#### CHEDRO-III MEMORANDUM No. [2] s. 2023

RELEASE DUL 19 2023

For

: ALL PRESIDENTS/HEADS OF HIGHER EDUCATION INSTITUTIONS

IN REGION III

Subject

: ENERGY ENTREPRENEURSHIP (EE) 103 - TRAIN THE TRAINERS

PROGRAM FOR THE ACADEME

Date

: 17 July 2023

This Office endorses the subject undertaking Energy Entrepreneurship (EE) 103 – Train the Trainers Program for the Academe organized by the Department of Science and Technology (DOST)-Bulacan State University (BulSU) SULONG Central Luzon Project Team in partnership with the New Energy Nexus Philippines with the theme, "TechnoRenew" to be held from August 16-18, 2023 at the Bulacan State University e-Library, Bulacan State University, Malolos, Bulacan.

The objectives of the program are to:

Build a pipeline of energy innovators and entrepreneurs in the Philippines;

Equip our professors in engineering and other courses with the resources, knowledge, and skills to teach Energy Literacy and Sustainable Energy Innovation;

Develop the technopreneurial mindset and thinking among the students and professors in Central Luzon:

 Connect the business sector to a pool of highly skilled and driven individuals in the clean energy space, and;

5. Recognize, share and disseminate best practices in Technopreneurship.

No fees will be collected for the training; however, participants are requested to pre-register through the link: <a href="http://bit.ly/EE103inRegion3">http://bit.ly/EE103inRegion3</a>. Please note that the pre-registration will close on August 1, 2023.

Should there be any queries, kindly direct your concerns to: Dr. Mary Ann Carranza, Executive Director, External Relations and Internationalization, BulSU through email maryann.carranza@bulsu.edu.ph.

For the voluntary participation of all concerned.

Wide dissemination of this memorandum is desired.

For: MS. LORA L. YUSI

OIC-Office of the Director IV

By: MS. EDEN DL. CAPATI
Chief Administrative Officer

## **Energy Entrepreneurship (EE) 103**

#### -Train the Trainers Program for the Academe



With the Theme:

#### "TechnoREnew"

July 1, 2023

Ms. Lora L. Yusi Officer in Charge Office of the Director IV CHEDRO III

Dear Ms. Yusi,

Greetings of peace and prosperity!

Start-up Ecosystem Leveraging on Opportunities and Networks for Growth (SULONG) for Central Luzon is a consortium project proposed by Bulacan State University (BulSU) to the Department of Science and Technology - Philippine Council for Industry, Energy, and Emerging Technology Research and Development (DOST-PCIEERD) for funding under the Higher Education Institution Readiness for Innovation and Technopreneurship - Regional Start-up Enablers for Ecosystem Development (HEIRIT-ReSEED) Program.

This start-up ecosystem consortium aims to work together with other organizations to support and nurture the growth of start-ups in Region 3. Currently, its core members are the Technology Business Incubators (TBI) in the region, which are BulSU BARAS TBI, HAU Encephalon TBI, PSAU Sibul TBI, BPSU SIKAT TBI, BPSU SINAG TBI, TSU Aslagan TBI, NEUST I-Metal TBI, and DA RFO 3 GRAINS TBI.

In line with our goal, the SULONG Central Luzon, in partnership with New Energy Nexus Philippines will be conducting a FREE 3-day technopreneurship program again focused on the renewable energy which is entitled as "Energy Entrepreneurship (EE) 103 - Train the Trainers Program for the Academe" which will focus on Energy Startup Bootcamp for Teachers.

With a theme, "TechnoREnew" from Aug 16, 2023 to August 18, 2023, at Bulacan State University E-Library.

Technopreneurship 101 is an essential subject implemented by CHED mainly on engineering courses under CHED Memorandum Order No. 57, Series of 2016 and is across all 539 HEIs that offer engineering programs in the Philippines. Additionally, in the Philippines, only a few Higher Education Institutions offer courses and programs in clean energy. Despite the positive trends and recent developments, skills gaps and shortages are widespread across countries. The following are the objectives of the said program:

- 1. Build a pipeline of energy innovators and entrepreneurs in the Philippines;
- equip our professors in engineering and other courses with the resources, knowledge, and skills to teach Energy Literacy and Sustainable Energy Innovation;

#### **Energy Entrepreneurship (EE) 103**

#### -Train the Trainers Program for the Academe



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With the Theme.

#### "TechnoREnew"

- to develop the technopreneurial mindset and thinking among the students and professors in Central Luzon;
- connect with the business sector to a pool of highly skilled and driven individuals in the clean energy space and;
- 5. recognize, share, and disseminate best practices in Technopreneurship.

And below are the brief program schedule:

- 1. Wednesday | August 16, 2023 | 8 AM 5 PM: Bootcamp Day 1
- 2. Thursday | August 17, 2023 | 8 AM 5 PM: Bootcamp Day 2
- 3. Friday | August 18, 2023 | 8 AM 4 PM: Pitching & Awarding Day

In line with this, we would like to request from your good office an endorsement of the said program to Higher Education Institutions (HEIs) in Region III. Attached to this letter are the Pre-registration link and in another file is the program briefer of the said event.

Pre-registration link: <a href="https://bit.ly/EE103inRegion3">https://bit.ly/EE103inRegion3</a>
(The pre-registration will close at August 1, 2023)

We appreciate your continuous support in our efforts to provide meaningful opportunities for professors and students to develop their skills and gain valuable experiences from the startup industry. Should you have any questions or concerns regarding this request, please do not hesitate to contact us through Dr. Mary Ann Carranza at <a href="maryann.carranza@bulsu.edu.ph">maryann.carranza@bulsu.edu.ph</a> (Executive Director, Bulacan State University - External Relations and Internationalization) or at +639267476065.

Sincerely,

ENGR DENNIS R. DELA CRUZ, MSc.

Project Lead, DOST-BULSU SULONG Central Luzon

August 16-18, 2023

# NEW ENERGY NEXUS Philippines

Program Briefer

# ENERGY ENTREPRENEURSHIP 103 PROGRAM

FOR THE ACADEME

With the theme: TechnoREnew

In partnership with:



By the TBI lead of SULONG Central Luzon: DOST-BUISU BARAS TBI





**Bulacan State University E-Library** 



# OFFICIAL POSTER





Business Assistance for Research Acceleration and Sustainability (BARAS) Technology Business Incubator (TBI) is a pioneering initiative located in Central Luzon, dedicated to accelerating innovation, fostering entrepreneurship, and driving economic growth. As a prominent catalyst for regional development, BARAS TBI acts as a launchpad for revolutionary ideas, transforming them into successful and sustainable businesses.

BARAS TBI creates an ecosystem that nurtures and empowers innovators, including aspiring entrepreneurs, researchers, and technology enthusiasts. We provide comprehensive support, resources, and mentorship to guide startups through their journey of turning groundbreaking concepts into reality. By fostering collaboration between the academe, government, industry, and the local community, we cultivate a culture of innovation and accelerate the transformation of ideas into tangible solutions.

At BARAS TBI, we believe in the power of collaboration. We actively bridge the gap between academia and industry, facilitating knowledge transfer, technology commercialization, and industry engagement. By establishing strategic partnerships and alliances, we create a vibrant ecosystem where startups, industry experts, investors, and mentors converge, fostering an environment conducive to growth and success.



We offer a wide range of support services tailored to the specific needs of startups. Our comprehensive programs include mentorship, training workshops, access to state-of-the-art facilities, networking opportunities, and potential funding sources. We equip entrepreneurs with the knowledge, skills, and resources necessary to navigate the challenges of the business landscape and propel their ventures to new heights.



Encephalon, the Technology Business Incubator of Holy Angel University, serves as a facility for incubation and intellectual property generation of start-up projects. It provides a comprehensive support system, including resources, services, and facilities, to help technology-based businesses during their early stage development. The center's strategic objectives include supporting emerging business start-ups, encouraging local inventors to commercialize novel products and machineries, developing an innovation hub for community inventors and innovators, and fostering an entrepreneurial culture on campus for innovative and talented students.



Síbul TBI of Pampanga State Agricultural University (PSAU) empowers the agriculture sector to become active members of the agrinnovation landscape through the growth and sustainability of technology-based enterprises. It offers services on business development, technical and marketing support, and technology transfer.



TSU- ASLAGAN focuses in the areas of Food technology and Product Developement. With its services Pamanintun ( to find), Pamangluid ( to conserve), Pamanggawa ( to create) and Pamisali ( to market) is crafted to explore the possibilities of food innovation in the province whick will bannered as food product of the province and will serve as platform in bridging start-ups and experts.



Creativity through Cultural
Knowledge, Artistry, and Technology
(SIKAT) TBI bridges the gap between
the creative manufacturing industry
and technology-driven entities by
utilizing advanced materials and
manufacturing through design and
systems thinking.
SIKAT TBI's main objective is to
produce creative and innovative
startup firms knowledgeable in
business development, finance, and
operation that can compete in the
market.

BPSU's Synergizing Innovation and

Bataan Peninsula State University Agri-aqua Technology Business Incubator (BPSU ATBI) named Social Innovation towards Agri-aqua Enterprise Growth (SINAG) aims to deliver services and resources that will aid the province's agriculture and aquatic entrepreneurial landscape by providing technology-driven assistance and interventions.





The DOST-NEUST i MeTAL is a technology business incubator under the DOST's HEIRIT Program. The TBI supports the faculty, researchers, and startupts on the development of their technology into full commercialization.

The DA-RFO 3 Center for Innovations and Technology Business Incubation (DA-RFO 3 CITBI) named GRAINS would help make sure that adopters of technologies are established as sustainable enterprises through capacity enhancement, capability building, and strong market linkages and partnerships.









#### SULONG Central Luzon

Start-up Ecosystem Leveraging Opportunities and Networks Growth (SULONG) for Central Luzon is a consortium project proposed by Bulacan State University (BulSU) to the Department of Science Technology - Philippine Council for Industry, Energy, and Emerging Technology Research Development (DOST-PCIEERD) funding under the Higher Education Institution Readiness for Innovation and Technopreneurship - Regional Start-up Enablers for Ecosystem Development (HEIRIT-ReSEED) Program.

A start-up ecosystem consortium is a group of organizations, individuals, and institutions that work together to support and nurture the growth of start-ups in a particular region. The consortium aims to create a collaborative network of resources and support for start-ups, enabling them to innovate and thrive.

The idea of a start-up ecosystem consortium has gained significant traction in recent years as more and more regions around the world have recognized the importance fostering a supportive environment for These start-ups. consortia include a mix of public and private organizations, sector universities. accelerators, and other institutions dedicated to supporting the growth of start-ups.

# NEW ENERGY NEXUS Philippines

Since its establishment in 2019, New Energy Nexus Philippines has been dedicated to enhancing and raising awareness of the clean energy innovation ecosystem in the country. The organization strives to create ample opportunities for energy businesses, startup founders, enthusiasts, and other stakeholders to actively participate in the Philippines' energy transition through entrepreneurship and innovation.

Despite the Philippines' commendable efforts in implementing policies and laws that support sustainable energy and climate action, significant challenges persist. These challenges include a lack of awareness among the general population, limited opportunities for growth and development, an insufficient talent pipeline, and the absence of clean energy courses in nearly 99% of universities.

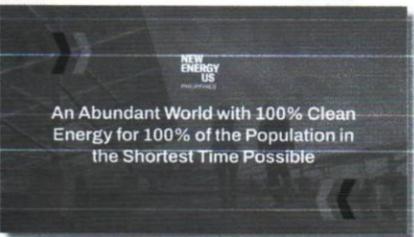
To address these issues, New Energy Nexus currently offers robust learning and innovation platforms that enable aspiring and early-stage energy entrepreneurs to acquire essential business skills, technical knowledge, and valuable networks. Additionally, the organization conducts indepth ecosystem mapping, providing a comprehensive understanding of the current landscape in the Philippines. This mapping serves as a powerful tool for stakeholders and policymakers to identify gaps, opportunities, and potential areas of improvement within the clean energy sector.

Moreover, New Energy Nexus fosters strong relationships with various stakeholders across the clean energy innovation ecosystem. By identifying and strengthening these relationships, the organization encourages collaboration, knowledge-sharing, and collective action, further accelerating the energy transition in the Philippines.

Through its multifaceted approach, New Energy Nexus Philippines strives to enhance the clean energy innovation ecosystem, promote sustainable practices, and create a more resilient and prosperous future for

the country.





# **EE103** Program for the Academe

EE103 Program for the Academe is an innovative technopreneurship training initiative organized by New Energy Nexus, in collaboration with SULONG Central Luzon and DOST-BulSU BARAS TBI. This comprehensive program features a range of activities including webinars, masterclasses, and an Energy Startup Bootcamp, specifically designed for various stakeholders within the academic sector. Participants include university top administrators, deans, principals, faculty members, students, energy researchers, and aspiring entrepreneurs. The primary objectives of this capacity-building program are as follows:

 Cultivate a thriving community of energy innovators and entrepreneurs in the Philippines.

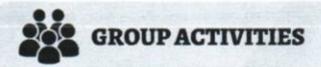
 Empower educators with the necessary resources, knowledge, and skills to effectively teach Energy Literacy and foster Sustainable Energy Innovation.

 Foster valuable connections with the business sector, facilitating collaborations and opportunities for highly skilled individuals in the clean energy field. Through the EE103 Program for the Academe, we aim to create a strong pipeline of talented individuals who are well-equipped to contribute to the sustainable energy sector and drive positive change in the Philippines.



At the end of the 2-day bootcamp, the participants will be able to:

- Analyze and define a clear problem statement and impactful energy solution;
- 2 Strategize a sustainable and scalable business model emphasizing the target market and their needs, solution concept, value proposition, and revenue streams; and
- Deliver a compelling pitch.



The bootcamp will require the participants, in teams (2-3 members), to accomplish the following activities:

- 1. Energy Problem Analysis
- 2. Solution Generation
- Customer Segmentation & Beachhead Market
- 4. Business Modeling
- 5. Startup Pitch

# MAJOR MODULES

#### DAY 1 MODULES

#### DESCRIPTION

Module 1 - Problem Analysis	This module equips the participants with problem discovery and analysis techniques, specifically employing the HMW statement, problem statement builder and 5 WHYs framework, to define an energy problem to solve.
Module 2 - Generating Energy Startup Solutions	This module equips the participants with the techniques in generating different solutions to their chosen energy problem or challenge. Specifically, the module will cover the How Might We statement as a design thinking tool to brainstorm possible solutions.
Module 3 - Customer Validation	Customer validation is the process of gathering evidence and learnings around business ideas through experimentation and user testing, in order to make faster, informed, de-risked decisions. In this module, the participants will go through the concepts, relevance and the different stages of customer validation. At the end of this module, the participants will be able to formulate validation hypotheses, and decide a validation experiment.
Module 4 - Market Segmentation	A better idea is to focus on a specific customer or a specific Market Segment. Starting slow and focused will help startups scale and grow and not burn bridges with segments they're not ready to serve. This module covers customer segmentation and the beachhead market. At the end of this module, the teams will be able to identify customer segments based on the four dimensions of market segmentation (such as psychographic & lifestyle, demographic, behavioral, and geographical), and figure out the beachhead market i.e. the first market to approach in scaling to other markets.
Module 5 - Lean Canvas	The Lean Canvas is a strategic tool for entrepreneurship that helps entrepreneurs concretize their ideas into a business model. Lean Canvas defines what value to deliver and for whom, how to deliver this value, and how to measure its success. At the end of this module, the teams will be able to map out the 9 building blocks of the Lean Canvas.



# **MAJOR MODULES**

#### DAY 2 MODULES

#### DESCRIPTION

Module 6 - Impact Assessment	This module covers a straightforward technique on how a startup can measure, and track impact. At the end of this module, the teams will be able to create a simple impact assessment that quantifies and tracks impact for the founders, funders and the energy landscape.
Module 7 - Startup Pitch	This module is allocated for startups to develop their pitch based on the key lessons they learned from previous modules and discoveries they've made from the insights of their target customers and users. At the end of this module, the teams will develop an improved startup pitch.
	This is a culminating activity where teams will present their energy startup ideas and innovations and receive comments and feedback from industry experts. The goal of the event is to encourage innovators to improve the ideas and solutions they developed from previous workshops and programs. In this activity, the participants will pitch their startup ideas within 5 minutes.
Module 8 - Open Pitching Activity	The pitch will be evaluated based on the given criteria. The top 2 participants will advance to the Ready, Spark, Charge which is a national clean energy idea competition.  • Market Need (30%) - Is there a problem to solve? And how big is this problem?  • Innovation (30%) - Is there something new or novel in your solution concept?  • Impact (20%) - Does it solve a pain point and has a direct
	<ul> <li>Sustainability &amp; Revenue Model (20%) - Is there a clea value that you're offering to the customers and how will you earn from that? How can you reach more people with</li> </ul>

minimal resources?

## NEW ENERGY NEXUS Philippines

## SCHEDULE AND VENUE

The EE103 Program for the Academe is a 2-day bootcamp with a pitching activity on the 3rd day. It will take place from August 16th to 18th, 2023 at the 5th floor AVR of Bulacan State University's E-Library.

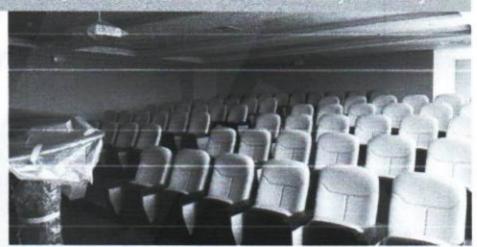
Please find below the comprehensive program schedule for the EE103 Program for the Academe:

	ednesday   August 16, 2023   R:00AM to 5:00PM
8 00 AM - 9 00 AM	Day 1 Check in of the Participants
zobeckehatertyca (septilik tik)	
9 00 AM - 9 05 AM	Prayer, National Anthem, and University Hymn
9 05 AM - 9 15 AM	Welcome Message
9.15 AM - 9.25 AM	Message and Rationale of the Activity
9 25 AM - 9 40 AM	About NEX Philippines and Energy103 Program
9.40 AM - 9.50 AM	Kanoot Quiz
9:50 AM - 10:00 AM	Networking / Coffee Break
	Bootcamp Proper
10:00 AM - 10:40 AM	How Might We for Energy Problems
10 40 AM - 11 20 AM	Problem Statement Canvas
11 20 AM - 12 00 NN	How Might We for Energy Solutions
12 00 NN - 1:00 PM	Lunch Break
1 00 PM - 1 20 PM	Presentation of Zen Statement
1 20 AM - 1 50 PM	Customer Validation
1 50 PM - 2 30 PM	Customer Segmentation
2 30 PM - 3 00 PM	Beachhead Market
3.00 PM - 3.15 PM	riealtr / Colfee Break
3 15 PM - 4 20 PM 4 20 PM - 4 30 PM	Lean Carvas
4 20 PM - 4 30 PM 4 30 PM - 5 00 PM	Q & A / Day 1 Wrap-up
	Buffer Thursday 1 August 17, 2023 I S-200 M to S-200 M
Time	Thursday   August 17, 2023   8:00AM to 5:00PM
8 00 AM - 9 00 AM	Day 2 Check - In, Networking / Morning Coffee
9 00 AM - 9 05 AM	Day 1 Recap
9 05 AM - 9 10 AM	Overview of Day 2
9 10 AM - 10 10 AM	Presentation of the Lean Canvas
10 10 AM - 10 40 AM	Impact Assessment
10:40 AM - 10:45 AM	Health / Coffee Break
10.45 AM - 12.00 NN	Estimating GHG Emissions
12 00 NN - 1 00 PM	Lunch Break
1 00 PM - 1 20 PM	Ice Breaker 2 Truths and a Lie
1 20 PM - 2:00 PM	Stage a Care
2 00 PM - 3 30 PM	Startup Pitch
3.30 PM - 3.40 PM	Health / Coffee Break
3 40 PM - 3 50 PM	Discussion of OPA Activity for 3rd Day
3.50 PM - 4.00 PM	Post test. Energy Entrepreneurship
4 00 PM - 4 10 PM	Q & A / Day 2 Wrap-up
4 10 PM - 5 00 PM	Buffer
	day   August 18, 2023   8:00AM to 4:00PM
Time	Activity
9:00 AM - 10:00 AM	Registration
10:00 AM - 12:00 NN	Final Preparation for the Pitching
12:00 NN - 1:00 PM	LUNCH BREAK
1:00 PM - 1:10 PM	
	Context Setting
1:10 PM - 1:15 PM	Opening Remarks
1:15 PM - 1:30 PM	Recap of 2-day Bootcamp
1. 15 PW - 1:30 PW	Introduction to the Panelists
1:30 PM - 3:00 PM	Pitching Activity
3:00 PM - 3:30 PM	Awarding of Winner & Completion Certificates

# **SCHEDULE AND VENUE**

5th floor AVR of Bulacan State University's E-Library

As mentioned earlier, the event will take place at the 5th floor AVR of Bulacan State University's E-Library. For your convenience, here are some sample pictures showcasing the E-Library at Bulacan State University:









# NEW ENERGY NEXUS Philippines

