

**Invitation for Expression of Interest (EOI)
For**

**Empanelment of Partners for replication of 'Induced
Draft Brick Kiln Technology'
in the State of Punjab**

EOI Document No.: PSCST/EOI/009

October 2019



PUNJAB STATE COUNCIL FOR SCIENCE & TECHNOLOGY, CHANDIGARH

(A State Govt. Undertaking)

MGSIPA Complex, Sector 26, Chandigarh- 160019

Name of the company/firm/ agency	
Address	
Contact Person	
Phone no.	
Email-id	
website	

Certified that this document contains 14 pages (Cover page & 1 to 13)

Punjab State Council for Science & Technology (PSCST) invites Expression of interest (Eoi) from interested firms/ individuals/ brick kiln contractors/ startups to apply for empanelment as Implementing Partner for replication of "Induced Draft Brick Kiln Technology" with zigzag firing in the State of Punjab.

1. INTRODUCTION

- 1.1. Punjab State Council for Science & Technology (PSCST) is a Scientific and Industrial Research Organization approved by Department of Scientific & Industrial Research (DSIR) and Central Govt., Department of Finance under clause (ii) of subsection (i) of section 35 of Income Tax Act 1961. PSCST endeavors to harness the potential of Science and Technology as an instrument of socio-economic change and acts as a catalytic agent for transferring technologies from the laboratory to the field.
- 1.2. Department of Science Technology and Environment, Government of Punjab has issued directions to convert all conventional Fixed Chimney Bull's Trench Kiln (FCBTK) into Induced draft Brick kiln with zigzag firing and rectangular in shape. Out of the 2800 brick kilns in Punjab, 1500 have them converted or under conversion & 1300 kilns are yet to adopt this cleaner technology. As per the orders, only induced draft brick kilns with zig-zag brick settings will be allowed to operate in the State after 30.09.2019.
- 1.3. Punjab Pollution Control Board has approved induced draft technology developed by PSCST vide letter No. SEE(HQ-2)/2017/34596 dated 24.08.2017 which is being replicated in many brick kiln across the State.
- 1.4. To facilitate the conversion of this technology in time bound manner & to ensure quality services to the brick kiln industry, PSCST wishes to empanel firms/ individuals/ brick kiln contractors/ start-ups for Implementation of Induced Draft Brick Kiln Technology in the State of Punjab.

2. Eoi DATA SHEET:

- 2.1. Submission of proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions and implications.

Name	“Empanelment of Implementation Partners for replication of induced draft brick kiln technology with zigzag firing in the State of Punjab ”
Availability of EOI Document on website	24.10.2019
Last date of submission of written queries for clarifications, if any.	Queries are to be submitted through email at pritpal.singh8@punjab.gov.in on or before 08.11.2019 by 1130 hours
Briefing/ Clarification meet	08.11.2019 at 1500 hrs in PSCST Office.
Release of response to clarifications on www.pscst.gov.in	09.11.2019
Last date of submission of EOI	16.11.2019 till 1500 hrs
Mode of Submission of EOI	Hard copy only
Opening of EOIs	16.11.2019 at 1530 hrs in PSCST office
Name and Address for submission of EOI	Senior Engineer, Technology Facilitation Division, Punjab State Council for Science and Technology, MGSIPA Complex, Adjacent Sacred Heart School, Sector 26, Chandigarh -160019
Contact Details	Ph. +91 172 2792325 (F) +91 172 2793143 Email : pritpal.singh8@punjab.gov.in Website: www.pscst.gov.in
Earnest Money Deposit / Proposal Security (Refundable)	Rs. 10,000/- (Rupees Ten Thousand only) through Demand Draft in favour “Punjab State Council for Science and Technology” payable at Chandigarh. Proposal security of the unsuccessful bidders and non qualified bidders shall be returned within 60 (sixty) days from the declaration of qualified bidders.
EOI Processing Fee (Non Refundable)	Rs. 1000/- (Rupees One Thousand Five Hundred only) through Demand Draft in favour “Punjab State Council for Science and Technology” payable at Chandigarh
Validity of Proposal	60 days from Proposal Due Date or extended on mutual consent

- 2.2. Bidders can download the EOI document from the website mentioned above and shall submit the requisite EOI Processing fee and EMD along with their EOI. EOI not accompanied by EMD/Processing fees shall be summarily rejected.
- 2.3. PSCST reserves the right to accept or reject any or all the applications to be received without assigning any reasons.

3. TECHNOLOGY DESCRIPTION

- 3.1. PSCST has developed and demonstrated technology for brick kilns in form of 'Induced Draft Brick Kiln Technology' with energy efficiency & low particulate emissions under a project sponsored by Department of Science & Technology (DST), Ministry of Science & Technology, GOI. Patent application has been filed in India for the technology through PFC, TIFAC. The technology has been approved by Punjab Pollution Control Board for replication in the State of Punjab.
- 3.2. Induced draft brick kiln is rectangular in shape, the bricks are placed in chambers having permanent / temporary hollow partition walls in such a manner so as to cause the fire to progress in two or more simultaneous zigzag patterns. This zigzag fire movement and construction of a partitioning wall creates a pressure drop / resistance which is overcome by providing induced draft fans, this technology is called High / Induced Draft Kiln (IDK). PSCST has developed an improved design of induced draft brick kiln with higher efficiency & better output quality.
- 3.3. Zigzag kiln has a long firing zone, pulverized coal & biomass dust are generally used as fuel. The kilns are designed to fire 30,000-60,000 bricks per day. The advantage of induced draft brick kiln technology with zigzag firing over FCBTK technology is:
 - (a) Higher heat transfer rate between the air and bricks due to higher velocity and turbulence caused by the frequent change in direction of air/flue gas.
 - (b) Improved combustion due to better mixing of air and fuel in the combustion zone and longer time available for combustion of volatiles.
 - (c) Reduced length of kiln and hence smaller footprint of the kiln.
- 3.4. The salient benefits of the above technology are:
 - (a) Reduction in fuel consumption by 15-20% and equivalent reduction CO₂ emissions
 - (b) Improvement in brick quality by 10-15%.
 - (c) Reduction in SPM emissions through better design construction & operating practices (<250 mg/Nm³).
 - (d) Drastic reduction in black smoke emitted from brick kiln chimneys.

4. RESPONSIBILITIES:

- 4.1. The responsibilities for the empanelled Implementation Partner & PSCST shall be:
- 4.2. **Responsibility of PSCST:**
 - (a) Providing standard technology details translated into 4-5 templates of drawings/design along with feasibility report – one time

- (b) Capacity building of empanelled engineers/agencies with regard to salient features of the technology including good construction practices and troubleshooting.
- (c) Providing implementation Kit comprising technology details and other IEC material concerning the technology already developed by PSCST.
- (d) Issuance of Certificate of Empanelment to empanelled individual/agency authorizing them to approach the brick kilns for providing them consultancy services.

4.3. Responsibility of Implementation Partner:

- (a) Approach individual brick kiln/brick kilns/ Brick Kilns Association for providing them consultancy services against a prescribed fee not exceeding Rs.25000/- + GST.
- (b) Collect the baseline data of brick kiln and prepare drawings and feasibility report.
- (c) Supervise the construction activities of brick kiln by visiting the site at least two times.
- (d) Provide training to workforce of brick kilns associated with brick setting and fuel feeding.
- (e) Perform the final visit to the brick kiln on completion jointly with PSCST.
- (f) Coordinate with PSCST and concerned brick kiln for issuance of Completion Certificate.
- (g) Provide list of brick kilns engaged on fortnightly basis along with progress report.

5. ELIGIBILITY CRITERIA

- 5.1. The invitation is open to all having required qualification & experience as mentioned in Para 6.0. However, bidder shall not be under declaration of ineligibility for corrupt and fraudulent practices.

6. QUALIFICATION OF BIDDERS

- 6.1. The bidder must have requisite qualification, experience, manpower and infrastructure for providing technical support to brick kilns for providing design and feasibility reports, visits to the kilns during its conversion/retrofitting process and guiding construction masons and brick kiln workers on better practices.
- 6.2. The bidder should either be a Civil/Mechanical/Chemical Engineer and with minimum 5 years experience in construction activities or should have a team with lead member having similar qualification & experience.
- 6.3. The bidder should have a team of at least 2 qualified Civil Engineers and 1 Draftsman for preparation of design and providing technical support as per the responsibilities mentioned at Para 4.2.

- 6.4. Even though the bidder meet the above qualify criteria, they are subject to be disqualified if they have:
- (a) They have made misleading or false representation in the form, statement and attachments submitted in proof of qualification requirements and/or
 - (b) Record of poor performance such as not properly completing the earlier contract, in-ordinate delays in completion, litigation history etc.

7. TECHNOLOGY FEE:

- 7.1. The selected Implementation Partner shall be required to pay the technology fee and replication cost as per the following:
- (a) One time non-refundable upfront technology fee of Rs. 1.00 lakh (Rs. One Lakh) at the time of signing of agreement with PSCST for a period of three (03) years.
 - (b) The bidder is required to indicate monthly target of brick kilns to be covered in the bid document. The bidder shall pay fee @ Rs. 7,500/- (plus GST, as applicable) per kiln for the target number of brick kilns on monthly basis at the start of each month (i.e. no. of kilns X 7500 (plus GST)).
 - (c) The bidder shall deposit 1st installment of monthly target fee at the time of signing of agreement along with technology fee. Thereafter, implementation partner shall deposit the monthly fee due on or before 7th of each month.
 - (d) The bidder is required to submit on the last day of each month, the details/list of kilns along with their status to whom the technical services have been provided in the prescribed format.
 - (e) In case the no. of brick kilns are less than the monthly target, the fee against the remaining kilns will be carry forward to the next month. In addition, the implementation partner will also pay the monthly target fee for that month.
 - (f) No sublicensing of technology by Implementation Partner is permitted without prior permission of PSCST.
- 7.2. The services rendered by the Implementation Partner shall be reviewed by the Council on quarterly basis. In case of any negligence in delivery of service/poor performance or immoral conduct, the empanelment would be cancelled/ nullified even after entering into agreement at any stage of execution. The fee deposited by the said partner shall not be refunded.

8. COST OF BIDDING

- 8.1. The bidders shall bear all cost associated with preparation and submission of his EOI and the Council will in no case be responsible and liable for those costs.

BIDDING DOCUMENTS

9. CLARIFICATION OF EOI DOCUMENT:

- 9.1. A meeting will be held for briefing/clarification on the EOI document on 08.11.2019 at 3:00 PM in the PSCST Office. The queries, if any, can be submitted either through e-mail or during the meet.
- 9.2. The response to the clarifications shall be uploaded on the website, www.pscst.gov.in on the due date as per EOI data sheet at Page 3 of the document.
- 9.3. PSCST reserves the right to limit, amend or delete any or part of the responsibilities and/or extend the last date for submission of the EOI. Such information shall be uploaded on the website only.
- 9.4. The bidders are advised to visit the website regularly for any addendum in the bid document. The bidders shall be given reasonable time to take an addendum into account in preparing the bid.

10. DOCUMENTS COMPRISING THE BID

- 10.1. The bid submitted by the bidder shall comprise the following:
- (a) Earnest Money of Rs. 10,000/- along with processing fee of Rs. 1,000/- in form of Demand Draft in favor of "Punjab State Council for Science & Technology", payable at Chandigarh.
 - (b) Technical bid comprising the following:
 - (i) EOI document duly signed.
 - (ii) One page write up on proposed action plan for technology transfer to brick kiln.
 - (iii) Target no. of brick kilns to be covered each month.
 - (iv) Detail of team members to be deputed for the task along with their qualification & experience.
 - (v) Prior experience in civil construction and process engineering.
 - (c) Declaration (Annexure-III)
 - (d) Undertaking on the Letter Head (Annexure – IV)
 - (e) Check List
- 10.2. The copy of original documents wherever required (as per check list) be attached and all the

documents should be duly signed.

- 10.3. PSCST shall not be responsible for incomplete bidding documents submitted by any party.
- 10.4. In case of tender being submitted by a firm, it must be signed by a person holding a power of attorney authorizing him to do so. The copy of power of attorney be also attached.
- 10.5. Failure to furnish all information or documentation by the bidding parties as required in the bid document may result in the rejection of the bid.

11. BID VALIDITY

- 11.1. The bid shall remain valid for a period not less than 45 days after the deadline date for bid submission.

12. EARNEST MONEY

- 12.1. The bidder shall furnish an earnest money of Rs. 10,000/- in the form of bank draft in favor of "Punjab State Council for Science & Technology" payable at Chandigarh.
- 12.2. Any bid not accompanied by earnest money shall be rejected by Council as non-responsive.

13. SUBMISSION OF BID

- 13.1. The sealed bid comprising of earnest money, processing fee and requisite documents as mentioned at Para 10 above, duly marking the envelope as Bid for "***Empanelment of Implementation Partner for Replication of Induced Draft Technology with Zigzag Firing in the State of Punjab***", shall be submitted by due date. The name of bidder and complete address should be mentioned on the envelope.
- 13.2. The sealed envelope shall be addressed to the **Senior Engineer, Punjab State Council for Science & Technology (PSCST), MGSIPA Complex, Sector-26, Chandigarh – 160019** and need to be submitted by the bidding party through post, courier or delivered by hand on or before the date and time as per EoI data sheet at page 3.

14. BID EVALUATION

- 14.1. The committee constituted for the purpose will open the bids received in the presence of the bidders or their representative on due date.
- 14.2. The evaluation committee will examine all the bids for the eligibility of the bidders. If required committee can invite the bidders for one to one discussion/ask for clarification before finalizing the list of short listed agencies.
- 14.3. PSCST reserves the right to verify all statements, information and documents submitted by the Applicant in response to the EoI. Any such verification or lack of such verification by PSCST shall not relieve the Applicant of his obligations or liabilities hereunder this EoI nor will it affect any rights of PSCST

14.4. PSCST reserves the right to amend, reject, re-invite the offer of Expression of Interest, if required. The decision of the Member Secretary, PSCST would be final binding to the participating parties.

15. EMPANELMENT OF IMPLEMENTING PARTNER AND SIGNING OF AGREEMENT

15.1. The selected bidders shall be informed regarding their empanelment by e-mail or by registered post.

15.2. The implementation partner will sign an agreement with PSCST in token of acceptance of terms & conditions of the EOI document before the start of activity. The agency would deposit the requisite fee as per Para 7 of the document.

15.3. PSCST reserves the right to empanel any number of any implementation partner through the EOI process within the same geographical location.

16. Arbitration

16.1. If any dispute or difference of any kind what so ever shall rise between the Council, its authorized representatives and agency in connection with or arising out of this EOI or the execution of the work there under, it shall be referred for settlement to Administrative Secretary to Govt. of Punjab, Department of Science, Technology & Environment or his nominee whose decision would be final and binding to both the parties. The arbitration will be held as per the Arbitration & Conciliation Act, 1996.

16.2. All disputes shall be subject to the jurisdiction of Courts at Chandigarh alone. However, before taking any legal steps, the parties hereby reiterate and agree to mobilize all efforts and to enter into discussions/negotiations in order to find out mutually acceptable settlement of such a dispute.

Performa*(To be submitted by the Company on their letter head)*

1.	Name of the company/ firm/ agency	
	Address	
	Contact person	
	Contact nos.	
	Email ID	
	Website	
2.	Details of Incorporation	
3.	Core area of expertise of the firm	
4.	Details of Licenses, Registrations owned by the Company a) PAN no b) GST No <i>(Please provide copies of legal documents)</i>	
5.	Available Technical manpower (number, qualification & year of experience) Please provide details on separate sheet	
6.	List of major works carried out in the last three years with documentary proof	
7.	Arbitration/Court Cases or dispute with any other Government agency <i>(Give the details, if applicable).</i>	
8.	Proposed action plan for technology transfer to brick kiln.	
9.	Target no. of brick kilns to be covered each month.	
10.	Any other major details - please specify	

Signature with Seal

DECLARATION

I/We, do hereby declare that the information given above and in the enclosed documents is true to the best of my/our knowledge and nothing has been concealed therein. I/We am/are well aware of the fact that if the information given by me/us is proved false/not true at any point of time, I/We will have to face punishment as per the provisions of law in force as well as the benefit availed of by me or the benefit accrued to me shall be summarily recovered.

I/We, also affirm that I/We, am/are not banned or blacklisted from participating in tenders by any of the Govt. Departments.

I/We, do hereby undertake to furnish any further information required in this connection as and when desired by PSCST.

I/We agree to abide by this bid for a period of 60 days from the date of opening of Bid under the instruction to Bidders and shall remain binding upon us and may be accepted at any time before the expiry of that period.

I/We, do hereby declare that I/We will not engage in any fraudulent/ unethical practices during the bidding process.

Signature

Place:

Name & Office seal

UNDERTAKING

(To be submitted by the company on their Letter Head)

Ref: _____ Dated _____ In pursuance of empanelment of Implementation Partners for replication of Induced Draft brick kiln technology with zigzag firing in the State of Punjab,

We _____ the company on being the successful bidder, undertake the following:

- Will pay the technology fees as per the offer letter issued by PSCST in full within a period of seven working days from the date of offer letter and before signing of agreement with PSCST
- Will execute the agreement signed with PSCST as per the terms & conditions stipulated in the agreement and the EOI documents.
- Will provide the data on technology transfer fortnightly , specifying the number of brick kilns engaged, status of construction & completion
- Will submit the advance monthly fees at the start of each calendar month.

We understand that in case we are found not adhering to the terms and conditions as laid out in this bid document, PSCST will nullify the empanelment and will debar us from benefits / participation in any of the PSCST, Chandigarh programs / activities in future for a period of 2 years. We also acknowledge that in case of misrepresentation of the information, our proposals / contract shall be rejected / terminated by PSCST, which shall be binding on us.

Date:

Signature

Place:

Name & Office seal

CHECK-LIST

a) Complete EOI document duly signed & stamped	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b) Annexure-I	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c) Proof of available technical Manpower & year of experience in civil construction & management activities	<input type="checkbox"/> Yes	<input type="checkbox"/> No
d) Eoi processing fees of Rs. 1000/- (DD No..... dt.....)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
e) EMD of Rs. 10,000/- (DD No..... dt.....)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f) Proof of registered Company / Firm / Agency	<input type="checkbox"/> Yes	<input type="checkbox"/> No
g) PAN & GST certificate copies	<input type="checkbox"/> Yes	<input type="checkbox"/> No
h) Annexure-II • Declaration	<input type="checkbox"/> Yes	<input type="checkbox"/> No
i) Annexure-III • Undertaking	<input type="checkbox"/> Yes	<input type="checkbox"/> No