



INTRODUCTION

This Memorandum of Understanding (MoU) is entered on 17th January, 2018, by and between:

1. Centre of Excellence for Geothermal Energy (CEGE), established on October 10, 2013 at Pandit Deendayal Petroleum University (PDPU). PDPU is established under the "Pandit Deendayal Petroleum University" Act promulgated by Gujarat State Assembly in 2007. It is an institution for higher education and is located at Raisan, Gandhinagar – 382007, Gujarat, India.

AND

2. ONGC Energy Centre Trust registered as a Trust and having one of its offices located at 8th Floor, Core-3&4, SCOPE Minar, Laxmi Nagar, Delhi-110092 (hereinafter called 'OECT', which expression shall unless repugnant to the context or meaning thereof include all its successors, administrators, executors and assignees).

ONGC Energy Centre and CECE, PDPU shall be hereinafter jointly referred to as the "Parties" and singularly as a "Party".

Whereas,

ONGC Energy Centre (OECT)

ONGC Energy Centre Trust is a research and technology development centre, engaged in research of various renewable and clean energy options, specifically focusing on projects which have the potential to make an impact on India's energy scenario. The Centre also aims to pursue projects till demonstration for commercialization. The objective is in line with the vision of ONGC to become an integrated energy company and not just restrict itself to oil and gas. OEC functions under the aegis of the ONGC Energy Centre Trust, which was, set up by Oil and Natural Gas Corporation Limited, (ONGC), established under Indian Trust Act on August 8, 2005. Currently OEC is working on two Geothermal projects i) Conventional two well geothermal power project in sedimentary basin ii) Single well geothermal project.

Pandit Deendayal Petroleum University (PDPU)

Pandit Deendayal Petroleum University promoted by Gujarat State Petroleum Corporation aims at creating a world class University in energy education and research with special focus on the oil and gas sector. PDPU addresses the need for trained and specialized human resource for Oil & Gas Industry worldwide. It intends to expand the opportunities for students and professionals to develop an intellectual knowledge base with leadership skills to compete in the global arena. This objective is being addressed through a number of specialized and well-planned undergraduate and post-graduate energy education programmes and intensive





research initiative. Pandit Deendayal Petroleum University (PDU), having established School of Petroleum Technology, School of Petroleum Management, School of Technology, is interested in conducting Industrial research problem pertinent to Indian Industry and taking lead to establish research facility on the campus.

The University has established Centre of Excellence for Geothermal Energy (CEGE) to carry out research and development studies in exploration and exploitation of geothermal energy.

Now therefore the MOU witnesses that the parties hereto agree as follow:

1. Objectives

The Memorandum of Understanding expresses mutual interest among the parties to promote research in geothermal energy and to explore in good faith the following:

1. To carry out research in geothermal energy to advance the mutual objective of CEGE PDU and ONGC Energy Centre and to take advantage of their complementary strengths.
2. Exchange of data and development of models for the benefit of geothermal research in India.
3. Conduct joint studies on exploration, interpretation and subsurface modeling.
4. Planning and design for Implementation of pilot geothermal projects.
5. Consider other innovative programs that provide opportunities for collaboration among the institutions with research.
6. Work together and explore the possibilities to develop a viable and sustainable model for funding of the research, which may include support of the Centre and of research projects in areas of interest to the parties related to geothermal energy.

2. UNDERSTANDING OF PARTIES

1. Parties understand and acknowledge that they are making a significant commitment to this collaborative effort. Accordingly, Parties agree to deploy their best efforts on its design and implementation.
2. This MoU shall remain effective for the period of 2 Two years from the date of signing of this agreement i.e. upto and thereafter it will terminate. However, it may be renewed as deemed necessary and with mutual consent of both Parties.
3. The Parties understand and acknowledge that this Memorandum of Understanding will provide the foundation for more comprehensive Agreements.
4. Each party would bear its own expenses in regard to implementation of this MOU. Further, actual implementation would be undertaken by respective Parties at its own risk and cost.





5. Each party represents that with respect to the matters which are subject to this Memorandum it will not make or offer any payment, gift, whether directly or through intermediaries, to or for the use of any public official where such payment, gift, promise or advantage would violate the Corrupt Practices Act.
6. **Confidentiality:** The Parties shall during the tenure of the Agreement and at any time thereafter maintain in the strictest confidence, all information acquired in pursuance of the Agreement and shall not, unless authorized in writing by the other party, divulge or grant access to any information acquired in pursuance of the Agreement or the results thereof and shall prevent anyone becoming acquainted with any such information. CEGE-PDPU shall also not destroy any report, note and technical data relating to the operation/work and not required by the OECT. OECT shall be bound by similar obligations w.r.t. confidentiality of information the obligation is a continuing one for the Parties and shall survive after the completion/termination of this Agreement.

The provisions of this clause shall not apply to information that:

- (a) is acquired/developed by the Parties independent of this Agreement or is rightfully received free of restriction from another source having the right to so furnish such information; or
 - (b) is in Public domain; or
 - (c) at the time of disclosure the information was known to either Parties or its affiliated companies, free of restrictions, as evidenced by documentation in its position; or
 - (d) is disclosed with prior consent of the Other Party; or
 - (e) is required to be furnished or reported under any Law/Order of a Court or is required by Govt. Ministries/agencies/regulatory agencies, Court of Law or the law of land or like Authorities having jurisdiction as regards such information, or in accordance with the rules, by laws, policies, disclosure standards or courts of professional conduct or ethics that may be applicable to such information. Provided, however, that as soon as the Disclosing Party learns that it is or may be required to disclose any Confidential Information under the above mentioned circumstances, it shall (i) as promptly as possible take reasonable steps to notify the Other Party of the disclosure requirement so that the Other Party, if it deems fit may seek a protective order or other appropriate relief. (ii) provide such cooperation and assistance as the other party may reasonably request in any effort by the Other Party to obtain such relief.
7. The provisions of this Memorandum reflect the current plans and intentions of the ONGC Energy Centre and CEGE, PDPU but are not binding on the ONGC Energy Centre and CEGE, PDPU. Specific terms and conditions are to be set forth in future Agreements of all Parties.
 8. All the parties shall designate a liaison office for this Memorandum of Understanding and for any subordinate Agreements under this Memorandum of Understanding.





9. This Memorandum of Understanding may be renewed or extended by mutual consent of the participating Parties. Such amendments, once signed by authorized signatories will become part of this Memorandum of Understanding.
10. This Memorandum of Understanding is a non-exclusive arrangement among the Parties. The MoU can be terminated by either party after giving 30 days notice in writing.
11. **Resolution of Disputes:** All disputes regarding the interpretation of contents of this MoU or its implementation shall be resolved bilaterally by the Head of the CEGE-PDPU and DG OEC. Any other disputes remaining shall be resolved through the relevant Ministries and guidelines of the Government.
12. **Assignment of the MoU to a third party:** Either Party shall not assign this Agreement to a third party without prior written consent of other Party.
13. **Publications & presentations in Journals & Conferences:** Publications shall have prior approval of OECT to restrict disclosure of any proprietary data of OECT. Further, publications and presentations in Journals & Conferences respectively shall be under joint authorship of OECT & CEGE-PDPU.
14. **Intellectual property:** The Parties shall execute separate Agreement for undertaking any project work In collaboration with each other prior to undertaking an activity relating to research in a particular field. The modalities relating to development, ownership and usage of Intellectual Property arising out of or in relation to any work undertaken by the Parties pursuant to this MoU shall be decided mutually by parties on case to case basis, at the time of execution of such agreement.
15. **Comprehensive Agreement for individual projects:** A detailed Agreement including execution Terms and Conditions, payment terms, milestones, deliverables, confidentiality etc. will be entered into for each individual project between CEDE-PDPU and respective OECT under the broad umbrella of this MoU.
16. **Correspondence:** Both Parties agree to correspond regarding this MoU to the attention of designated representative at the following addresses.
17. **Signatories:** The MoU shall be signed by the Head OEC and the Coordinating head of CEGE-PDPU, and the originals, made in duplicate, will be retained by OECT and CEGE-PDPU.





**Pandit Deendayal Petroleum
University**

Signature: _____
Date: _____

Prof. Anirbid Sircar
Head, CEGE
Pandit Deendayal Petroleum Uni.
Raisan, Gandhinagar - 382007
Gujarat, India




ONGC Energy Centre

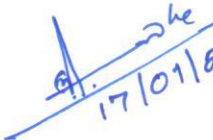
Signature: _____
Date: _____

Puneet Kishore
Head-OEC,
ONGC Energy Centre,
8th Floor, Core 3&4, Scope
Minar,
Laxmi Nagar,
Delhi- 110092

पुनीत किशोर/Puneet Kishore
महाप्रबंधक (उ)/General Manager (P)
प्रमुख-ओ. एन. जी. सी. सर्जा केन्द्र
Head-ONGC Energy Centre
स्कोप मीनार, दिल्ली-92/SCOPE Minar, Delhi-92

IN WITNESS WHEREOF, the Parties to this MOU have caused this agreement to be executed by their fully authorized representatives on their behalf on the 17th day of January, 2018.


17/1/18
DWIJEN VAIDYA
COORDINATOR, CEGE-PDPU


17/01/2018
BHARAT MENDHE
CE(P), ONGC Energy Centre