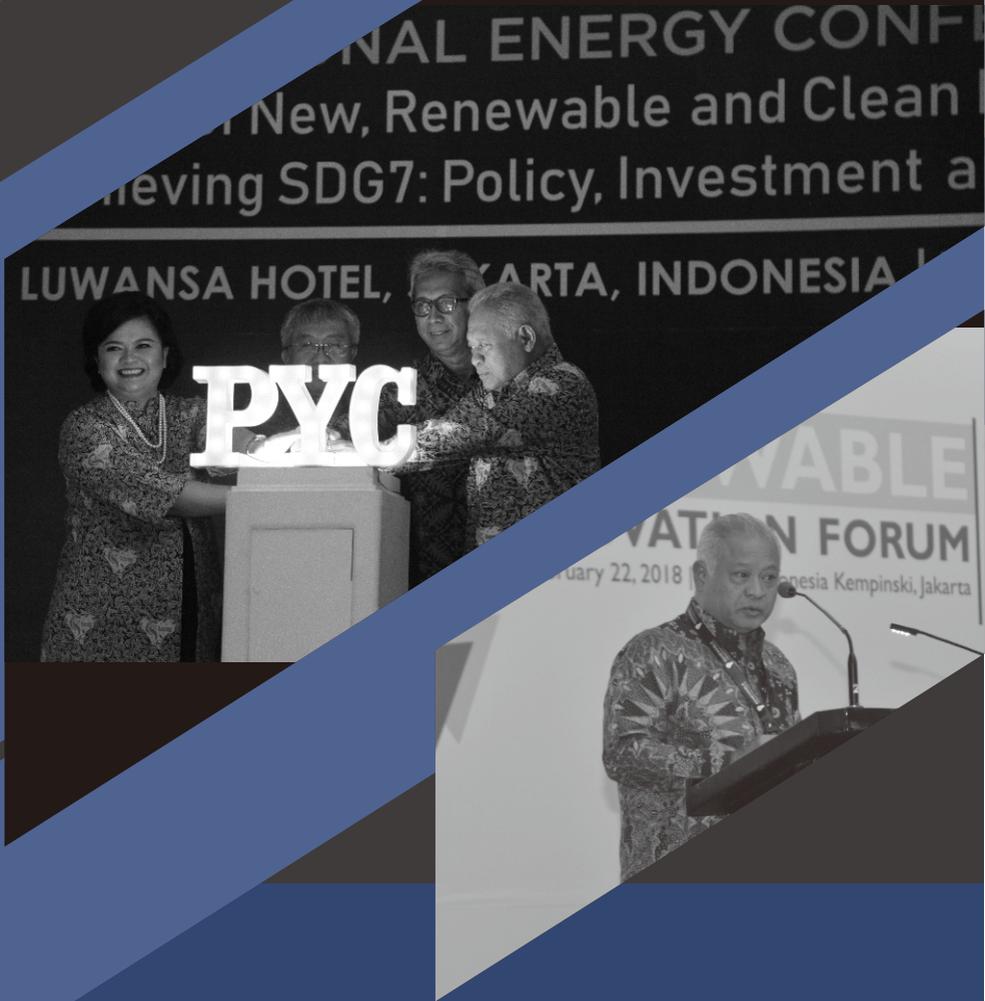


Purnomo Yusgiantoro Center
Research Portfolio
2020



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Our Profile

The **Purnomo Yusgiantoro Center (PYC)** is an independent, non-governmental think tank which was established as an initiative on June 2016. PYC's headquarter is based in Jakarta and its main goal is to promote independent, unbiased, systematic, professional analysis and research on the field of energy and natural resources.

The Center aims to participate in a wide range of research spectrum and to provide policy solutions and/or recommendations inside the energy and natural resources sectors. The center emphasizes on reviewing and identifying current issues revolving the energy sector at local, national, and global level. PYC also plays the bridging role in connecting various entities in the energy and natural resources sector.

PYC upholds independency, integrity, objectivity, and diversity as the core values of its work.

Our Vision

To be a leading knowledge center in energy and natural resources sectors for research, innovation, and technological development in Indonesia and abroad.

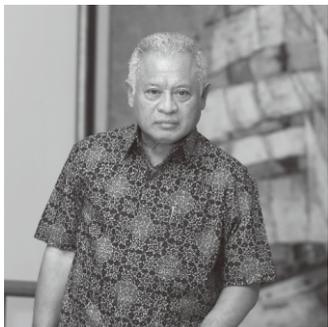
Our Missions

- To provide, promote, and support high-quality research and training in the field of energy and natural resources.
- To facilitate a meeting point for experts, academics, and various think tanks and initiatives working in the energy and natural resources sector and encouraging collaboration among them.

Our Focus

Built upon a research foundation, the center initiative strives to develop a solid research division with members coming from the diverse inter-disciplinary background. PYC research works involve independent and collaborative studies as well as projects with several institutions, focusing on issues: (1) renewable energy development; (2) energy security; (3) energy transition; and (4) energy economics.

Board Members



Founder

**Prof. Purnomo Yusgiantoro, Ir.,
M.Sc., M.A., Ph.D.**



Member of the Advisory Board

**Luky A. Yusgiantoro, B.Sc., M.Sc.,
M.S., Ph.D.**



Head of the Supervisory Board

**Inka B. Yusgiantoro, B.S.E.,
M.S., M.S.E., M.A., Ph.D.**



Member of the Supervisory Board

**Alexander E. Wibowo, S.H.,
L.L.M., JSD.**



Chairperson

**Filda C. Yusgiantoro, S.T., M.B.M.,
M.B.A., Ph.D.**

PUBLICATIONS

Through its publications, PYC aims to make its research output or information accessible to the public. PYC has released several publications including data center, podcast, books and journal to provide reliable information regarding the energy sector for free.



PYC Data Center

PYC understands the importance of a reliable data in the energy sector. Through PYC Data Center, it facilitates energy stakeholders to access data for free.

Website: <https://datacenter-pyc.org/>



Indonesian Journal of Energy

Indonesian Journal of Energy (IJE) is a peer-reviewed journal published twice a year by PYC. The journal is a multi-disciplinary journal in energy research that aims to be an authoritative source of information for analyses, reviews and evaluations related to energy. The journal covers extensive research with a strong focus on energy economics, modeling, integrated systems, while also covers energy planning, law and policy. Up to date, PYC has published five journals since 2017.

ISSN: 2549-1016

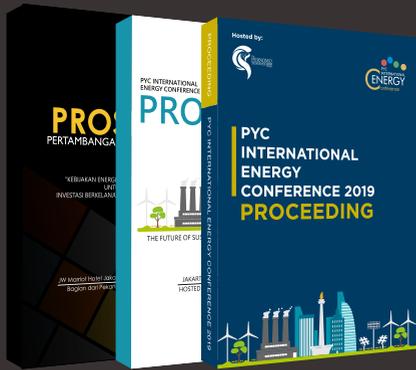
ISSN (Online): 2549 - 760X



ENERGY DRINK
Your Favorite Energy Podcast

Energy Drink by PYC

Energy Drink is a podcast by PYC aiming to provide casual discussions on the hottest topic of the energy sector. Energy Drink podcast invites various academics and practitioners in the energy sector to discuss their thought on special issues in each episode. Energy Drink podcast is available on Youtube, Spotify and Apple Music.



Proceedings

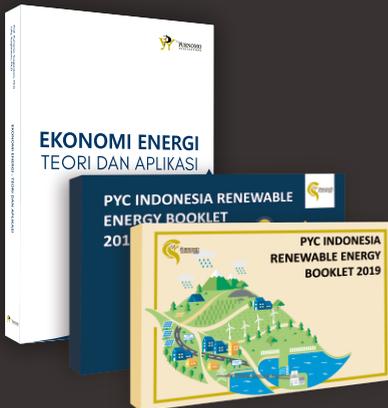
The proceeding contains the selected papers and/or materials presented during the International or National Energy Conference which was hosted by PYC. The materials include photos, infographics and essays from the conference. The list of our proceedings are:

- International Energy Conference (IEC) 2017 Proceeding
- International Energy Conference (IEC) 2019 Proceeding
- Indominergy Proceeding

Books

Purnomo Yusgiantoro Center (PYC) also launched several books. The discussions in the books involved topics such as renewable energy data in Indonesia and the theory and application of energy economics. Prof Purnomo Yusgiantoro also published a book explaining his experinced during his served as Minister of Energy and Natural Resources in 2000-2009. The list of our books are:

- Ekonomi Energi: Teori & Aplikasi
- Rekam Jejak 2
- Indonesia Renewable Energy Booklet 2018
- Indonesia Renewable Energy Booklet 2019



RESEARCH PROJECTS

(2019-2020)



Biogas Implementation for Home Industrial Waste

PYC visited a biogas reactor that utilizes wastewater from tofu factories in Giriharja Village, Sumedang, in January 2020. This visit was made possible through facilitation by Dr. rer. nat. Neni Sintawardani from Indonesian Institute of Sciences (LIPI). She received the PYC Energy Awards 2019 for her contribution in developing the biogas and delivering positive impacts to local society. During the visit, the PYC team observed and discussed the biogas development and sustainability in the village. In the future, PYC aims to get to know the project better and to discuss further possible collaboration with the LIPI.



Flare Gas Utilization through Mini LNG Feasibility Study

PYC is currently conducting a feasibility study of flare gas utilization through mini-LNG. Gas flaring produces primary greenhouse gases (GHGs). By utilizing the flare gas, this will alleviate the emission problems. In addition, it will increase the national supply of natural gas to support the current energy transition from fossil-based fuels to low carbon fuels. LNG is suitable to distribute natural gas to the end users where pipelines are unavailable because LNG is easier to store and to transport. Through mini-LNG, there will be less initial development cost, more efficient distribution and smaller area used. This study aims to identify the feasibility of developing mini LNG facility in the research area considering its economy aspect.



PYC Socioeconomic Study on Business Model of Decentralized Solar Power Installation in Remote Area

PYC team and Sinari visited a remote island on November 27-30, 2019. Sinari is a renewable energy startup that received PYC Energy Awards 2019 for its works to provide electricity access in the remote area. PYC conducted a survey on the affordability and availability of electricity on the island. It was found that people still suffer from a lack of electricity. Currently, PYC is conducting a socioeconomic analysis of the data collected during the visit.

Remote Island Electrification for Productive Use

PYC is conducting an integrated study in order to find a better solution for electrifying Indonesia's remote island and improving its economy. The study focuses on analyzing the most suitable types of technologies needed to electrify remote islands, especially for productive activities. Affordability and financing options for the suitable technology adoption on the island are also investigated. Through this research, PYC hopes that it can be used as a reference for the implementation in other remote islands.



PYC-IPS Project on PV Installation for Military Base

PYC is currently working with International Power Supply (IPS AD) and Indonesia Defense University (Universitas Pertahanan Indonesia, Unhan) on a research project for military posts electrification. As an archipelagic country, Indonesia has numerous remote military posts where electricity power for these posts are often provided using diesel generator. This approach is considered as a costly and unsustainable alternative considering the supply chain of the diesel fuel. Aiming to assess the cheaper and sustainable alternative, the joint research project focuses on conducting a feasibility study on military posts electrification through smart off-grid renewable energy system.



Geothermal Investment Feasibility Study

PYC is currently taking part in an integrated study on the technical, financial, and legal aspects of a geothermal investment project. This work aligns with Indonesia's ambitious renewable energy (RE) target with the commitment of having a 23% share of RE in the 2025's energy mix. In fact, geothermal energy is the second largest contributor to Indonesia's renewable energy mix after hydro power. Despite its large potential, the development of geothermal energy often faced with complicated bureaucracy and regulations. Hence, PYC aims to facilitate RE development in Indonesia through various efforts, including participation in its feasibility studies and legal aspects mediation.

RESEARCH PROJECTS

(2017-2018)



ERIA-PYC Joint Research on Manufacturing Review: Energy

PYC supported ERIA in research on reviewing energy issues, challenges, and opportunities in the manufacturing industry. The research was a part of the arrangement of the National Medium-term Development Plan (RPJMN) 2020-2024 and the Government Work Plan (RKP) 2020. The research aimed to provide alternative solutions which are advantageous to achieve the government target in the manufacturing sector. It mainly covered the government accomplishments, relevant policies and issues, policy comparisons, policy and institutional role evaluations in developing manufacturing industries, especially linked to supply, demand, and efficiency of energy.

Natuna Seabed Maritime Infrastructure Feasibility Study

The collaborative research between Purnomo Yusgiantoro Center (PYC), Indonesia Defense University (UNHAN) and Bandung Institute of Technology (ITB) went through consecutive events including several Focus Group Discussions (FGDs) and field research since August 2017 up to October 2017. The research focused on a microanalysis of the maritime infrastructures in the Natuna Sea, Indonesia. The research report was presented at the seminar on October 10, 2017, in Nusantara Hall, Urip Sumoharjo Building, Ministry of Defense of the Republic of Indonesia and was attended by the Minister of Defense of the Republic of Indonesia.

INTERNATIONAL EVENTS, FORUMS & DISCUSSIONS:

PYC believes that conversation and information exchange would help people to understand the complexity of energy issues. By means of that, PYC held various international events, forums and discussions regularly. This is to facilitate knowledge sharing among stakeholders, involving government, private sectors, academics and researches.

- PYC International Energy Conference 2019
- PYC International Energy Conference 2017
- PYC Millennial Talk: Energy Security 101
- Renewable Energy Innovation Forum 2018
- PYC-YIPA Meet the Leaders series in London, UK
- An Introduction to Geothermal: Theory & Applications
- Energy Condition in Indonesia: An Energy Economics Perspective
- MEMR Policy Outlook for Indonesia Energy Sovereignty
- Energy & Environment: Millennial Perspective
- Women in Energy
- Manufacturing Industry Review: Energy Perspective
- Alternative Energy Policy for Manufacturing Industry
- Escorting the Future of Indonesia's Energy: 2019-2024
- Energy Efficiency towards SNI ISO 50001



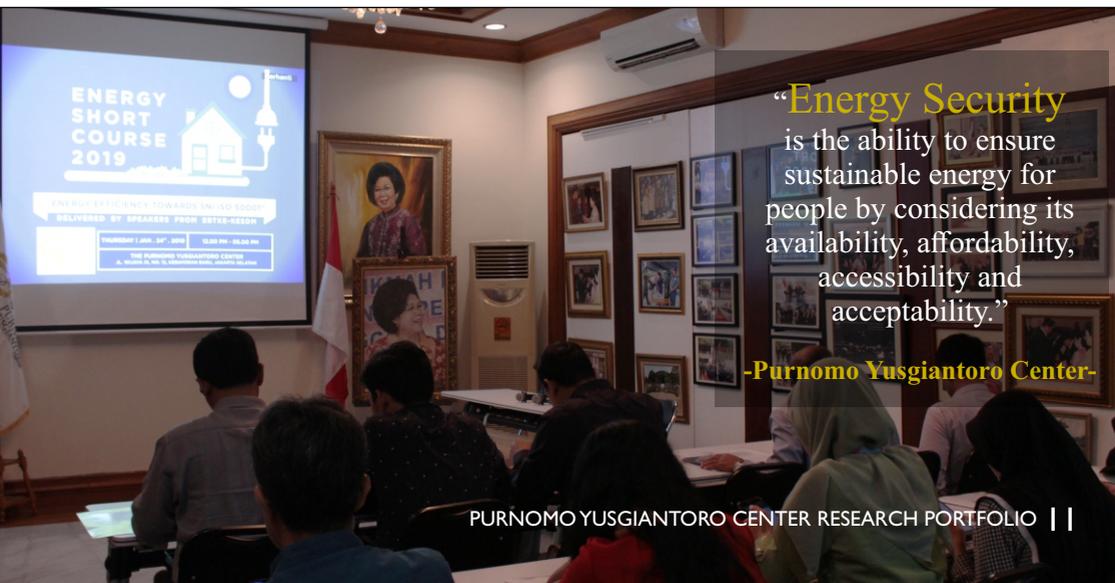
OPINION ARTICLES

by PYC Researchers

*For the full articles please visit:

<https://publication-pyc.org/category/opinion/>

- The Unpredictability of Oil Price
- Indonesia Renewable Energy Development: How Far Have We Gone?
- The Implementation of Renewable Energy in the Top Oil Producer Countries
- Green Bonds Standard Formulation in the Energy Sector
- Brief Notes for Indonesia's Feed-in Tariff (FiT) Implementation
- Indonesia Energy Efficiency Current Situation
- A Brief Review on Indonesia's National Energy Policy
- Power Wheeling and Clean Energy Development
- The Importance of Energy Security Concept
- Coal in Indonesia: Current and Future Role
- Welcoming Indonesia's Vision in 2045: How About Energy Security in Indonesia?
- Public Acceptance of Nuclear Power in Indonesia
- Green Fuel for Green Indonesia
- Reforming Energy Subsidies in Indonesia
- Averting Another 8 Hours of Dark Ages
- Transforming from a Reliable to a Resilient Power System
- Energy Equitable in Papua



“Energy Security is the ability to ensure sustainable energy for people by considering its availability, affordability, accessibility and acceptability.”

-Purnomo Yusgiantoro Center-

PARTNERSHIP

PYC, as a non-government think tank, is open to cooperate with various institutions in developing Indonesia's energy natural resources sector. In the last few years, the center has collaborated with both international and national institutions, mostly on conducting joint-research activities. Along with what we have achieved, we continue to look for more future collaborations and partnerships.

For more information, please contact us through research@purnomoyusgiantorocenter.org.

Our Partners:



Ministry of Energy and Mineral Resource of Indonesia



Embassy of The Republic of Indonesia in Sofia, Bulgaria



Kementerian PPN/
Bappenas

National Development Planning Agency



Institut Teknologi Bandung



Indonesia Defense University



Universitas Pertamina

Universitas Pertamina



International Power Supply Bulgaria



Economic Research Institute for ASEAN and East Asia



RESEARCH/PROJECT COLLABORATION OPPORTUNITIES

At PYC, we value partnership and collaboration. We welcome any opportunities to explore the possibilities to work with you because we believe that the best value will be achieved by working together.

What can be proposed for collaboration?

1. Outreach programs

i.e. seminar, workshop, and conference

2. Capacity building programs

i.e. short courses, workshops, and/or dialogues with government officials, industry players, and/or academics.

3. Collaborative research and project

i.e. research fellowships, joint publications, and internship.

Why collaborate with us?

As a non-profit organization, PYC focuses on the quality of the program in a professional capacity. The center opens to new ideas, allows for great flexibility and creativity in crafting collaborations that suit the needs. The team is structured to prioritize a strong and long relationship with our partners and collaborators.

By collaborating with PYC, partners and collaborators will gain access to Indonesia's energy stakeholders, receive most updated energy sector issues and a comprehensive review from the PYC research team.



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