Philippine Council for Industry, Energy and Emerging Technology Research and Development 2016 List of PCIEERD -GIA New and On-going Projects with Beneficiaries

Title	Status	Implementing	Beneficiaries
Climate Resilience Infrastructure Initiative	Program (CRII)		
Automated Real-Time Monitoring System (ARMS) for Ambuklao, Binga, and San Roque Dams	New	Mapua Institute of Technology (MIT)	1.National Water Resources Board (NWRB) 2. Dam Operator 3. LGU's
Competitive Advancement of Technologie	s and Competen	cies of Human Resource Up	ograding (CATCH-Up)
Design and Optimization of Austenitic Manganese Steel Liners for Philippine Aggregates and Mineral Processing - Project 3	New	Metals Industry Research and Development Center	Philippine foundries     Philippine aggregates and mineral processing industry
CY 2016 MECO-TECO Cooperation Prog	ram		
Synergistic effect of Forward Osmosis and Capacitive De- Ionization for Water Purification and Recovery	New	Malayan Colleges Laguna	Industry partners along the CALABARZON-REG IV-A with wastewater discharges containing heavy metals.     LLDA for the protection of Laguna Lake
Development of Seismic Recording Instru	ments for Energy	Exploration and for Disaste	r Preparedness
Geophysical Exploration Instruments with Micro-seismic Imaging and Tomography for Energy Exploration in the Philippines - Project 1	New	Tekton GeoMetrix Inc.	Energy exploration companies that will be involved in the test exploration     The Department of Energy     Communities in the vicinity of the exploration areas     The Filipino exploration industry and Filipino exploration service providers     Students of geology and physics Indirect beneficiaries:     The Philippine economy     The geology and geophysics community
e-Asia Joint Research Program			
e-Asia: Development of Information Gathering and Utilization Systems using small Unmanned Airborne Vehicles (UAVs) for Disaster Risk Assessment, Monitoring and Response	New	PHIVOLCS	People living near active volcanoes and active faults     People affected by disasters.     Local government units     PHIVOLCS researchers and monitoring personnel.
Innovation Hub			
Innovation Hub: Diliman	New	UP Diliman	1. Research and Development institutions 2. Academe 3. Startups 4. SMEs 5. Government and non-government organizations

Innovation Hub: Intramuros  National R&D Program for Natural Rubbe	New	IdeaSpace Foundation	1. Research and Development institutions 2. Academe 3. Startups 4. SMEs 5. Government and non-government organizations
National R&D Program for Natural Rubbel	Processing and	Rubbel Products Manufacti	unng
Rubber Project 5: Empirical Modelling of Rubber Compounds Using Active Design of Experiment	New	College of Engineering,, UP Diliman	Local rubber manufacturers
Packaging Technology			
Development of Generic Packaging Materials and Technology for Selected Food Products of Food Innovation Centers (FICs) and MSMEs in the Regions	New	Industrial Technology Development Institute (ITDI)	1. FICs in the region 2. 005T packaging coordinators in the region 3. M5MEs in the region
UP Bike hare			
Design and Development of UP Bike Share System	New	UP EEEI	Students, faculty, and staff     Campus Administration.
ANEEME: Synthesizing and Sharing Animation Building Blocks for Rapid creation of 3D Motion Scenes	New	Electrical and Electronics Engineering Institute,, UP Diliman	Education sector     Game developers and creators of computer generated movies     Local animation industry
Climate Change Adaptation and Disaster Resilience Cluster PH-US Joint Cooperation	New	PCIEERD	General Public
Detection and Identification of Legitimate Public Utility Vehicles (PUVs) Along various road netWorks (DILAW)	New	Department of Computer Science,, UP-Diliman	1. LTFRB 2. Motorist
Development of a Cost-Effective Colorimetric Packaged/Frozen Fish Freshness Sensor Using Food- Compatible Materials	New	National Institute of Physics,, UP-Diliman	Public consumers     Regulatory Agency
Development of an Atmospheric Plasma Jet System for Plasma Characterization and Materials Processing	New	University of the Philippines Baguio	Faculty Members and Student of Department of Physical Sciences, College of Sciences

Development of Food Reference Materials for Nutrition Labeling for Use of Local Testing Laboratories	New	Food and Nutrition Research Institute (FNRI)	1. DOST RSTLs and RDIs; 2. small and medium scale food industries; 3. local and regional food testing laboratories that are participants of PTs and/or users of RMs; 4. local accreditation body (PAO, DTI) which gives 3rdparty ISO/IEC 17025:2005 accreditation 5. commercial testing laboratories providing the analytical services; 6. local recognition bodies which give 2ndparty accreditation namely: Food and Drug Administration and Department of Health (FDA, DOH) for processed foods.
Development of Intermediate Food Products from Tulya and Dilis Bagoong and Other Products from Region 2	New	Cagayan State University (CSU) - DOST Region 2 Food Innovation Center	Fishermen, smallscale food processors, cooperatives, and local government units
Development of Wireless Sensory Network System for Structural Integrity Monitoring of Bridges (SMART BRIDGE)	New	Mapua Institute of Technology	DPWH-BOD and Maintenance Unit
Disaggregated Electricity Consumption Baseline Measurement of Micro, Small, and Medium Enterprises in the Philippines and Behavioral Response Analysis to an Intelligent Energy Management Platform using Real-Time Electricity Monitoring with Integrated Analytics and Recommendations Engine	New	WattSmart Philippines Corp.	micro-, small- and medium- enterprises
Dried Cassava Grates Processing and System Optimization	New	Visayas State University (VSU)	1. Joji's Bakeshop 2. Bohol Cassava Farmers 3. Bakeries and Food Processors, institutional and other markets, and related ancillary sectors in Bohol 4. Machine Shop fabricating the processing machines
Electronics Product Development Center Upgrade and Operation	New	Advanced Science and Technology Institute (ASTI)	Academic and other training institutions     Electronics companies and other members of the supply chain     Engineering associations     Government institutions     Independent designers     OEMs, ODMs, Resellers     Venture capitalists, SMEs

Enhancing the Natural Science Research Center Laboratories of Central Mindanao University	New	Central Mindanao University (CMU)	cosmetic industries     graduate students     local communities     pharmaceutical industries     young researchers
Establishment of a Center of Innovation and Technopreneurship @ Mindanao State University-Iligan Institute of Technology (CIT@ MSU-IIT)	New	Mindanao State University- Iligan Institute of Technology (MSU-IIT)	1. Graduate students from MSU-IIT 2. Other colleges/universities 3. Innovators 4.Technicians and entrepreneurs, particularly SMEs.
Establishment of an Advanced Device and Materials Testing Laboratory (ADMATEL) - Phase 5 (OPERATION OF ADMATEL)	New	ITDI	Philippines' Semiconductor & Electronics Industry
Establishment of Common Service Facility for Artisanal Small-Scale Gold Mining in Northern Mindanao	New	MSU-IIT	ASGM in Northern Mindanao
Exploratory Characterization of Scandium and Rare Earth Elements in Zambales, Palawan, and Surigao del Sur Nickeliferous Laterite Deposits	New	National Institute of Geological Sciences,, UP Diliman	scientists in the academe
Improvement of Locally Designed Micro- Hydro Turbines and Establishment of MHP Test Rig	New	University of Rizal System	National Institution     People of the Philippines, Energy Sector     Student of URS-Morong Rizal
Integrated Risk Management of Non- Engineered Vernacular Houses for Effective Disaster Risk Reduction	New	University of the Philippines - College of Architecture	Academic faculty, Researchers and Students     Construction Workforce     Design Professionals     LGUs and relevant NGAs     Local and International Aid     Organizations     Local communities or organizations     (NGOs and CSOs)
Integrated Scenario-based Assessments of Impacts and Hazards (ISAIAH)	New	National Institute of Geological Sciences,, University of the Philippines Diliman	Local Government Units.     National Government Agencies     Non-Government     Organizations     stakeholders     disaster management practitioners.

Market Validation of VISSER in 1st District of Zamboanga del Sur	New	University of the Philippines Diliman	1. New Labangan National High School 2. Mahayag VTS 3. Malave VTS 4. Tukuran VTS 5. Midsalip National High School 6. Aurora National High School 7. Navalan National High School 8. Sominot National High School 9. Leonardo National High School 10. Tambulig National High School 11. Commonwealth National High School 12. Panagaan National High School 13. Pagadian City Science National High School 14. Zamboanga del Sur National High School 15. Dumingag National High School
Newton Royal Academy of Engineering (RAE) Leaders in Innovation Fellowship (LIF) Programme - Batch 2	New	Asian Institute of Management	1. Leaders in Innovation Fellowship 2. DOST Tech transfer officers3. 3. The Country/Science and Innovation in the Country 4. DOST
Package Development of Bakery Product and Field Testing of Ready-to-Eat (RTE) Smoked Fish Rice Meal and Sweet Potato as Disaster/Relief Foods	New	Industrial Technology Development Institute (ITDI)	Victims of natural calamities s     Local food manufacturers
PagBAGO (Behavior-Adviser Guide and Operations towards Modeling Resilient Behavior during Disaster (Original Title: Disaster Agent Models (DAM): Understanding Disaster Behavior for Social Change)	New	Ateneo De Manila University	LGUs     NDRRMC     Disaster Training Institutions
Piloting and Market Validation of the UP Technologies on Rapid Electric Vehicle Charging or CharM (Charging in Minutes) in Cauayan City, Isabela for Progressive SMARTER City	New	Isabela State University,, Cauayan City Campus	Tricycle Operators and Drivers     Association (TODA) in Cauayan City     and     Santiago City     Local fabricators in the region
Product and Technology Holistic Strategy (PATHS) for the Semiconductor and Electronics Industries of the Philippines	New	Semiconductor and Electronics Industries in the Philippines Foundation, Inc.	1. Government 2. Academe 3. medium and small scale enterprises (M
Proposed PUP College of Engineering Sensors and Mechatronics Laboratory	New	Polytechnic University of the Philippines	1.Pre-selected SME's 2 PUP Faculty and Students1.

Sonochemical Synthesis of Cobalt Oxide and Copper Oxide Nanostructures as Electrodes in Photoelectrochemical Water-Splitting Applications	New	Mapua Institute of Technology	Fuel cell companies     Solar Cell companies
Standards and Testing Automated Modular Platform (STAMP)	New	National Institute of Physics,, University of the Philippines Diliman	Public calibration laboratories in the regions
Strengthening SLSU's Capability in GIS Technologies in Support of Southern Leyte's Competitiveness and Development	New	Southern Leyte State University	1. DepEd Teachers in Southern Leyte 2. Funding Agencies and Stakeholders 3. LGU and PLGU Officials and Employees of Southern Leyte 4. SLSU Faculty, Staff and Students 5. Southern Leyte Citizens
The Pilot Plant for the Production of Organo Mineral Products for Effective Waste Water Treatment and Septic System Management	New	Adamson University	1. Food Processing/Manufacturing Firms 2. Eco-Tourism Establishments 3. Agriculture Industries 4. LGUs 5. Piggeries and Livestock Industries
Upgrading of Production Through Acquisition of CNC Machine for Ertess Plastic Industries [Project Code: PRP#2386]	New	DOST-III PSTC - Bulacan	Ertess Plastic Industries Inc
Upgrading the PNRI Neutron Laboratory for Neutron Physics and Dosimetry Research [Project Code:PRP#2489]	New	PNRI	1. PNRI 2. Nuclear regulators 3. Universities 4. Radiation workers working with neutron 5. Secondary Dosimetry Laboratory (SSDL)
On-going BAYANIHANETS: Building Robust and Su	ıstainable Coope	erative Community Networks	
BAYANIHANETS Project 1 - Development of a Multipath Transport Protocol for Cooperative Community Networks	On-Going	Electrical and Electronics Engineering Institute,, UP Diliman	Internet users
BAYANIHANETS Project 2 - ARC: An Application Framework for Robust Communications Transport over Community Networks	On-Going	Department of Computer Science,, UP Diliman	Communities needing a community mesh network deployment 2. Software developers

BAYANIHANETS Project 3- Development of Routing Metrics for High Throughput and Congestion Free Routing over Wireless Community Mesh Networks  BUILD BACK BETTER: The Science and	On-Going  Technology of D	Department of Information Technology,, College of Engineering,, Central Luzon State University	1. Communities, individuals, and groups needing community wireless mesh networks 2. Engineers and Application Developers  ster-Resilient Communities, Sites &
BOILD BAON BETTEN. THE GEICHEC and	Technology of D		tter resilient communities, ones a
The Architecture of Filipino Resilience: The Adaptation of Traditional Wisdom from Selected Philippine Vernacular Architecture into Modern Building Systems - Project 2	On-Going	UP Diliman	1. Engineers, architects, and other experts as future guide scheme for similar works 2. The end users for a disaster resilient housing, school, and evacuation center 3. The government agencies and DRRM authorities who are in-charge of housing projects
Development of Sustainable Integrated Bi	ological Wastew	ater Treatment Systems for	the Food Processing Industry
Development of a Compact Wastewater Treatment System Enhanced with Bioaugmentation Technology for Quick Service Restaurant (QSRs)	On-Going	Industrial Technology Development Institute	Quick Service Restaurants
e-Asia Joint Research Program (the e-AS	IA JRP) Japanes	e-Thai-Filipino Research Co	operation in the field of
e-Asia JRP: Development of Functional Nanocarbon-Based Catalysts for Biomass Conversion Processes	On-Going	Chemical Engineering Department,, De La Salle University	Researchers     Academe
Field-testing of the Integrated Gold-Coppe	er Mineral Proces	ssing Pilot Plant in the Regio	ns
Field-testing of the Integrated Gold- Copper Mineral Processing Pilot Plant in the Regions - Compostela Valley	On-Going	DOST Regional Office NoXI	Small-scale Mining Industry     SSM Mining Communities and associations     SSM operators in Compostela Valley and Academic Institutions
Interdisciplinary Signal Processing for Pin	oys (ISIP): Softw	are Applications for Education	on
ISIP:SAFE - Project 1. Developing an Automated Reading Tutor for Elementary Students of Filipino	On-Going	Electrical and Electronics Engineering Institute (EEEI),, UP Diliman	Filipino students in the second or third level of elementary education
ISIP:SAFE - Project 2. Developing Closed Captioning Systems for Philippine Languages	On-Going	Electrical and Electronics Engineering Institute (EEEI),, UP Diliman	Hearing impaired Filipinos     Researchers (engineers, computer scientist, computational linguistics, etc.)

ISIP:SAFE - Project 3. Development of a Filipino Language Writing Tool  ITS-Intelligent Transport Systems	On-Going	De La Salle University	Linguists and Filipino language planners     Teachers and students in Philippine schools
113-Intelligent Transport Systems			T
Contactless Apprehension of Traffic Violators on 24-Hour Basis and All- Vehicle Detection System (CATCH- ALL)	On-Going	De La Salle University,, Manila	1. LGU of Manila 2. Private car owners/drivers
ITS 2. Development of a Customized Local Traffic Simulator - Year 1 & 2 (LOCALSIM)	On-Going	National Center for Transportation Studies,, UP Diliman	1. DOTC 2. EDSA Passengers 3. MMDA 4. PUV Operators
ITS 3. An Integrated and Optimal Scheduling of a Public Transport System in Metro Manila (PUBFix) - Year 1 and 2	On-Going	De La Salle University	1. DOTC 2. MMDA 3. Passengers 4. PUV operators
National R&D Program for Natural Rubber	Processing and	Rubber Products Manufact	uring
Rubber Project 4. Integration of Testing Services for Rubber and Rubber Products	On-Going	ITDI-Standards and Testing Division	Philippine Rubber Industries     Association
National Space Promotion, Advancement Program)	and Capability E	xpansion Development Prog	gram (National SPACE Development
National Space Promotion, Advancement and Capability Expansion (SPACE) Development Program	On-Going	Regulus SpaceTech	Philippine government     Private companies and agencies     Universities
SMART TEXTILE BIOPOLYMERS R&D			
Smart Textile Project 2. Durable and Regenerable Biocidal Hydantoin- Grafted Polyester and Ligno cellulosic Fiber Containing Textiles	On-Going	Philippine Textile Research Institute	Textile and garment industry
Smart Textile Project 1. Photocatalytic Multi-Functional Natural Fiber-blended Technical Textiles and Materials	On-Going	Philippine Textile Research Institute	Textile and garment industry
SmartWire Program			

Smart Wire Project 1 - Energy Efficient Data Acquisition and Conditioning for the SmartWire Sensor Node Project	On-Going	Electrical and Electronics Engineering Institute,, UP Diliman	Academe     Energy sector     Semiconductor Industry
Support for Cagayan Valley Industry and	Energy Research	and Development Consorti	ium (CVIERDEC) R & D Program
Development of Food Products from DOST Developed Food Processing Equipment Utilizing Cagayan Valley Local Resources-(CVIERDEC)	On-Going	Cagayan State University	Cagayan Valley Farmers/ Vegetable Processors
Postharvest and Bio-processing Mechanization Support System for Peanut and Cacao (Defatting Machine)-(CVIERDEC)	On-Going	Isabela State University	Fabricators / Peanut and Cacao Producers/Growers
The Smart Wire Program			
Smart Wire Project 2 - Integrated Energy Harvesting, Storage and Regulation for the SmartWire Sensor Node	On-Going	Electrical and Electronics Engineering Institute,, UP Diliman	Academe     Energy Sector     Semiconductor Industry
Smart Wire Project 3 - Energy Ultra- Low Power Computation and Communication for the SmartWire Sensor Node Project	On-Going	Electrical and Electronics Engineering Institute,, UP Diliman	Academe     Energy Sector     Semiconductor Industry
Smart Wire Project 4 - Resilient Data Transport	On-Going	Electrical and Electronics Engineering Institute,, UP Diliman	
Water Conservation, Collection and Stora	ge Programs		
Deployment of a Low-Cost ModularType Rainwater Collection System using Locally Available Materials	On-Going	Industrial Development Institute (ITDI)	Brgy. 352, Sta.Cruz, Manila/Barangays in Taguig & Quezon City
Bio-oil/Oil Production from Agricultural Waste (Rice and Corn Straws) and Waste Plastic via Pyrolisis	On-Going	UPLB	Policy makers     Government institutions     law makers, aviation industry
Black Sand Mineral Characterization	On-Going	National Institute of Geological Sciences,, UP Diliman	LGUs whose locales have black sand mining     Private sector     Edit Scientists and Engineers

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Boosting Delivery of ITDI-DOST Training Services through Development and Use of E-learning Packets	On-Going	Regional Cooperation and Training Section Industrial Technology Development Institute (ITDI)	Small and Medium Enterprises
Bringing DOST R&D Technologies to the Market	On-Going	UP Enterprise for Technopreneurship	Industry partners/Private sector     Investors     R&D proponents
Development of a Dipstick Assay Format for Detection of Salmonella in Food and Feeds	On-Going	National Institute of Molecular Biology and Biotechnology (BIOTECH),, UP Los Baños	Food processing industry     Testing laboratories
Development of a Grid-Tied Inverter for Philippine Electronics Companies	On-Going	Electronics Industries Association of the Philippines,, Inc.	Philippine Electronics Manufacturing Industries
Development of a Low-Energy Ion Source System for the Synthesis of Diamondlike Carbon Films	On-Going	University of the Philippines	1. Agricultural sector 2. Automotive 3. Machining 4. Metalworking 5. Woodworking
Development of Competence of the DOST Food Innovation Centers (FICs) and Recognition of Most Innovative Products	On-Going	Industrial Technology and Development Institute	Food Innovation Centers (FIC)
Development of Ink Using Carbon from Straight Pyrolysis of Glycerol as Electrodes in Printed Electronics	On-Going	School of Science and Engineering,, Ateneo de Manila University	Biodiesel Industry     Electronics and Energy Sector     Health and Agriculture (for bioelectronics sensing)
Development of Interactive Software and Teaching Guides for Grades 7-10 Mathematics	On-Going	Ateneo de Manila University	Students and teachers in Public and Private Schools
Establishment and Operation of the Philippine Institute for Integrated Circuits	On-Going	Electrical and Electronics Engineering Institute,, UP Diliman	1. Companies engaged in IC Design and Development activities 2. Government 3. PEZA Zones and industrial Parks 4. Semiconductor Manufacturing 5. Start-up companies 6. Universities and Institutes 7. Venture Capital

Fabrication of Supercapacitors Using Indigenous Textiles as Electrode Materials	On-Going	Research Center for the Natural and Applied Sciences,, University of Santo Tomas	Agricultural and transportation sector (hybrid electric vehicles)     Consumer electronics field, especially emergency defibrillators     Energy sector
Human Hands as Input Device for an Immersive Virtual Reality Experience	On-Going	Electrical and Electronics Engineering Institute,, UP Diliman	Developers of virtual reality (VR) applications     Games and entertainment industry
Investing in the Future through Basic Researches Today: Institutional Grant for Invigorating Basic Research	On-Going	National Research Council of the Philippines,,	Graduate and Undergraduate Students Delete Edit NRCP Members Delete Edit Researchers
Large Scale Production of Laccase from Trametes sp. for Food and Beverage Applications	On-Going	National Institute of Molecular Biology and Biotechnology (BIOTECH),, UP Los Banos	Environmental cleanser producers     Pulp and paper industries     Textile Industries
Marine Weather Forecasting using High Frequency Doppler Radar	On-Going	Philippine Atmospheric Geophysical and Astronomical Services Administration	line agencies, resource manager, Industry; and     policy makers, educators, scientists and the general public.
Microbial Production of Xylitol from the Hydrolysis Products of Selected Agricultural Wastes	On-Going	National Institute of Molecular Biology and Biotechnology (BIOTECH),, UP Los Banos	Confectionery, Food and Pharmaceutical industries     Corn farmers
Nanostructured Electrocatalyst Composites for Direct Ethanol Fuel Cell: Preparation, Characterization and Performance Evaluation	On-Going	Research Center for the Natural and Applied Sciences,, University of Santo Tomas	Agricultural sector     Energy sector     Government Units
Radiation-induced grafting of nonwoven fabrics for waste water treatment to meet Class C effluent heavy metal standards.	On-Going	Philippine Nuclear Research Institute	Industries with heavy metals in the wastewater
Regional Disaster Science and Management S&T Capacity Development (Phase II)	On-Going	Isabela State University	1. Local Government Units 2. Regional and Local Disaster Risk Management Council 3. State Universities and Colleges 4. Vulnerable communities
Setting-up of a One-Stop Laboratory Services for Global Competitiveness (OneLab)	On-Going	Industrial Technology Development Institute	Industries

Tidal Current Energy Integrated Resource Assessment and Spatial On-Going Planning Tool	L)enartment of (Fendetic	Department of Energy     Financial Institutions     Local Government Units     People of the Philippines, Energy Sector (Government and Private)
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