

Please fill in the form in the grey spaces, by following the instructions in italic.

Requesting country:	JORDAN
----------------------------	---------------

Request title:	Technical Assistance to support the accreditation of JSMO Energy Efficiency lighting Laboratory in Jordan.
-----------------------	---

Contact information:		
<i>{Please fill in the table below with the requested information. The request proponent is the organization that the request originates from, if different from the National Designated Entity (NDE).}</i>		
	National Designated Entity	Request Applicant
Contact person:	Hanadi Marie	Eng. Hind Shnaikat, Eng. Rand AlAssaf
Position:	Head of Climate Change Adaptation section	Eng. Hind/ Head of Lab Unit Eng. Rand/ Head of Engineering Materials Section- Lab Unit
Organization:	Ministry of environment	Jordan Standards and Metrology Organization (JSMO)
Phone:	+962 6 5560113	+962 6 55301225 Ext. 2207, 2305
Fax:	+962 6 5516377	+962 6 5301249
Email:	hanadi.marie@moenv.gov.jo hanadimarie@yahoo.com	hshnaikat@jsmo.gov.jo rassaf@jsmo.gov.jo
Postal address:	P.O. Box 1408 Amman	P.O. box 941287 Amman - 11194 Jordan

<p>Technology Needs Assessment (TNA):</p> <p><i>{Select one of the three boxes below:}</i></p> <p><input type="checkbox"/> <i>The requesting country has conducted a TNA in (please insert date of TNA completion)</i></p> <p><input checked="" type="checkbox"/> <i>The requesting country is currently conducting a TNA</i></p> <p><input type="checkbox"/> <i>The requesting country has never conducted a TNA</i></p> <p><i>{If the requesting country has completed a TNA, please indicate what climate technology priority this request directly relates to. Please indicate reference in TNA/TAP/Project Ideas.}</i></p>

<p>CTCN Request Incubator Programme:</p> <p><i>{Please indicate if this request was developed with support from the Request Incubator Programme:}</i></p> <p><input type="checkbox"/> <i>Yes</i></p> <p><input checked="" type="checkbox"/> <i>No</i></p>
--

Geographical focus:

{Select below the most relevant geographical level for this request:}

- Community-based
 Sub-national
 National
 Multi-country

{If the request is related to the sub-national or multi-country level, please indicate here the areas concerned (provinces, states, countries, regions, etc.)}

Theme:

{Select below the most relevant theme(s) for this request:}

- Adaptation to climate change
 Mitigation to climate change
 Combination of adaptation and mitigation to climate change

Sectors:

{Please indicate here the main sectors related to the request. e.g. energy, industry, transport, waste, agriculture/fisheries, forestry, water, ecosystem/biodiversity, coastal zones, health, education, infrastructure/human settlement, tourism, businesses, early warning/disaster reduction, institutional design and mandates, cross-sectorial}

Energy sector.

Problem statement (up to one page):

{Please describe here the difficulties and specific gaps of the country in relation to climate change, for which the country is seeking support from the CTCN. Please only provide information directly relevant to this request, and that justifies the need for CTCN technical assistance.}

JSMO Energy efficiency laboratory for testing lamps is the first national governmental lighting lab in Jordan, it was established in February 2015; for the purpose of testing the performance requirements and energy efficiency for different types of lamps to ensure the quality of lighting products enter into or within the market. The lab also will be helpful to support the phase-out of energy inefficient lamps, increase the use of energy efficient lamps; which will be beneficial for the environment and in combat climate change. Getting international accreditation for JSMO lighting lab is very necessary to ensure that the test results are reliable and trusted. In addition, accreditation is an important element to ensure enforcement and compliance with existing lighting standards and technical regulations. However, JSMO energy efficiency lighting lab is facing some obstacles and issues that need a technical support and advice in order to get international accreditation, these issues such as participation in proficiency tests, verification of test methods and uncertainty calculations.

Past and ongoing efforts (up to half a page):

{Please describe here past and on-going processes, projects and initiatives implemented in the country to tackle the difficulties and gaps explained above. Explain why CTCN technical assistance is needed to complement these efforts, and how the assistance can link or build on this previous work.}

During the first stage of setting the specifications of JSMO energy efficiency lighting lab, UNEP through the establishment of Jordan National Efficient Lighting Action Plan (JNELAP) in 2013 was having a significant role in the technical support of JSMO by sending an employee to an accredited lab in China to help finalize the shape of our lab and also in follow up made by Ms. Marie and Mr. Gustavo.

UNEP since the earliest stage of establishing JSMO lighting lab shared JSMO the vision of having an accredited energy efficiency lighting lab, which is needed to accomplish JSMO national mandate. JSMO energy efficiency lighting lab was established in February 2015, then a training program; for the operation of equipment, calibration using standard lamp, and procedures for testing different types of lamps, was held by the manufacturer immediately after the lab establishment, but that training did not include other important technical topics; such as uncertainty and verification of test methods, and these topics are technical requirements in ISO/IEC 17025 and are important for the accreditation. Since then, great efforts were made by the lab management and employees to operate the lab and start performing the required tests as soon as possible. The made efforts led to begin the operation of the lab effectively in the last two months of the year 2015.

As we mentioned above that the JSMO lighting lab is the first governmental lighting lab in Jordan, where this sector is a new testing sector in the lab unit/JSMO and as well in Jordan, and that the lab staff are new employees; which increase the need for this technical assistance for training them on the required technical topics described above.

Regarding the proficiency tests (PT) and interlaboratory comparisons, we searched for PT tests and we sent many e-mails to several proficiency tests providers, but we did not find our request till now, and we are still looking for suitable PT tests, so we require the technical assistance in this subject, especially that the Jordan energy efficiency technical regulations for lighting field had been enforced in July 2014, which enforce a required energy efficiency classes according to a time schedule mentioned in eco-design technical regulations requirements. These regulations and standards enforcement lack the availability of an accredited lab that we are working hard to get.

However, the needed technical assistance is very important for the lighting lab to get international accreditation.

Assistance requested (up to one page):

{Please describe here the scope and nature of the technical assistance requested from the CTCN and how this could help address the problem stated above and add value vis-à-vis the past and on-going efforts. Please note that the CTCN facilitates technical assistance and is not a project financing mechanism.}

The JSMO Energy Efficiency lighting Laboratory needs technical assistance for its strengthening, and support its accreditation, the required technical assistance as follow:

- 1- Assistance in the participation in Proficiency Tests and/or interlaboratory comparisons tests (In other meaning: support our lab in the participation of round robin tests).**
- 2- Professional Guidance and training on: measurement uncertainty, verification of test methods and any important subjects to get accreditation.**
- 3- Training on technical topics related to testing, and in the relevant lighting standards and regulations.**

This assistance will help JSMO Energy Efficiency lighting Laboratory in improving its testing capability, and in satisfying the accreditation requirements, and this will assure the quality of its test results, and the lab personnel will be highly qualified.

Expected benefits(up to half a page):

{Please outline here the medium and long-term impacts that will result from the CTCN technical assistance, including how the assistance will contribute to mitigate and/or adapt to climate change.}

The following benefits are expected:

- 1- By the participation in proficiency tests with other labs, JSMO energy efficiency lighting lab will assure the quality of its test results.
- 2- The lab personnel will be able to calculate uncertainty and to perform verification of test methods, and they will become more qualified and increase their competency.
- 3- Getting international accreditation for JSMO energy efficiency lighting lab and this will ensure the reliability of its test results, and increase the confidence in them.
- 4- JSMO energy efficiency lighting lab will support more efficiently the enforcement and compliance with the existing lighting standards and regulations; thus protecting the Jordanian market from the entering of poor quality lamps and this will protect consumers. Also, the JSMO lab may service the neighboring countries in future.
- 5- JSMO energy efficiency lighting lab will be a helpful tool for the transition to energy efficient lighting products, by testing lamps and prove their energy efficiency. The use of energy efficient lamps has economic and environmental benefits such as reducing electricity consumption, saving money, combating climate change and reducing CO₂ emissions.

Post-technical assistance plans (up to half a page):

{Please describe here how the results of the CTCN technical assistance will be concretely used by the applicant and national stakeholders, to pursue their efforts of resolving the problems stated above after the completion of the CTCN intervention (list specific follow-up actions that will be undertaken).}

- After getting international accreditation for JSMO energy efficiency lighting lab, the lab will maintain accreditation and continue to get it.
- Training more personnel on testing, verification of test methods and uncertainty calculations (if possible).
- Be helpful in the phase-out of inefficient lamps and control the quality of lamps within or entering to the Jordanian national market, and continue in supporting the enforcement of lighting standards and regulations. (Beneficiaries: JSMO, Ministry of industry and Trade and supply, Ministry of Environment, Ministry of Energy and Mineral Resources and consumers).
- Increasing the reliability, credibility and confidence in JSMO energy efficiency lighting lab test results by getting international accreditation, will support the Ministry of Energy and Mineral Resources in the implementation of Jordan national efficient lighting action plan (JNELAP) regarding the monitoring, verification and enforcement of national legislations. (Beneficiary: Ministry of Energy and Mineral Resources).
- Increasing the reliability and credibility of JSMO lighting lab test results by getting international accreditation will help and encourage the traders to import high quality lamps. (Beneficiary: Jordan Chamber for Commerce; traders).

Key stakeholders:

{Please list in the table below the main stakeholders who will be involved in the implementation of the requested CTCN technical assistance, and what their role will be in supporting the assistance (for example, government agencies and ministries, academic institutions and universities, private sector, community organizations, civil society, etc.). Please indicate what organization(s) will be the main/lead counterpart(s) of CTCN experts at national level, in addition to the NDE.}

Stakeholder	Role to support the implementation of the assistance
Energy efficiency lighting lab /JSMO	Participation of the lab employees (JSMO) in the requested technical assistance activities (requested training courses, proficiency tests and/or interlaboratory comparisons) in order to get international accreditation.
Related departments in JSMO (Inspection and Surveillance department, Standardization department)	Identifying suitable candidates to participate in the training courses on lighting standards and regulations, uncertainty calculations and verification of test methods
Ministry of environment/NDE	Reviewing, submitting, monitoring and evaluation for the CTCN technical assistance request.

Alignment with national priorities (up to half a page):

{Please demonstrate here that the technical assistance requested is consistent with documented national priorities (examples of relevant national priorities include: national development plans, poverty reduction plans, technology needs assessments (TNAs), LEDS, NAMAs, TAPs, NAPs, sectorial strategies and plans, etc.). For each document mentioned, please indicate where the priorities specifically relevant to this request can be found (chapter, page number, etc.)}

Results of the mitigation analysis (as mentioned in TNC) show that the energy sector is a national priority in mitigation to climate change, and that energy efficiency is one of the two major areas that should receive the most attention with this regard.

According to TNC; The NEEAP (National Energy Efficiency Action Plan endorsed in 2013) which sets a national energy efficiency target of 20% by 2020 proposes concrete measures in a number of key sectors to guide Jordan towards achieving this target, in the demand side (e.g. energy labels, lighting). The NEEAP furthermore outlines several horizontal and cross-sectoral measures (e.g. tax exemptions for energy efficient equipment).

According to our INDC; the unconditional outcome target is aiming at reducing Jordan's greenhouse gases (GHGs) emissions by 1.5 % by 2030 compared to a business as usual scenario levels. The conditional outcome target is aiming at reducing Jordan's GHGs emissions by 12.5 % by 2030. In addition, one of the main goals of the Updated Master Strategy of Energy Sector in Jordan (2007-2020) is to secure reliable energy through promoting energy efficiency (as mentioned in INDC).

JORDAN 2025: A National Vision and Strategy addresses energy security and provides an analysis for it. One of the most important initiatives in energy security is activating energy efficiency programs as mentioned in the Jordan 2025 vision.

The use of energy efficiency lamps will reduce the electricity consumption and the resulting GHGs emissions which is beneficial to the environment.

By getting international accreditation the JSMO lighting lab will be a helpful tool for the transition to energy efficient lighting products, by testing lamps and prove their energy efficiency, so we need this technical assistance to support the achievement of our targets.

Development of the request (up to half a page):

{Please explain here how the request was developed at the national level and the process used by the NDE to approve the request before submitting it (who initiated the process, who were the stakeholders involved and what were their roles, and describe any consultations or other meetings that took place to develop and select this request, etc.)}

- 1- We send an e-mail to Eng. Qais Azzam (Standardization department/JSMO) about the Energy efficiency lighting lab needs.**
- 2- Eng. Qais contact officially people in charge of United Nations Environment Programme (UNEP), where they suggested a potential CTCN technical assistance for the JSMO lighting lab.**
- 3- UNEP en. lighten project manager send us the details of NDE, and the link of the template for the request form to CTCN to fill it.**
- 4- We contact NDE (Eng. Hanadi Marie/ Ministry of Environment), and told her that we want to fill a CTCN technical assistance request and asked her about the contents of the request.**
- 5- We fill the CTCN request.**

Expected timeframe:

{Please propose here a duration period for the assistance requested.}

12 months.

Background documents:

{Please list here relevant documents that will help the CTCN understand the context of the request and national priorities. For each document, provide web links if available, to attach to the submission form while submitting the request. Please note that all documents listed/provided should be mentioned in this request in the relevant question(s), and that their linkages with the request should be clearly indicated.}

- 1) Third National Communication (<http://unfccc.int/resource/docs/natc/jornc3.pdf>)**
- 2) Jordan INDC (<http://www4.unfccc.int/submissions/INDC/Published%20Documents/Jordan/1/Jordan%20INDCs%20Final.pdf>)**
- 3) JORDAN 2025: A National Vision and Strategy.**
- 4) Updated Master Strategy of Energy Sector in Jordan for the period (2007-2020).**
- 5) National Energy Efficiency Action Plan (NEEAP) of Jordan.**

Monitoring and impact of the assistance:

{Read carefully and tick the boxes below.}

By signing this request, I affirm that processes are in place in the country to monitor and evaluate the assistance provided by the CTCN. I understand that these processes will be explicitly identified in the Response Plan in collaboration with the CTC, and that they will be used in the country to monitor the implementation of the CTCN assistance.

I understand that, after the completion of the requested assistance, I shall support CTCN efforts to measure the success and effects of the support provided, including its short, medium and long-term impacts in the country.

Signature:

NDE name: Hanadi Marie

Date: 16/3/2016

Signature:



THE COMPLETED FORM SHALL BE SENT TO THE CTCN@UNEP.ORG

Need help? The CTCN team is available to answer questions and guide you through the process of submitting a request. The CTCN team welcomes suggestions to improve this form.

>>> Contact the CTCN team at ctcn@unep.org