

L3. Action researches to test theory in practice are conducted by faculty and students





MEMORANDUM OF AGREEMENT

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KNOW ALL MEN BY THESE PRESENTS:

This MEMORANDUM OF AGREEMENT entered into and executed by and among:

PHILIPPINE COUNCIL FOR INDUSTRY, ENERGY AND EMERGING TECHNOLOGY RESEARCH AND DEVELOPMENT, a government institution created by virtue of Presidential Degree No. 729 with principal address at DOST Compound Gen. Santos Avenue, Bicutan, Taguig, Metro Manila, represented herein by its Officer-In-Charge, Office of the Executive Director, ENGR, RAUL C. SABULARSE, herein referred to as "PCIEERD":

The DEPARTMENT OF SCIENCE AND TECHNOLOGY - NATIONAL CAPITAL REGION, a government agency created and existing under and by virtue of the laws of the Republic of the Philippines, with postal address at DOST Compound, Taguig City, Metro Menila, represented herein by its Regional Director, JOSE B. PATALINJUG III, herein referred to as

The FOOD AND NUTRITION RESEARCH INSTITUTE, a government institution with principal address at DOST Compound Gen, Santos Avenue, Bloutan, Taguig, Metro Manila, represented herein by its Director, DR, MARIO V, CAPANZANA, herein referred to as "FNRI";

The INDUSTRIAL TECHNOLOGY DEVELOPMENT INSTITUTE, a government institution with principal address at DOST Compound Gen, Santos Avenue, Bicutan, Taguig, Metro Manila, represented herein by its Officer-In-Charge, Office of the Director, DR, ANNABELLE V. BRIONES, herein referred to as "ITDI";

The METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER, a government Institution with principal address at MIRDC Compound Gen. Sentos Ave. Bicutan 1631, Taguig, Metro Manila, represented herein by its Executive Director, ENGR. ROBERT O. DIZON, herein

DEPARTMENT OF ENVIRONMENT AND ECOSYSTEMS RESEARCH AND DEVELOPMENT BUREAU, a government agency with principal address at DENR-ERDB College, Laguna, represented herein by its Director, DR, SOFIO B, QUINTANA, herein referred to as "DENR-ERDB";

The COMMISSION ON HIGHER EDUCATION - NATIONAL CAPITAL REGION, a government agency with principal address at 2nd Floor Higher Education Development Center Bidg. C.P. Garcia Avenue, UP Campus, Diliman, Quezon City, represented herein by its Director, DR. LEONIDA S. CALAGUI, herein referred to as "CHED-NCR".

The RENEWABLE ENERGY ASSOCIATION OF THE PHILIPPINES, an industry association, with principal address at 39-A J.P. Rizal Ext., West Rembo, Maketi City represented herein by its Chairperson, EREL B. NARIDA, herein referred to as "REAP".

The ENERGY EFFICIENCY PRACTITIONERS ASSOCIATION OF THE PHILIPPINES, an industry association with principal address at VV Soliven Building, EDSA, San Juan City represented herein by its President, ENGR, RAYMOND MARQUEZ, herein referred to as

The PHILIPPINE FOOD PROCESSORS AND EXPORTERS, INC., an industry association with principal address at Tycoon Centre Condominium, Pearl Drive, Ortigas, Pasig City, represented herein by its President, ROBERTO C. AMORES, herein referred to as

The ADAMSON UNIVERSITY, a private higher education institution with principal, address at 900, San Marcelino St. Ermita, Manila, represented herein by its President, FR. MARCELO V. MANIMTIM, CM, herein referred to as "ADU";

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The ARELLANO UNIVERSITY, a higher education institution with principal address at Legarda St., Sampaloc, Manila, represented herein by its President, FRANCISCO PAULINO CAYCO, herein referred to as "AU";

The COLEGIO DE MUNTINLUPA, a public higher education institution with principal, address at Posadas Avenue, Sucat, Muntinlupa City represented herein by its President, DR, TERESITA C. FORTUNA, herein referred to as "CDM";

The DE LA SALLE UNIVERSITY, a private higher education institution with principal address at Taft Avenue, Manila, represented herein by its President, BR, RAYMUNDO SUPLIDO, herein referred to as "DLSU";

The EULOGIO AMANG RODRIGUEZ INSTITUTE OF SCIENCE AND TECHNOLOGY, a public higher education institution with principal address at Nagtahan St. Sampaloc, Manila, represented herein by its President, DR. EDITHA V. PILLO, herein referred to as "EARIST";

The FEATI UNIVERSITY, a private higher education institute with principal address at Holios Street Sta. Cruz Manila, represented herein by its President, DR, ADOLFO JESUS R, GOPEZ, herein referred to as "FEATI";

The LYCEUM OF THE PHILIPPINES UNIVERSITY, a private higher education institute with principal address at Muralla St, Intramuros, Manila, 1002 Metro Manila, represented herein by its President, ATTY, ROBERTO P. LAUREL, herein referred to as "LPU";

The MAPUA UNIVERSITY, a private higher education institute with principal address at 658 Muralla St, Intramuros, Manila, 1002 Metro Manila, represented herein by its President, DR, REYNALDO V, VEA, herein referred to as "MAPUA";

The MARIKINA POLYTECHNIC COLLEGE, a public higher education institution with principal address at 252 Shoe Ave, Marikina, 1800 Metro Manila, represented herein by its President, DR. JOSELITO B. GUTIERREZ, herein referred to as "MPC";

The PAMANTASAN NG LUNGSOD NG MAYNILA, a public higher education institution with principal address at General Luna St, Intramuros, Manila, 1002 Metro Manila, represented herein by its President, DR, MA, LEONORA V. DE JESUS, herein referred to as "PLM";

The PAMANTASAN NG LUNGSOD NG MUNTINLUPA, a public higher education institution with principal address at University Road, Poblacion, Muntiniupa, Metro Manila, represented herein by its President, DR. ELLEN E. PRESNEDI, herein referred to as "PLMUN":

The PHILIPPINE NORMAL UNIVERSITY, a private higher education institution with principal address at 104, Taft Ave, Ermita, Manila, 1000 Metro Manila, represented herein by its Officer-In-Charge, Office of the President, DR. MA. ANTOINETTE C. MONTEALEGRE, herein referred to as "PNU";

The POLYTECHNIC UNIVERSITY OF THE PHILIPPINES, a public higher education institution with principal address at Anonas St., Sta. Mesa, Manila, represented herein by its President DR, EMANUEL C. DE GUZMAN, herein referred to as "PUP";

The PHILIPPINE WOMEN'S UNIVERSITY, a public higher education institution with principal address at 1743 Taft Ave, Malate, Manila, 1004 Metro Manila, represented herein by its President, DR. JOSE FRANCISO B, BENITEZ, herein referred to as "PWU";

The RIZAL TECHNOLOGICAL UNIVERSITY, a public higher education institution with principal address at 704 Born Ave Cor Sacrepante, Mandaluyong, 1550 Metro Manila, represented herein by its President, DR. JESUS RODRIGO F, TORRES, herein referred to as "RTU";

The TAGUIG CITY UNIVERSITY, a public higher education institute with principal address at Gen. Santos Ave., Central Bicutan, Taguig City, represented herein by its Officer-In-Charge, Office of the President, DR. JUAN C. BIRION, herein/referred to as "TCU";

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The TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES, a private higher education institute with principal address at Aurora Boulevard, Quezon City and 363 P Casal, Quiapo, Manila, 1001 Metro Manila, represented herein by its President, DR, ELIZABETH Q, LAHOZ,

The TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES, a public higher education institution with principal address at Ayala Blvd, Ermita, Manila, 1000 Metro Manila, represented herein by its Officer-in-Charge for the Office of the President, DR. MA, LEONOR F, VALIDOR, herein referred to as "TUP";

The TRINITY UNIVERSITY OF ASIA, a private higher education institute with principal address at 275 E Rodriguez Sr. Ave., Quezon City, represented herein by its President, DR. WILFRED U. TIU, herein referred to as "TUA";

The UNIVERSITY OF SANTO TOMAS, a private higher education institute with principal address at España Blvd, Sampaloc, Manila, Metro Manila, represented herein by its Rector Magnificus, FR. HERMINIO V. DAGOHOY, OP, PhD, herein referred to as "UST";

The UNIVERSITY THE PHILIPPINES-DILIMAN, a public higher education institution with principal address at Vidal A. Tan Hall, Velasquez Street, Diliman, Quezon City, Metro Manila, represented herein by its Chancellor, DR. MICHAEL L. TAN, herein referred to as "UP-

The UNIVERSITY THE PHILIPPINES-MANILA, a public higher education institution with principal address at Padre Faura St, Ermita, Manila, 1000 Metro Manila, represented herein by its Chancellor, DR, CARMENCITA D. PADILLA, herein referred to as "UP-MANILA".

Which may collectively be referred to as the "PARTIES"

#### WITNESSETH

WHEREAS, PCIEERD is mandated to serve as the central agency in the planning, monitoring and promotion of scientific and technological research for application in the industry, energy, and emerging technologies sectors;

WHEREAS, DOST-NCR is committed to the promotion, transfer and commercialization of scientific and technological results that are products of R&D for the development of the industry, energy, and emerging technologies in National Capital Region;

WHEREAS, Research and Development Institutes namely FNRI, ITDI, and MIRDC are mandated to render a variety of services to local industries generating a large pool of technologies while providing technical services to industry. It also committed to provide services or interventions to industry to help modernize the production sector and improve their productivity;

WHEREAS, DENR-ERDB promotes the science-based ecosystem management for sustainable development of industry and energy to achieve sustainable growth;

WHEREAS, CHED-NCR is mandated to ensure and protect academic freedom for the continuing intellectual growth, the advancement of learning and research, the development of responsible and effective leadership, the education of high level professionals, and the enrichment of historical and cultural heritage;

WHEREAS, REAP and ENPAP promotes the development of the energy sector through productive and sustainable utilization of indigenous energy resources;

WHEREAS, PHILFOODEX focuses in the planning, development, and sourcing of raw materials, on research and technology development of world-class quality food products, and on the improvement of manufacturing efficiency and productivity in order to be globally competitive

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WHEREAS, Colleges and Universities namely ADU, AU, CDM, DLSU, EARIST, FEATI, LPU, MAPUA, MPC, PLM, PLMUN, PNU, PUP, PWU, RTU, TCU, TIP, TUP, TUA, UST, UP-DILIMAN, UP-MANILA, recognize the importance of coordinating the industry, energy and emerging technology research and development efforts among their respective institutions into a region-wide, inter-agency and inter-institutional cooperation;

WHEREAS, all PARTIES recognize the necessity of establishing an institutional mechanism that will generate cooperation and commitment to manage and coordinate the industry, energy, emerging technology R&D development efforts in National Capital Region;

NOW THEREFORE, for and in consideration of the foregoing premises and of the mutual covenants, stipulations, and other considerations hereinafter set forth, the PARTIES have agreed as they hereby agree to the following:

### I. ROLES AND RESPONSIBILITIES OF MEMBER-AGENCIES

#### 1.1. General

- 1.1.1. That all PARTIES agree to form the Metropolitan Manila Industry, Energy and Emerging Technology Research and Development Consortium (MMIEERDC); the concept and principles to which it was formed is made an integral part of this agreement;
- 1.1.2. That all PARTIES with their respective Heads of agency/institution shall commit themselves to the mandate of the consortium and to the purposes to which it was established, to wit;
  - Create a mechanism for proper coordination, programming, development, and utilization of resources for related R&D works;
  - 1.1.2.b. Foster interagency collaboration and participation between and among the academe, local / national government agencies, and private sector / industry:
  - 1.1.2.c. Promote adoption and utilization of R&D output;
  - 1.1.2.d. Formulate an R&D Agenda for sectors that will be identified by the Consortium; and
  - 1.1.2.e. Generate funding to conduct R&D activities.
- 1.1.3. That all Heads of agencies/institutions shall comprise the Metropolitan Manila Industry, Energy and Emerging Technology Research and Development Consortium (MMIEERDC) as the highest policy making body of the consortium;
- 1.1.4. That all PARTIES agree to commit the services of their permanent and alternate representatives herewith attached as ANNEX A, research staff/experts to the consortium;
- 1.1.5. That all PARTIES agree to utilize and share research facilities and resources in the conduct of collaborative R&D work in the pursuit of its mandate and goal; and
- 1.1.6. That all PARTIES commit to support the generation and sourcing of R&D fund needed to implement the identified programs and projects of the consortium.

### 1.2. Specific Responsibilities

## 1.2.1. PCIEERD shall:

1.2.1.a. Provide an operational fund for the operation of the consortium-until such stage that the consortium is capable of sustaining its operational requirements, subject to the submission and approval of a required project proposal for financial assistance; and

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1.2.1.b. Provide direction on research and development goals and priorities of the consortium.

#### 1.2.2. DOST-NCR, DENR-ERDB and CHED-NCR shall:

- 1.2.2.a. Assist in planning, coordination and implementation of R&D programs/projects/ activities to make them congruent to the Philippine Dévelopment Plan or Regional Development Plan;
- 1.2.2.b. Assist in the promotion and utilization of the R&D output via information dissemination, technology fair, technology investment forum and clinic, etc;
- 1.2.2.c. Assist in matching sources of funds both locally and internationally to the member institutions implementing R&D programs and projects; and
- 1.2.2.d. Assist in the provision of other technological services needed by the industry and energy sector,

## REAP, ENPAP, PHILFOODEX shall:

- 1.2.3.a. Provide relevant information particularly industry profiles technological needs of the various industries in their municipalities:
- 1.2.3.b. Promote the transfer and adoption of consortium R&D generated technologies to their members, and
- 1.2.3.c. Provide leadership role in establishing linkage and network in the private industries.

#### FNRI, ITDI, MIRDC, ADU, AU, CDM, DLSU, EARIST, FEATI, LPU, MAPUA, MPC, PLM, PLMUN, PNU, PUP-MANILA, PWU, RTU, TCU, TIP, TUP, TUA, UST, UP-DILIMAN, UP-MANILA, shall:

- 1.2.4.a. Enjoin newly trained researchers to carry out meaningful researches;
- 1,2.4,b. Provide a list of research facilities that can be used for the conduct of Consortium R&D activities:
- 1.2.4.c. Provide a list of experts that can assist by the Consortium on its R&D undertakings;
- 1.2.4.d. Share research facilities and staff for the conduct of collaborative R&D activities:
- 1.2.4.e. Participate in the identification of regional R&D priorities;
- 1.2.4.f, Formulate regional R&D plans and programs;
- 1.2.4.g. Prepare and implement joint R&D proposals:
- 1.2.4.h. Monitor and evaluate projects;
- 1.2.4.1. Conduct training and other shared activities; and
- Provide logistics and venues for joint meeting conferences and dialogues.

#### II. RIGHTS OF THE PARTIES

- 2.1. That all PARTIES have the right to propose amendments to this Agreement, and the documents derived hereafter, made upon the approval of the other signing
- That all concerned PARTIES shall have joint title/rights to all data and research findings derived from jointly undertaken projects; and
- 2.3. That the ownership of all research results and/or findings shall be in accordance to the Technology Transfer Act or Republic Act 10055.

#### III. REPRESENTATIONS AND WARRANTIES

The PARTIES hereby represent and warrant as follows:

3.1, It has full power, authority and legal right to execute and perform its obligations under this Agreement;





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3.2. All necessary approvals and other legal action required to authorize the execution, delivery and performance of this Agreement have been obtained or made and are in effect; and

 This Agreement constitutes the legal, valid, and binding obligation of said Party, enforceable in accordance with its terms.

#### IV. CONFIDENTIALITY

4.1. The PARTIES hereby unconditionally and irrevocably agree and undertake to, observe the provisions of the Data Privacy Act, to preserve and maintain in utmost confidence all Confidential Information, that may be obtained during the course of implementation of this Agreement;

4.2. Without limiting the foregoing, "Confidential Information" shall include but not be limited to statistics, data, source codes, object codes, user manuals, programming manuals, modification manuals, flow charts, drawings, software listings, models, drafts and diagrams in all forms of storage or representation including, but not limited to, documents, loose notes, diaries, memoranda, drawings, photographs, electronic storage and computer print-outs;

4.3. The PARTIES acknowledge that the Confidential Information will not be deemed to be public knowledge solely by virtue of the fact that it is embraced by more general information which may have become public knowledge; and

4.4. The PARTIES adheres to the data sharing agreement up to the processing of the shared data principle laid down in the IRR of the Data Privacy Act of 2012, NPC Circular 16-02, and all applicable issuances of the Commission, including putting in place adequate safeguards for data privacy and security.

### V. COMPLIANCE WITH LAWS

The PARTIES agree that they will comply with all applicable national, and local laws, regulations and conventions in the performance of their respective obligations under this Agreement. Each Party further agrees to hold harmless and indemnify the other Party, including reasonable attorney's fees, for any breach, damage and/or injury that may be sustained by reason of the failure of the other Party to comply with such laws, regulations, authority and conventions.

### VI. EFFECTIVITY AND TERMINATION

6.1. This Agreement shall take effect upon signing of all PARTIES and shall remain in force and effect, unless terminated by mutual consent of majority of the PARTIES with written notice. Nothing in this agreement shall preclude any of the PARTIES from terminating the agreement, provided that due notice shall be given to all the PARTIES within thirty (30) days prior effectivity of the termination; and

6.2. If no now agreement is signed, this Agreement is deemed renewed for another year and for every year thereafter unless a new agreement is signed to replace it.

### VII. MISCELLANEOUS

#### 7.1. Counterparts

This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. The PARTIES may each execute this Agreement by signing any such counterpart.

### 7.2. Entire Agreement

This Agreement and the documents referred to herein, and such other documents as may be executed by the PARTIES contemporaneously herewith or subsequently pursuant to hereto, constitute and express the entire agreement between the PARTIES with respect to the subject matter thereof and supersedes



all prior communications, representations, agreements and understandings, whether oral or written, between the PARTIES.

The annexes and appendices are an integral part of this Agreement. In case of conflict between the provisions of this Agreement and annexes and appendices, this Agreement shall take precedence.

### 7.3. Amendment of Agreement

Any amendments, addition, modification or supplement to this Agreement must be made in writing, approved and signed by the PARTIES.

### 7.4. Validity and Severability

Whenever possible, each provision of this Agreement shall be interpreted in a manner as to be effective and valid under applicable Law, but if for any reason any clause or provision of this Agreement, or the application of any such clause or provision in a particular context or to a particular situation, circumstance or Person is held to be prohibited, invalid or unenforceable by any Governmental Authority, then the application of such clause or provision in contexts or to situations, circumstances or Persons other than that in or to which it is held prohibited, invalid or unenforceable, shall not be affected thereby, and the remaining clauses and provisions of this Agreement shall nevertheless remain in full force and effect.

#### 7.5. Good Faith

The PARTIES agree to observe the utmost good faith in all matters concerning the subject matter of this Agreement.

#### 7.6. Further Acts

The PARTIES agree that they shall individually and jointly cooperate and shall do all things necessary or appropriate and execute and deliver, or cause to be executed and delivered, all documents appropriate or necessary to enable the PARTIES to perform their obligations hereunder and to effectuate the purposes of this Agreement including, but not limited to, obtaining all requisits approvals of all Governmental Authorities, or third Persons with a legal interest in or jurisdiction over the subject matter or transactions contemplated under this Agreement.

#### 7.7. Waiver

No failure or delay by any Perty to exercise or to insist upon the performance, in whole or in part, of any term, condition, covenant, right, legal or equitable remedy or any provision of this Agreement, shall constitute a waiver of any such term, condition, covenant, right, legal or equitable remedy or provision, or preclude such Party from exercising or insisting upon the performance, in whole or in part, of any such term, condition, covenant, right, legal or equitable remedy or provision of this Agreement at any later time.

#### 7.8. Governing Law

This Agreement and the rights of the PARTIES hereunder shall be governed by and interpreted in accordance with Philippine Law.



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DR. MANUEL M. MUHI Consortium Director, and	JOSE B. PATALINJUG III
/P for Academic Affairs, PUP-Manila	Governing Council Co-Chairperson
1	and Regional Director, DOST-NCR
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	DR. ANNABÉLLE V. BRIONES
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DR. MARIC V. CAPANZANA Director Condition Research Institute	Officer-In-Charge, Office of the Director, Industrial Technology Development Institute
Director Nutrition Research Institute	Officer-In-Charge, Office of the Director, Industrial Technology Development Institute  DR. SOFIO B. QUINTANA
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OR, LEONIDA S, CALAGUI	Officer-In-Charge, Office of the Director, Industrial Technology Development Institute  DR. SOFIO B. QUINTANA Director DENR-Ecosystems Research and Development Bureau  EREL B. NARIDA Chairperson Renewable Energy Association of the
NGR. ROBERT O. DIZON  Executive Director  Statis Industry Research and Development  Center  OR. LEONIDA S. CALAGUI  Commission on Higher Education-National	Officer-In-Charge, Office of the Director, Industrial Technology Development Institute  DR. SOFIO B. QUINTANA  Director  DENR-Ecosystems Research and Development Bureau  EREL B. NARIDA  Chairperson
Director Nutrition Research Institute  ENGR. ROBERT O. DIZON Executive Director Metals Industry Research and Development Center  OR. LEONIDA S. CALAGUI Director Commission on Higher Education-National Capital Region	Officer-In-Charge, Office of the Director, Industrial Technology Development Institute  DR. SOFIO B. QUINTANA Director DENR-Ecosystems Research and Development Bureau  EREL B. NARIDA Chairperson Renewable Energy Association of the Philippines
Director Nutrition Research Institute  Food and Nutrition Research Institute  ENGR. ROBERT O. DIZON  Executive Director  Vistals Industry Research and Development	Officer-In-Charge, Office of the Director, Industrial Technology Development Institute  DR. SOFIO B. QUINTANA Director DENR-Ecosystems Research and Development Bureau  EREL B. NARIDA Chairperson Renewable Energy Association of the Philippines  ROBERTO C. AMORES
ENGR. ROBERT O. DIZON Executive Director Astals Industry Research and Development Center  OR. LEONIDA S. CALAGUI Director Commission on Higher Education-National Capital Region  ENGR. RAYMOND MARQUEZ	Officer-In-Charge, Office of the Director, Industrial Technology Development Institute  DR. SOFIO B. QUINTANA Director DENR-Ecosystems Research and Development Bureau  EREL B. NARIDA Chairperson Renewable Energy Association of the Philippines President





FR. MARCELO V. MANIMTIM, CM

President

Adamson University

DR. TERESITA C. FORTUNA

well

President

Colegio de Muntinlupa

BR. RAYMUNDO SUPLIDO President

FRANCISCO PAULINO CAYCO

DR. ADOLFO JESUS R. GOPEZ

President

President

De La Salle University

Arellano University

DR. EDÎTHA V. PILLO

President

Eulogic Amang Rodriguez Institute of Science

and Technology

FEATI University

ATTY, ROBERTO P. LAUREL

President

Lyosum of the Philippines University

DR. REYNALDO V. VEA

President

Mapua University

DR. JOSELITO B. GUTIERREZ

President

Markina Polytechnic College

DR. MA, LEONORA V. DE JESUS

President

Pamantasan ng Lungsod ng Maynila

DR. ELLEN E, PRESNEDI

President

Pamentasan ng Lungsod ng Muntinlupa

Storteless DR. MA. ANTOINETTE C. MONTEALEGRE

Officer-In-Charge, Office of the President Philippine Normal University

DR. EMANUEL C. DE GUZMAN

President

Polytechnic University of the Philippines

DR. JOSE FRANCISO B. BENITEZ

President

Philippine Women's University

DR. JESUS RODRIGO F. TORRES

President

Rizal Technological University

DR. JUAN C, BIRION

Officer-In-Charge, Office of the President

Taguig City University

DR. ELIZABETH Q. LAHOZ

Technological Institute of the Philippines

DR. MA. LEONOR F. VALIDOR

Officer-In-Charge, Office of the President

Technological University of the Philippines

suf live DR. WILFRED U. TIU

President

Trinity University of Asia

FR. HERMINIO V. DAGOHOY, O.P, PhD

Rector Magnificus

University of Santo Tomas



DR, MICHAEL L. TAN Chancellor University of the Philippines, Diliman

DR. CARMENCITA D. PADILLA Chancellor University of the Philippines, Manila

SIGNED IN THE PRESENCE OF:

ENGR. ERMIE M. BACARRA Chief, Human Resources and Institution Development Division, PCIEERD



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ENGR	. RAYMOND MARQUEZ			
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	ARCELO V. MANIMTIM, CM			-
DR. TI	RESITA C. FORTUNA			
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	OITHA V. PILLO			
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	ROBERTO P. LAUREL			
	EYNALDO V, VEA			
	SELITO B. GUTIERREZ			_
	LEONORA V. DE JESUS			-
	LEN E, PRESNEDI	1		-
DR, MA	. ANTOINETTE C. MONTEALI	GRE		-
	IANUEL C. DE GUZMAN			-
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	AN C. BIRION ZABETH Q. LAHOZ			-
	LEONOR F. VALIDOR			
	FRED U, TIU			
	RMINIO V. DAGOHOY, O.P. PI			
DR. MK	HAEL L. TAN	D		
	RMENCITA D. PADILLA			
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	All known to me to be the same they acknowledged to me that the same entities they respectively represent.	ne persons who executed to the is their free and voluntary	he foregoing instrument ar act and deed and that of th	id e		
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#### ANNEX A

## INSTITUTIONAL REPRESENTATIVES

JOSE B, PATALINJUG III
Department of Science and Technology –
National Capital Region

ENGR. ROSEMARIE G. GARCIA Food and Nutrition Research Institute

ENGR. APOLLO VICTOR D. BAWAGAN Industrial Technology Development Institute

Metals Industry Research and Development Center

NERY A. ALBA DENR- Ecosystems Research and Development Bureau

MERIGEN S. CAFINO
Commission on Higher Education-National
Capital Region

ENGR. OLEGARIO S. SERAFICA Renewable Energy Association of the Philippines

ENGR. BENJAMIN T. GREGORIO
Energy Efficiency Practitioners Association
of The Philippines

FERDINAND R. ESGUERRA
Phillippine Food Processors and Exporters,

ENGR. ROMELEN T. TRESVALLES Department of Science and Technology — National Capital Region

ALEXIS M. ORTIZ Food and Nutrition Research Institute

ENGR, REYNALDO L. ESGUERRA Industrial Technology Development Institute

Metals Industry Research and Devalopment Center

MARY CATHERINE P. DELOS REYES DENR- Ecosystems Research and Development Bureau

ANNALYN P. DIAZ
Commission on Higher Education-National
Capital Region

ENGR, ERWIN SERAFICA Renewable Energy Association of the Philippines

Energy Efficiency Practitioners Association of The Philippines

Philippine Food Processors and Exporters, Inc.





	10.3
DR. NUNA E. ALMANZOR Adamson University	ENGR. MELANIE B. MENDOZA Adamson University
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Arellano University	Arellano University
DR. TERESITA C. FORTUNA Colegio de Muntinlupa	ENGR. PROSPERO C. CABORNAY Colegio de Muntinlupa
	A A
DR, RAYMOND GIRARD R. TAN De La Salle University	Dr. Jose Richard to Manual M. Sorre
DR. GRANT B. CORNELL	ENGR. ROGELIO T, MAMARADIO
Eulogio Amang Rodriguez Institute o Science and Technology	of Eulogio Amang Rodriguez Institute of Science and Technology
DR. ROGELIO A, PANLASIGUI EATI University	DR. LEO MENDEL D. ROSARIO FEATI University
Widni H. Z.	AMO .
DR, VICTORINA H, ZOSA  Lyceum of the Philippines University	JOANNA JUVYJOY ROJO ) Joycesim of the Philippines University
OR, JONATHAN SALVACION Mapus University	Mapua University
MARILOU F. ALMOCERA Marikina Polytechnic College	SONIA J. FETALINO Marikina Polytechnic College
Pamantasan ng Lungsod ng Maynila	Pamantasan ng Lungsod ng Maynila
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Pamantasan ng Lungsod ng Muntiniupa	DR. JAIME G. ANG Pamantasan ng Lungsod ng Muntiniúpa
DR. ROSEMARIEVIC V. DIAZ	DR. EDNA LUZ R. ABULON



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DR. MANUEL M. MUHI	Hisso J. Ander
Polytechnic University of the Philippines	DR. GINNO L. ANDRES Polytechnic University of the Philippines
phuse I. fr	Followers by of the Philippines
DR. MENCHITÁ F. DUMLAO Philippine Women's University	Philippine Women's University
1.90	· Parad
OR. EDNA-C. AQUINO	DR. LEONILA S. CRISOSTOMO
Rizal Technological University	Rizal Technological University
FERNANDO TATARO	HERMINIA LABON
Teguig City University	Taguig City University
	- Sur
ENGR. FLORANTE A. MAGNAYE Technological Institute of the Philippines - Manila	OR, DRANDREB EARL O. JUANICO Technological Institute of the Philippines Manils
	ENGR ARIANNE A. PALISOC
DR. JESUSA N PADILLA Technological Institute of the Philippines - Quezon City	ENGR ARIANNE A. PALISOC Technological Institute of the Philippines Quezon City
TE	aug
Technological University of the Philippings	PROF. RENATO BUTCH R. BITUONAN Technological University of the Philippines
DR. ARJUN G. ANSAY Technological-University of the Philippines	ENGR. LEAN KARLO S. TOLENTINO Technological University of the Philippines
DR. MARIA ANTONIA CARIL	Lugar
DR. MARIA ANTONIA CAPILI Trinity University of Asia	ENGR. FERDINAND BUNAG Trinity University of Asia
Blest	Bond
DR. BERNARD JOHN V. TONGOL University of Santo Tomas	DR. MARIA NATALIA R. DIMAANO University of Santo Tomas

University of the Philippines, Diliman

PROF. JULIAN V. ADVINCULA, JR. University of the Philippines, Manila

University of the Philippines, Diliman

DR. VIVIEN FE R. FADRILAN-CAMACHO University of the Philippines, Manila



## KNOW ALL MEN BY THESE PRESENTS:

This Memorandum of Agreement, made and entered into in the City of \_\_\_\_\_\_this \_\_\_ day of \_\_\_\_\_\_2012 by and between:

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES (PUP for brevity), a State University created and existing under the laws of the Philippines with principal address at Sta. Mesa, Manila, represented herein by its President, DR. EMANUEL C. DE GUZMAN, hereinafter referred to as the UNIVERSITY;

-and-

HYTEC POWER, INC., a corporation incorporated and existing under Philippine laws, with principal address at No. 2 T. Cruz St., Cruzville Subdivision, Zabarte Road, Novaliches, Quezon City, represented by its President, ENGR. ERIC JUDE S. SOLIMAN, and hereinafter referred to as the COMPANY;

### WITNESSETH:

WHEREAS, the UNIVERSITY, is a state university dedicated among others, to the development of new technologies the enhancement of technology education and generation of new knowledge.

WHEREAS, the UNIVERSITY, in furtherance of its vision to offer advanced programs in the fields of Science and Engineering, that will meet the demands of a knowledge-based and technology-driven economy, is desirous to provide appropriate trainings and seminars for the students of the College of Engineering in collaboration with the COMPANY to enhance their qualification for employment in the industry;

WHEREAS, the COMPANY is engaged in the distribution, supply, service and training on the use of educational and engineering tools and equipment, has the requisite experience, expertise, manpower and capital to perform its obligations under this agreement;

WHEREAS, the UNIVERSITY and the COMPANY, with the objectives and intention of enhancing the strengths of each party and utilizing any and all their available resources that would be beneficial to the parties in order to promote technology in education wherever practicable, have agreed to enter into this Agreement;

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consideration of the mutual covenants and agreements made herein, by these conditions, to wit:

#### ARTICLE I

## Areas of Cooperation

- The scope of cooperation contemplated hereunder includes the following:
  - 1.1 Academe Industry linkage
  - 1.2 Students Internship Program or On-the-Job Training
  - 1.3 Job fair and other related University activities
  - 1.4 Curriculum and training and seminars
  - 1.5 Job posting
  - 1.6 Job placement/employment
  - 1.7 Faculty development
  - 1.8 Faculty immersion
  - 1.9 Skill certification or center for skill certification

### ARTICLE II

## Terms of Cooperation

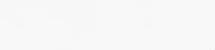
Subject to availability of resources, the parties shall cooperate in fulfilling the purpose and objectives of the Agreement. Towards this end, they shall exert their best efforts to deliver their respective end as agreed upon within its scope, to wit:

 The UNIVERSITY through the College of Engineering shall furnish the COMPANY graduate lists of the College of Engineering on a yearly basis upon a written request of the COMPANY, subject to the applicable rules and regulations of the UNIVERSITY.

The COMPANY will be allowed by the UNIVERSITY to participate in University sanctioned job fairs upon written request by the Company and subject to the rules and regulations set-forth therein.

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- Engineering website will be allowed, upon written request of the COMPANY and subject to the approval of the University.
- The COMPANY and/or any its satellite office shall accept at least two (2) candidates from the College of Engineering every term/semester for the ON THE JOB TRAINING (OJT) or INTERNSHIP.
- The COMPANY shall employ at least one (1) qualified graduate of the College of Engineering every year.
- The COMPANY shall conduct at least one seminar/training session .
   per year at selected six campuses of the UNIVERSITY.
- The COMPANY shall provide the College of Engineering with preemployment, entry level and permanent employee evaluation/assessment of its graduates.
- The COMPANY shall furnish the UNIVERSITY through the College of Engineering a list of all the hired graduates of the College of Engineering specifying therein their respective positions or job titles.

### ARTILCE III

## Consultation and Exchange of Information

The parties shall exert its best efforts to keep each other informed on matters of common interest in order to widen the exchange of knowledge-between them. The consultation and exchange of any information and/or documents under this agreement is without prejudice to any arrangements which may be required under the premises to safeguard the confidential and restricted character of certain information and/or documents.

#### ARTICLE IV Academe - Industry Linkages

The parties shall jointly pursue and conduct the following but not limited to the activities, projects and programs enumerated below:

- The COMPANY will provide the College of Engineering Faculty and the students in the undergraduate and graduate levels, the support needed for the completion of their respective requirements for practicum or On The Job Training for undergraduates, education cooperation for the graduate students and industry immersion of the faculty members in the design and development of possible projects of the COMPANY.
- The COMPANY warrants the acceptance of students for the practicum/ On The Job Training and the University shall be free from any liabilities that may arise in the course thereof.
- 3. The College of Engineering shall provide a list of potential trainees for the OJT and faculty immersion. The list of the potential trainees submitted by the College of Engineering shall be screened and interviewed by the duly authorized representatives of the COMPANY.
- 4. The COMPANY, through its roster of industrial affiliations, will identify the companies that will assist the trainees in their OJT and education cooperation and the possible eventual employment of the College of Engineering graduates.







#### ARTICLE V

## Curriculum and Training

The UNIVERSITY shall determine if any of the Company's technology is creditable for inclusion in curriculum of its engineering courses, subject to the approval of the University Academic Council and the Commission on Higher

The COMPANY shall provide the necessary training needed by the faculty and staff of the College of Engineering. The duration, venue, and schedule of the training shall be determined by the parties. The services of the trainers to be supplied by the COMPANY shall be free of charge. All other expenses that may be necessarily be incurred for the training such as but not limited to the training facilities, materials, shall be negotiated and further agreed upon by the

The parties shall inform each other of any in-house training that may be available for the students, alumni of the University and employees of the

#### ARTICLE VI

## Faculty Immersion

Any and all pertinent information shall be made available to the faculty via the Faculty Immersion for their post graduate or masteral requirements. The Company shall provide avenues for the faculty where they can conduct their research and data collection such as but not limited to technical research on latest laboratory equipment.

### ARTICLE VII

## Participation in Sanctioned University Activities

The Company shall be allowed, upon written request, to participate in the University's activities such as job fairs, seminars, career orientation and

### ARTICLE VIII

## Confidentiality

The parties shall ensure that the scientific and technical data and business information mutually provided, are not transferred or supplied to a Third Party without prior written consent of the other party. "Confidential information as" used in this agreement shall mean all data, /information, documents and samples disclosed hereunder to the receiving party by the disclosing party, whether written, oral, electronic or in any tangible form relating to the disclosing party's business that is deemed "confidential" at the time it is disclosed or if it is disclosed orally, is identified by the disclosing party as confidential within seven [7] days of such disclosure.







#### ARTICLE IX

## Dispute Settlement

Any dispute arising out of the interpretation and implementation of this Agreement shall be settled amicably by consultation or negotiation.

#### ARTICLE X

### General Provisions

- 1. Intention of the Parties. The MOA does not form a partnership, within the meaning of law, between the parties. As such, no party shall be construed as an agent of the other. It is understood, that one party may not bind nor involve the other to contracting with third parties without its written consent. In addition, neither party shall have any obligation to proceed with any project or undertaking or make any legally binding commitment beyond the agreement contemplated under this MOA.
- 2. Agreement on Employment. It is understood that no employer-employee relationship is created between the COMPANY and UNIVERSITY and the concerned individuals representing the UNIVERSITY and vice-versa.
- Binding Effect. This MOA shall take effect between the parties, their assigns and successor-in-interest, except in case where the rights and obligations arising from this MOA are not transmissible by their nature, or by stipulation or by provision of law.
- 4. Severability. If at any time, any of the provisions of this MOA is adjudged to be or becomes illegal, invalid or unenforceable in any respect under the law, rules and regulations by any competent jurisdiction, the legality, validity and enforceability of such provisions not so affected or intpaired shall subsist and remain valid as between the parties.
- 5. Effect of Force Majoure on MOA. In the event this agreement is prevented from being implemented due to war, civil commotion, strike and labor disputes, acts of God, force majeure or any another analogous causes beyond the control of either party, this agreement shall be deemed suspended during the existence of any of the conditions mentioned. Upon termination or cessation of the force majeure condition, this agreement shall be deemed effective and its duration extended for the period of time of suspension thereof, unless the continued execution and implementation of this agreement shall be impossible for either of the contracting parties.
- 6. Release and Content of Press Statement. During the term of this agreement, the Parties hereby agree to coordinate and agree beforehand the release and content of any press statement or other publicity emanating from any Party or its affiliates pertaining to the subject matter of this MOA. The University however, may advertise in any form that it is an affiliate of the Company, only with respect to the technical operation of the course and potential placement of the University's College of Engineering graduates at the Company, subject to the standards set by the latter.







 Use of the Logo. Subject to the written approval/clearance of the parties, either party may use the other party's logo in accordance with the said party's logo usage guidelines.

### ARTICLE XI

## Effectivity

The Agreement shall be valid and in force upon signing by the parties hereto and shall remain effective unless terminated by either party for want of available resources, violation by the other, and other reasonable grounds upon service of a written notice at least fifteen (15) calendar days in advance.

#### ARTICLE XII

#### Amendment

Either party may request in writing a revision or amendment of this Agreement. Any revision or amendment agreed upon by the parties shall become effective only upon the execution of an addendum or supplemental agreement duly signed by the authorized representatives of both parties.

IN WITNESS WHEREOF, the parties have hereunto set their hands on the day, year and place first above-written.

POLYTECHNIC UNIVERSITY OF THE PHILIPPINES

HYTEC POWER, INC.

By:

DR. EMANUEL C. DE GUZMAN

President

By:

ENGR. ERIC JUDE S. SOLIMAN

President

Signed in the Presence of:

DR. SAMUEL M. SALVADOR

Vice President for Academic Affairs



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#### List of Faculty who have conducted and/or are conducting research/es relevant to the Program

Name of Faculty	Title of Research	Duration of Implementation	Funding Source	Status (On-Going/Completed)
Cansino, Julius . De La Cruz, Arvin R. Tenerife Jr., Pedrito M.	Impact Assessment of the Computer Engineering Learning Management System Evaluation	2019 - 2020	Personal	On-Going
Ado, Remedios G. Cansino, Julius S. Mahaguay, Rolito L. Tenerife, Pedrito Jr. M.	Industry Perception on the Computer Engineering Graduates of the Polytechnic University of the Philippines	2019 - 2020	Personal	On-Going
De La Cruz, Arvin R. Tenerife Jr., Pedrito M.	Design and Development of Banana Fiber Decorticator with Wringer	2018 – 2019	Personal	Completed
De La Cruz, Arvin R.	Optical Character Reader of a Braille Unicode System for the Blind	2018 - 2019	Personal	Completed
De La Cruz, Arvin R.	E-Teaching Assistance Management System (ETAMS) with Educator Stress Determination for K*12, Tertiary, Graduate School and Distance Education	2018 - 2019	Personal	Completed
De La Cruz, Arvin R.	Optical Character Reader for the Blind	2018 - 2019	Personal	Completed
De La Cruz, Arvin R. Tenerife Jr., Pedrito M.	Image-Based Microalgae Cell Identifier and Counter	2018 – 2019	Personal	Completed
Ado, Remedios G. Mahaguay, Rolito L.	Development of e-Bag Wireless Charger for Gadgets	2017 - 2018	Personal	Completed
De La Cruz, Arvin R. Tenerife Jr., Pedrito M.	Design and Development of a Hybrid Photobioreactor for Biomass Production of Spirulina Platensis Species	2017 – 2018	Personal	Completed
Tenerife Jr., Pedrito M. Tubola, Orland D.	The Development of a Hybrid Renewable Energy: Powered Light Bouy System Hamessing Sea Energy Potentials	2017 – 2018	Personal	Completed
Cansino, Julius S. Tenerife Jr., Pedrito M. Fernando, Ronald D. Mahaguay, Rolito L.	College of Engineering Online Class Record	2017 – 2018	Personal	Completed





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Natividad, Ferdinand O. Oquindo, Florinda H.				
Dela Cruz, John R.	Design of a Fuzzy-based Automated Organic Irrigation system for Smart Farm	2016 - 2017	Personal	Completed
Dela Cruz, John R.	Fuzzy-based Decision Support for Smart Farm Water Tank Monitoring	2016 – 2017	Personal	Completed
Tubola, Orland D.	Lung Disease Identification and Classification through Neural Networks	2015 – 2016	Grant in Aid (PUP)	Completed
Remedios G. Ado	Evaluation of SMART Wireless Engineering Education Program (SWEEP): Basis for a Proposed Integrated Model of Collaboration Between Industry and Academe	2014 – 2015	Personal	Completed
Ferdinand O. Natividad	Computer Engineering Laboratory Equipment Reservation and Monitoring System with Mobile Application	2014 - 2015	Personal	Completed
Remedios G. Ado	Engineering Academe Industry Partnership Towards Learning Exploration	2014 - 2015	Personal	Completed
Remedios G. Ado	Mobile Emergency Response Application Using Geolocation for Command Center	2013 - 2014	Personal	Completed
Natividad, Ferdinand O.	Enhanced Voiced Based Cane For The Blind With Anti-Lost Feature For The Resources Of The Blind Inc.	2012-2013	Personal	Completed
Oquimdo, Florinda H.	Groundwater Treatment using Bio-sand Filter in Sitio Centro Brgy, Cogunan Nasugbu, Batangas	2012-2013	Personal	Completed

Prepared by

Pedrito M. Tenerife Jr.

