APTI BUSINESS PORTFOLIO

By Asian Pyrochem Technologies, Inc
Date: 1.17.2025

APTI’s Mission Statement

At Asian Pyrochem Technologies, Inc., our mission is to drive sustainable energy solutions and foster economic growth through strategic partnerships and innovative trade practices. We are committed to advancing palm oil-based renewable energy initiatives in collaboration with the National Power Corporation's Small Power Utilities Group (SPUG) units, providing cleaner and more reliable energy solutions for off-grid communities across the Philippines.

We strive to strengthen regional economic ties through a dynamic B2B Global Barter Trade Supply system between the Philippines and Indonesia + 38 countries. By exchanging high-value Philippine commodities such as tobacco, abaca, and nickel for essential Indonesian resources like fertilizer, coal, and diesel, we aim to create a balanced and mutually beneficial trade ecosystem that supports agricultural productivity, energy security, and industrial development.

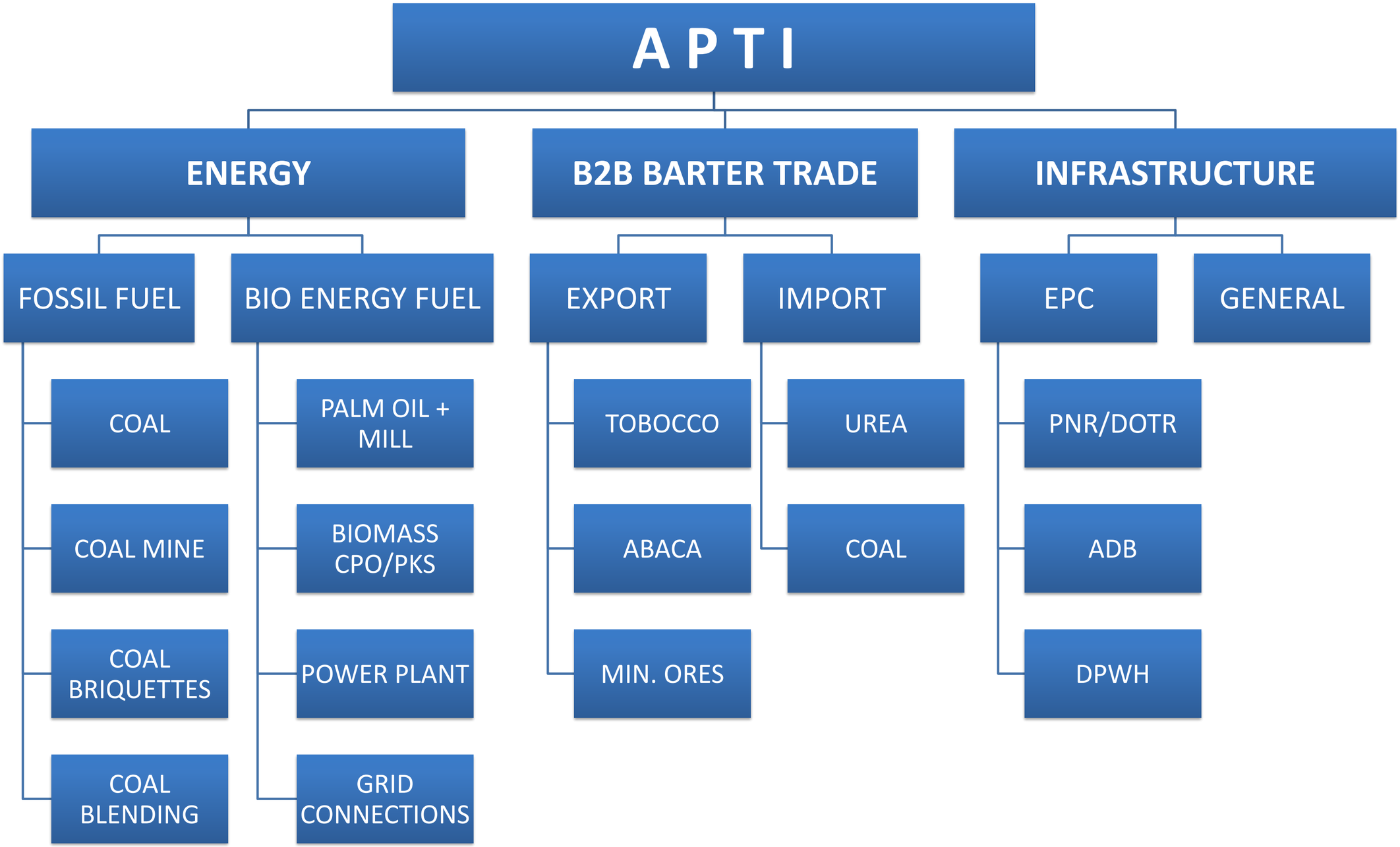
Our dedication to sustainability, innovation, and strategic collaboration drives us to empower industries, uplift communities, and contribute to a greener, more resilient future for the Philippines and the ASEAN region.

Our Organizational Goal

1. **Renewable Energy Leadership:** Expand palm oil-based renewable energy projects nationwide, supporting the National Power Corporation SPUG units in delivering sustainable energy to remote areas.
2. **Sustainable Trade Relations:** Establish and strengthen B2B barter trade agreements with Indonesia to ensure a steady exchange of key resources and commodities.(Tobacco, abaca, nickel,)
3. **Economic Growth and Community Empowerment:** Drive local economic development by creating job opportunities and supporting industries related to agriculture, energy, and mining
4. **Environmental Stewardship:** Promote eco-friendly practices and technologies to reduce carbon emissions and environmental impact across all operations.
5. **Innovation and Research:** Invest in research and development to enhance renewable energy technologies such as **PKS (Palm Kernel Shells for Co-firing with Coal Power Plants, Baguilumbang Oil Plantation at Napocoe 485,199 hectares Watershed Areas, Tamanu Plantation**
6. **Strategic Partnerships:** Foster collaborative relationships with government agencies, private sectors, and international partners to expand business networks and market reach particularly on **G2G Business between Philippines and Indonesia on Diesel Supply to Napocor**

Services and Products

1. **Palm Oil-Based Renewable Energy Solutions:** Production and distribution of palm oil-derived biofuels to power National Power Corporation SPUG units and off-grid communities.
2. **B2B Barter Trade Services:** Facilitation of barter trade between the Philippines and Indonesia, exchanging commodities like t**obacco, abaca, and nickel for fertilizer, coal, and diesel.**
3. **Sustainable Agriculture Solutions:** Supply of eco-friendly agricultural products, including organic fertilizers and soil enhancers, to improve crop yield and soil health.
4. **Renewable Energy Consultation and Project Development:** End-to-end consulting services for the design, implementation, and management of renewable energy projects.
5. **Logistics and Supply Chain Management:** Integrated logistics solutions to streamline the transport and distribution of goods and raw materials across borders.


A P T I
ENERGY
B2B BARTER TRADE
INFRASTRUCTURE
FOSSIL FUEL
BIO ENERGY FUEL
EXPORT
IMPORT
EPC
GENERAL
COAL
COAL MINE
COAL BRIQUETTES
COAL BLENDING
PALM OIL + MILL
BIOMASS CPO/PKS
POWER PLANT
GRID CONNECTIONS
TOBOCCO
ABACA
MIN. ORES
UREA
COAL
PNR/DOTR
ADB
DPWH

STRATEGIC ALLIANCES

B2B GLOBAL BARTER TRADE SUPPLY CHAIN FRAMEWORK

(Philippines / Indonesia + 38 Countries)

B2B GLOBAL BARTER TRADE SUPPLY CHAIN FRAMEWORK (INDONESIA + 38 COUNTRIES)

Tobacco Farmers	Farmers or FCA Philippines	APTI Philippines	TBI Indonesia	Cigarette Manufacturer Indonesia	**Urea** Manufacturer Indonesia	Farmers or FCA Philippines
Nickel Miner	Coal Plant Owner Philippines	APTI Philippines	TBI Indonesia	Nickel Smelter Indonesia	**Coal** Mine, Indo.	Coal Plant Owner Philippines
Iron Miner	Steel Trader Philippines	APTI Philippines	TBI Indonesia	Iron Smelter Indonesia	**Steel** Producer Indonesia	Steel Trader Philippines
Energy Corp	Energy Industry Philippines	APTI Philippines	TBI Indonesia	Energy Corp Indonesia	**Energy Project** Indonesia	Energy Industry Philippines

Business Matching

INDUSTRY	PARTIES	PROJECT	COMMENTS
Energy	APTI/NPC/LGU	SPUG units	Conversion of SPUGS for Biomass, Biofuel Re-Embedded Modular power plant
Agriculture	APTI/LGU/Farmers	Palm	Feeds for SPUGS
	APTI/LGU/Farmers	Fertilizer	Phil/Indo – PT Pupuk
	APTI/LGU/Farmers	Tobacco	Phil – Indo trade
	APTI/NTA/Farmers	Tobacco	Phil – Indo trade
	APTI/LGU/Farmers	Abaca	Phil/Indo trade
Mining	APTI/LGU/Miners/Shippers	Nickel Ore	Phil/Indo trade
	APTI/LGU/Miners/Shippers	Iron Ore	Phil/Indo trade
	APTI/LGU/Miners/Shippers	Bauxite	Phil/Indo trade
Trading	APTI/Coal Pant / Traders	Coal	Indo/Phil trade – Bukit Asam
	APTI/SPUGS	Palm Oil	Indo/Phil
	APTI/Traders	Steel	Indo/Phil
	APTI/Traders	Tin	Indo/Phil
Infrastructure	APTI/Government	PPP	Indo State Owned Enterprises

ENERGY

Napocor / APTI
Mou dated 06th March 2023

To promote and identify priorities for developing sustainable renewable energy using biofuel and bio-mass hybrid power in the country. **281** Small Power Utilities Group (SPUG) plants in 189 municipalities across 35 provinces.

State-owned National Power Corporation (Napocor) CEO FERNANDO MARTIN Y. R0XAS signed a Memorandum of Understanding (MOU) with MR HARLEY LUIS T LEANO, CEO of APTI to promote and identify priorities for the development of sustainable renewable energy using biofuel and bio-mass hybrid power in the country, particularly in Small Power Utilities Group (SPUG) areas.

ENERGY

OCCIDENTAL MINDORO / APTI

Mou dated 13th February 2024

Construction and installation of 10MW Biofuel Re-Embedded Modular power plant project utilizing Biomass and Bio-Fuel Pulang Lupa San Jose Occidental Mindoro Philippines.

Triumvirate synergies consisting of :-
-Napocor, Philippines
-PT Pln Nusantara Power, Indonesia
-Asian Pyrochem Technologies In
-Occidental Mindoro Energy Consortium

ENERGY

PT PLN Nusantara Power / APTI

Business meetings and coordination for the Philippines' SPUGS conversions.

PT PLN Nusantara Power will serve as Asian Pyrochem Technologies' strategic partner in the conversion of all diesel-powered SPUG units operated by NAPOCOR (National Power Corporation) across the Philippines.

By transitioning from diesel to clean, renewable energy sources, such as biofuel-embedded modular power plants, the adoption of renewable energy sources aligns with global efforts to combat climate change and reduce carbon

MOU SIGNING THE AGREEMENT BETWEEN ASIAN PYROCHEM TECHNOLOGIES INC HARLEY LUIS T.LEANO CHAIRMAN CEO and PT PLN NUSANTARA POWER DIRECTOR MUHAMAD REZA FOR THE JOINT VENTURE ENGINEERING, PROCUREMENT, CONSTRUCTION AND COMMISSIONING OF THE PROPOSED LIQUID BIOFUEL & GREEN HYDROGEN EMBEDDED COMPARTMENTALIZED POWER GENERATION FOR NATIONAL POWER CORPORATION SPUG POWER PLANTS

PLN NUSANTARA POWER

PLN president director Darmawan Prasodjo (left) poses for a photo on Oct. 9, 2023, with the Energy and Mineral Resources Ministry's New and Renewable Energy and Energy Conservation (EBTKE) Director General Yudo Dwinanda Priaadi and PLN Nusantara Power managing director Ruly Firmansyah, at the green hydrogen power plant inauguration at the Muara Karang Steam Gas Power Plant (PLTGU) in Jakarta.(PLN/-)

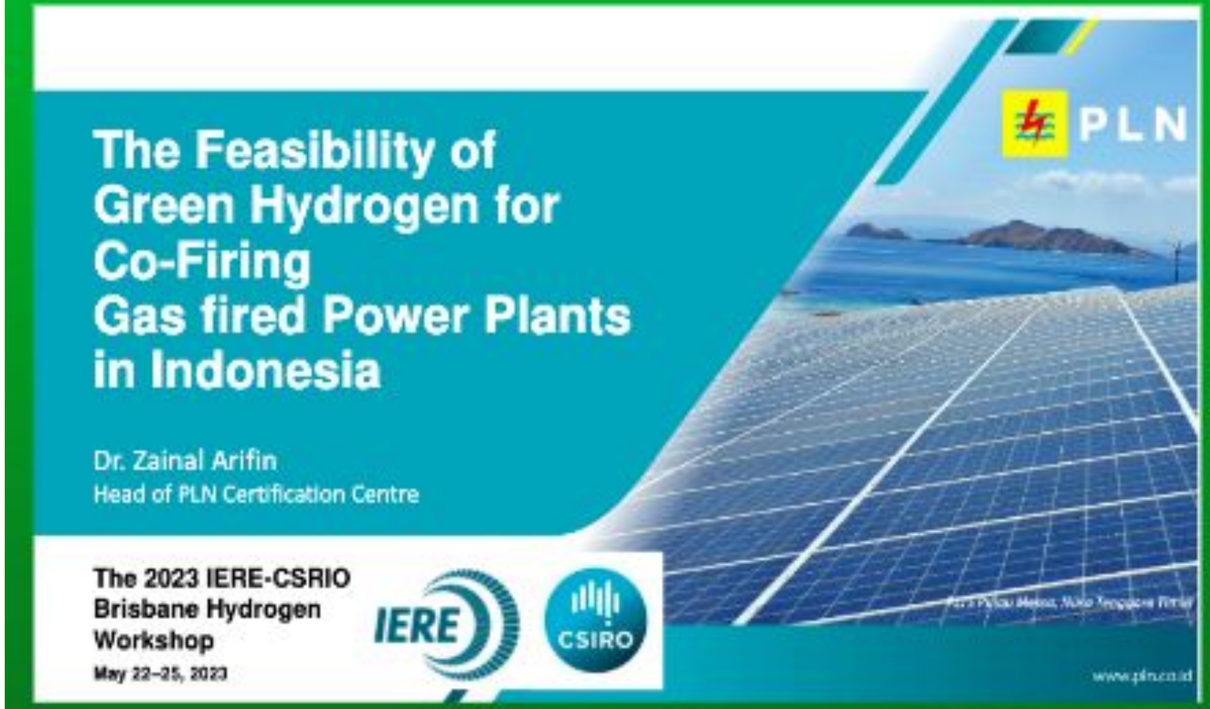
State-owned electricity company PLN has begun to produce green hydrogen, or hydrogen produced using renewable energy, at the first green hydrogen plant in the country, according to a press release issued by the Energy and Mineral Resources Ministry on Monday.

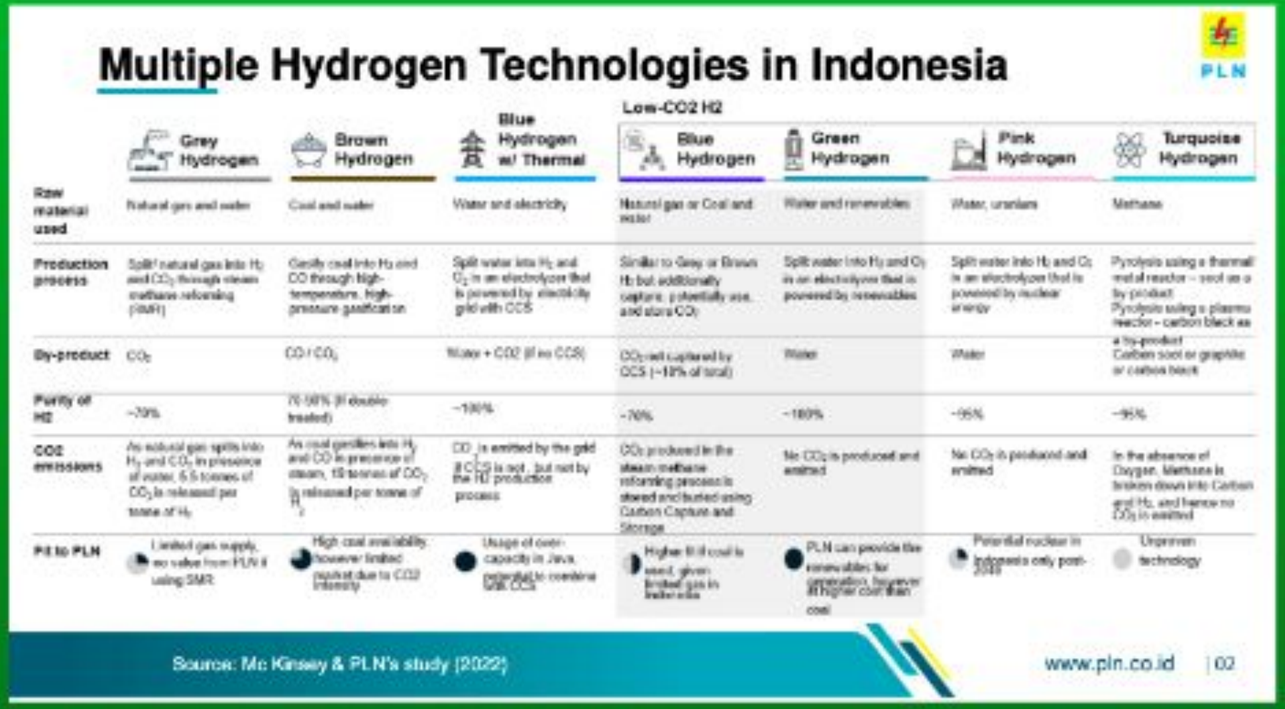
The facility is set to produce about 51 tonnes of hydrogen per year using 2,795-megawatt hours (MWh) of electricity generated using solar panels, according to the release, with the power provided by PLN Nusantara Power, a subsidiary of the state-owned utility company.

As a fuel that does not produce carbon emissions during production or use, green hydrogen is deemed crucial to reducing emissions in industries that are tough to electrify, like steel, cement-making or sometimes transportation.

Ruth Dea Juwita (The Jakarta Post) PREMIUM Jakarta Tue, October 10, 2023

According to the roadmap, green hydrogen development in the Indonesian power sector will start gradually from 2031 and increase rapidly beyond 2050. It estimates the hydrogen generation capacity of 328 MW from 2031 to 2035, 332 MW from 2036 to 2040, 9 GW from 2041 to 2050, and 52 GW from 2051 to 2060 (Misna, 2022).





In a landmark collaboration, PT PLN (Persero), ACWA Power, and PT Pupuk Indonesia (Persero) have forged a Joint Development Study Agreement (JDSA) to accelerate the growth of the hydrogen business in Indonesia. The three companies are united in their pursuit of green energy solutions and have set their sights on developing green hydrogen as a vital raw material for ammonia production in Gresik, East Java.

The collaboration is focused on tapping into the potential of green ammonia production at the existing Petrokimia Gresik facility, promoting the adoption of clean energy sources across the nation. The anticipated results of the joint study, as emphasized by Mr Pahala, could propel Indonesia to become a prominent player in the hydrogen business within the Southeast Asian market.

6,000 Hectares of Palm Plantation in Palawan to generate 60MW of power in MIMAROPA Region, Philippines starting 20MW Embedded Modular Power Plants in Occidental Mindoro as per Memorandum of Agreement with the Local Government

Total Crude Palm Oil Requirements for Power Generation

6,000 Hectares Palawan Palm Oil Feedstock Source

Production Capacity: 6,000 ha. x 8metric tons/ha = 48,000 metric tons raw fruit

Ceremonial Signing of MOU with Farmers Cooperative

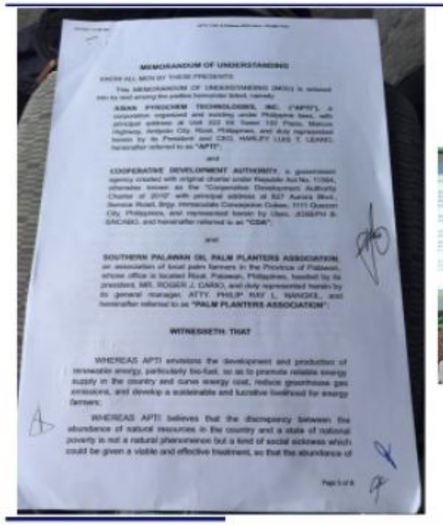
Ten palm oil-producing cooperatives in southern Palawan signed a memorandum of understanding (MOU) with Cooperative Development Authority (CDA) and an Indonesia-state based investor for the production of renewable energy as a solution to the "emerging energy crisis."

Asec. Abad Santos of CDA said at the ceremonial signing that aside from helping farmers with their livelihood, the purpose of the project with Asian Pyrochem Technologies Incorporated (APTI) is to also produce renewable energy out of palm oil coming from Southern Palawan.

"The purpose of this project is two words – renewable energy. This renewable energy will provide solution to the emerging energy crisis in the entire province of Palawan," he said.

The 6,000 hectares of 14 palm oil-producing cooperatives will be the source of the needed energy. CDA officials mentioned that there are 14-palm oil-producing cooperatives in Southern Palawan but only 10 arrived during the signing.

Cooperation Agreements


MEMORANDUM OF UNDERSTANDING

WITNESSETH: THAT

WHEREAS APTI envisions the development and production of renewable energy, particularly bio-fuel, so as to promote reliable energy supply in the country and curve energy cost, reduce greenhouse gas emissions, and develop a sustainable and lucrative livelihood for energy farmers;

WHEREAS APTI believes that the discrepancy between the abundance of natural resources in the country and a state of national poverty is not a natural phenomenon but a kind of social sickness which could be given a viable and effective treatment, so that the abundance of

With ASEC Abad I. Santos, Dir Angelito U. Sacro

Signing of the 10MW Memorandum of Agreement with the Occidental Mindoro Local Executives headed by Governor Hon. Eduardo Gadiano, Vice Governor VICE GOV. ANECITA DIANA C. APIGO-TAYAG and witnessed by Indonesian Deputy Chief of Mission & Head of Chancery Dodo Sudradjat at the Provincial Capitol in Mamburao' Occidental Mindoro on February 13 , 2024

Meeting with Occidental Mindoro Governor Hon. Eduardo Gadiano at the Provincial Capitol in Mamburao' Occidental Mindoro Jan. 16, 2023

GUEST SPEAKER AT THE PANLALAWIGANG LUPON OF OCC MINDORO CONFERENCE HEADED BY VICE- GOV ANECITA DIANA C. APIGO-TAYAG
JANUARY 16, 2024

Innovation and Research

Invest in research and development to enhance renewable energy technologies:

- **PKS (Palm Kernel Shells for Co-firing with Coal Power Plants,**
- **Baguilumbang Oil Plantation at Napocor 485,199 hectares watershed Areas**
- **Tamanu Oil Plantation**
- **Coal Blending and Pyrocoal Briquette Facilities in joint venture with PNOC BAUAN BATANGAS BRIQUETTING PLANT**

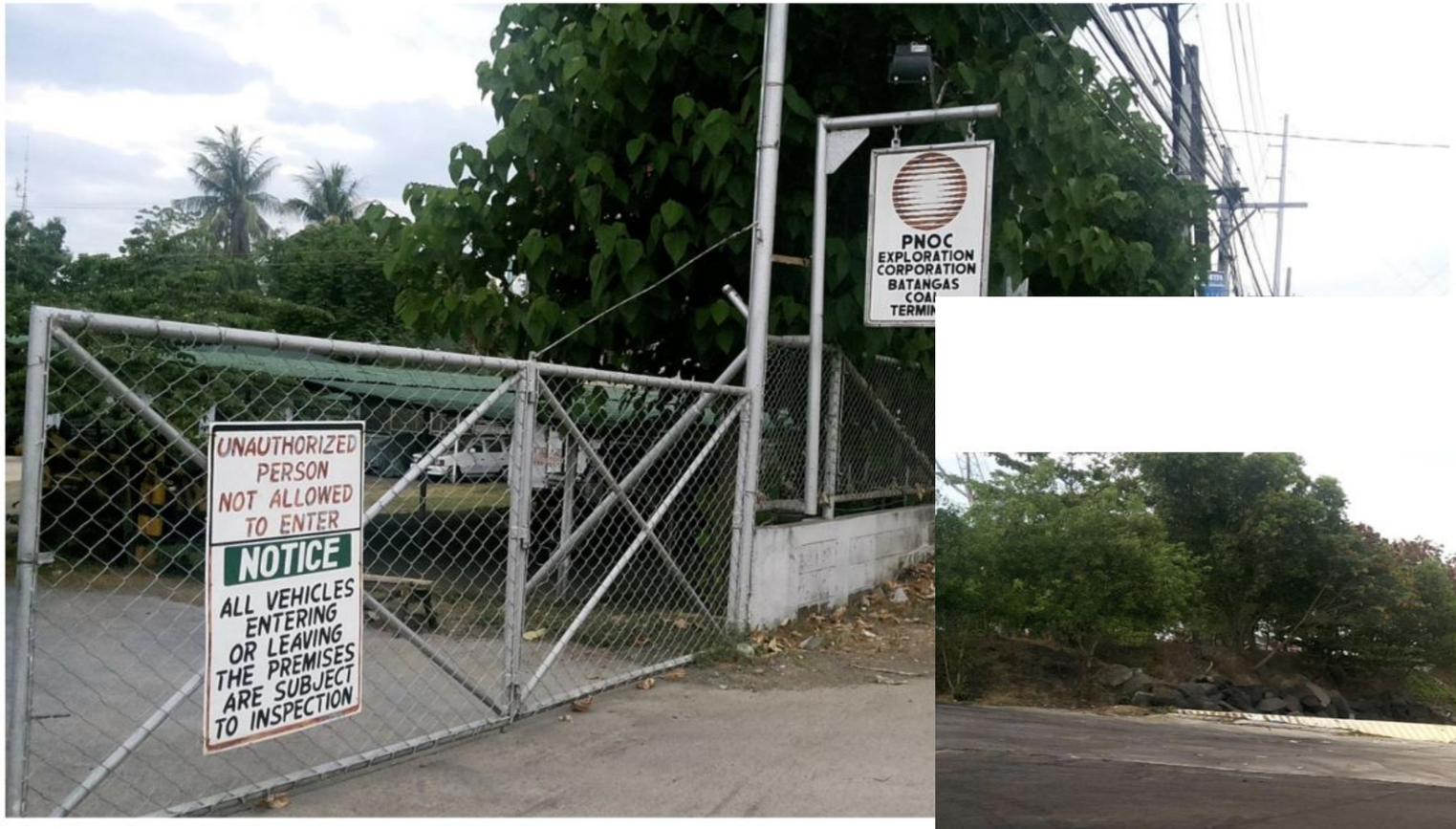
Baguilumbang or Lumbang Tree or Candlenut as Liquid Biofuel Feedstock for Napocor SPUG Power Generators

Plantation: 485,199 Hectares NAPOCOR Watershed Areas in joint-venture with ASIAN PYROCHEM TECHNOLOGIES, INC.

Tamanu or Bitaog

Asian Pyrochem Technologies, Inc. Pyromix PKS Feedstock for Co-firing Coal Power Plants

PNOC Exploration Corporation Site
Batangas Coal Terminal



Pier

Unloading/Loading

Stockyard for Briquetting

G2G AGREEMENT FOR DIESEL SUPPLY TO NAPOCOR: A MILESTONE TOWARD AFFORDABLE AND SUSTAINABLE ENERGY

A significant development in the energy sector is underway as Pertamina International Marketing Distribution Pte Ltd is set to finalize an agreement with the National Power Corporation (NAPOCOR) for a trial shipment of diesel under a government-to-government (G2G) modality. The first delivery expected by July 2025. This initiative is being facilitated with the strategic involvement of Asian Pyrochem Technologies, Inc. (APTI), led by its President and CEO Harley Luis Leano.

APTI has played a crucial role in forging this G2G partnership, leveraging its expertise and connections to streamline negotiations and align the agreement with the energy goals of both parties. A Game-Changing Proposal for 2026 If the trial shipment proves successful, Pertamina could supply up to 200 million liters of diesel annually under the same G2G arrangement starting in 2026. This extended contract could be renewed thereafter.

MOVING FORWARD

APTI’s “recent” endeavors and contributions are in line with the current roadmap of increasing the countries’ industrial development

Presented by:

HARLEY LUIS T. LEANO
CHAIRMAN AND CEO
ASIAN PYROCHEM TECHNOLOGIES, INC.