



MEMORANDUM OF UNDERSTANDING

BETWEEN

UNIVERSITY OF PISA

DEPARTMENT OF ENERGY, SYSTEMS, TERRITORY
AND CONSTRUCTION ENGINEERING (DESTEC)

AND THE

UNIVERSITY OF RWANDA

COLLEGE OF SCIENCE AND TECHNOLOGY (UR-CST)

African Center of Excellence in Energy for Sustainable
Development

REPUBLIC OF RWANDA

Preamble

WHEREAS the University of Pisa (UniPi), School of Engineering (Via Carlo Francesco Gabba, 22, 56122 Pisa PI, Italia), through its Department of Energy, Systems, Territory and Construction Engineering (DESTEC) and the University of Rwanda through its College of Science and Technology (UR-CST) (hereinafter "the parties" / "institutions "), motivated by the extensive opportunities-offered by international co-operation, recognize the need to develop and nurture new partnerships and to share human and material resources, with the aim of promoting international understanding, contribute to the growth of global knowledge and advance the development of our respective countries and world;

AND WHEREAS in the spirit of this challenge and responsibility, the parties acknowledge the similarities in the scholarly pursuits of the institutions and desire to promote inter-institutional co-operation, scientific and cultural exchange, and mutual understanding and respect between the citizens of Italy and Rwanda;

AND WHEREAS the parties therefore join in the following International Memorandum of Understanding (IMOU):

Article 1

1. Objectives

- 1.1 **Overall Objective:** The overall objective of the IMOU is to provide a framework within which UR/CST and DESTEC can collaborate in energy research and capacity building to advance the objectives of Vision 2050 and the World Bank sponsored Africa Center of Excellence in Energy for Sustainable Development (ACE-ESD).
- 1.2 **Specific Objectives:** The two Institutions seek to establish and encourage mutually beneficial scientific, technological, educational and other relations which could include the following activities:
 - 1.2.1 Collaboration in the research, design, testing and use of the following laboratories in direct support of ACE-ESD:
 - 1.2.1.1 Photovoltaics Integration Laboratory (Implemented by June 2019)
 - 1.2.1.2 Micro-hydro Power Laboratory (Implemented by June 2019)
 - 1.2.1.3 Other laboratories to be implemented on the basis on need and availability of funds.

- 1.2.2 Collaborative research and development to advance the design and implementation of minigrids technology in support of rural development for Rwanda and the rest of Sub-Saharan Africa.
- 1.2.3 Curriculum and course development with particular emphasis on developing intensive concentrated courses taught over a short period of time.
- 1.2.4 Development and teaching of Master of Science programs for Energy Policy and Systems Engineering, and co-supervising thesis development and research.
- 1.2.5 Development and teaching in a joint PhD program and co-supervising dissertation development and research.
- 1.2.6 Exchange of academic staff members for the purpose of collaborative research, teaching and the presentation of specific topics in their fields of specialization.
- 1.2.7 Establishment of joint research programs with opportunities for UR academic staff and postgraduate students to collaborate with DESTEC academic staff and researchers and publish in appropriate peer reviewed journals.
- 1.2.8 Exchange of students (undergraduate, postgraduate, and postdoctoral fellows) in respect of specific research projects or courses of interest and importance.
- 1.2.9 Organization of workshops, conferences, seminars and symposia of mutual interest to the institutions.
- 1.2.10 Preparation and implementation of short-term training programs for industry to include 1-3 day workshops.
- 1.2.11 Assistance in international accreditation initiatives.
- 1.2.12 Collaborative research and development to advance the design and implementation of microgrids technology in support of rural development for Rwanda and the rest of Sub-Saharan Africa.
- 1.2.13 Collaborative research and development to advance the smartgrids technology in support of rural development for Rwanda and the rest of Sub-Saharan Africa.
- 1.2.14 Collaborative research and development to advance the devices under testing (battery, solar charge controller, converter efficiency) technology in support of rural development for Rwanda and the rest of Sub-Saharan Africa.

Article 2

2.1 Areas of common interest include, energy, electrical and mechanical engineering, grid design and management, integration into the national grid and management of clean energy generation, design of smart grids, technology development, project management, trans disciplinary research in support of optimizing energy for rural development, methane/liquefied petroleum gas (LPG) research and development in support of national development and environmental remediation, developing research and development (R + D) relationships with commercial organizations and other general areas related to energy and engineering that directly support the goals of Vision 2050.

Article 3

3.1 In each case, the theme for a joint activity, the conditions for the ownership of any Intellectual Property, arrangements for a visit, exchange and other forms of co-operation shall be determined collaboratively by the management and scholars of the institutions and will be the subject of a separate, signed agreement that is in compliance with the laws of Rwanda and the republic of Italy.

3.2 The number of members of staff to participate in a visit or exchange programme, their sojourn and conditions of service shall be negotiated in each case, with due consideration to the capabilities and needs of the individuals and the institutions concerned.

3.3 The exchange of students must be outlined in a separate agreement signed by both parties.

Article 4

4.1 Both parties accept that in case of joint projects, which require additional funding not included as part of this IMOU, financial arrangements shall be negotiated in each case and continuation of said projects shall be dependent on the availability of funds.

Article 5

5.1 This Memorandum of Understanding supersedes all prior agreements whether written or oral between the parties with respect to the subject matter.

5.2 The parties, or their authorized substitutes, shall evaluate this IMOU regularly to decide on changes or additions thereto, which will not be of any force or effect unless in writing and signed by the representatives of both parties.

Article 6

6.1 This Memorandum of Understanding takes effect when signed by authorized representatives of the participating organizations. It will continue in force and effect for a period of five (5) years from that date. Renewal of the MoU may be initiated at the end of each such five year period, and will require signatures by authorized officials of the participating organizations.

This agreement may be terminated at the request of either party by giving advance written notice of sixty (60) days.

Article 7

7.1 The parties choose for purposes of this IMOU as their domicilium citandi et executandi, the following addresses:

University of Pisa Via Carlo Francesco Gabba, 22 56122 Pisa, PI ITALY	University of Rwanda KK737st Gikondo, Kigali RWANDA
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7.2 A party may at any time change its domicilium by giving notice in writing, provided that the new domicilium consists of, or includes a physical address at which process can be served.

7.3 The signatories appoint prof. Ing. Umberto Desideri, director of DESTEC, and the Directorate of Research, Innovation and Postgraduate Studies (University of Rwanda-College of Science and Technology), as co-coordinators for the purpose of this IMOU.

Signed at

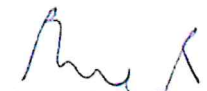
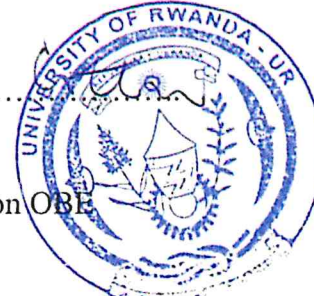
Signed at

On this 9th day of Oct. 2018

On this 9th day of Oct. 2018




Prof. Ing. Umberto Desideri
Director
DESTEC

Prof. Philip Cotton OBE
Vice Chancellor
University of Rwanda