certain building conditions, requirements for parallel systems, etc. • Description of the work environment in which it is proposed to implement the solution • If it is a solution that requires recycling infrastructure, how will the cycle be closed in Israel	
10. Solution development status – does it exist or require	

development? If development is required, has it started, and at what stage of development is it?	
11. If the solution requires development – what is the minimal level of procurement necessary for investment in the development of the solution?	
12. Price range of each stage of solution, including direct and indirect costs pertaining to the process	
<p>13. How will the addresser benefit from contracting the proposed method – economic, environmental benefits (with an emphasis on greenhouse gas emissions), operational?</p> <p>We ask the respondents to pay attention to this section – it is important for the addresser to understand whether the proposed solution is indeed a preferred environmental alternative, and as far as possible, even quantify the benefits of the</p>	

proposed solution.	
14. Describe the end-of-lifecycle of the proposed solution	
15. Method of engagement – contractual/ proprietary issues that the bidder wishes to bring to the attention of the addresser:	
16. Additional comments relevant to the subject but which are not expressed in the above questions:	

Appendix B – sections of the reply which the bidder would like to be kept confidential

Below are the sections included in the reply which the bidder evaluates as breaching confidentiality if examined by other bidders.

Section Number	Topic	Rationale for preventing exposure