

2nd Quarter | April-June 2021



Purnomo Yusgiantoro Center

E-NEWSLETTER

Academic Corner
Our Publications
Events in Energy Sector
Social Initiatives Events
Upcoming Events
More From Us

A Message from the Chairperson

Hello from Purnomo Yusgiantoro Center!

Welcoming the third quarter of 2021, we would like to share some updates and exciting news about PYC's activities from the last quarter. Despite the rapid rising case of COVID-19 in Indonesia in the past few weeks, we hope that most of us continue to live life at its fullest (the carpe diem way) and tirelessly practicing to social distancing and wear a mask all the time for the sake of everyone's safety around us.

While at PYC, the team continued to provide its best efforts to contribute to research and community education for the energy and natural resources sector. Several social programs have also been conducted online to support the non-profit nature of the organization.

Supporting our ongoing research, we held two focus group discussions (FGD). The first FGD focused on Indonesia's position in the electric vehicles industry and supply chain. The second FGD discussed the prospect of crowdfunding for renewable energy projects. Thank you to all invited speakers for their valuable time to share their knowledge with our research team.

The Enight, as shortened from Energy and Insight, has been held again in the second quarter. Under the Sovereign Wealth Fund (SWF) topic for sustainable funding to enhance energy security, there were essential points made from the perspective of investments and fundings.

Our research paper of "Feasibility Study of Flare Gas Utilization through a Small-Scale LNG in South Sumatera, Indonesia" is also presented at IAEE Virtual Conference 2021.

Specifically, to PYC publication, we open to anyone who wants to share their opinions on the energy sector to be reviewed and published on our website and social media. You may also find several opinions from our researchers accepted in several mass media, sharing a broad spectrum of topics that we hope you will find interesting. We highly encourage opinions on the theme of energy security as an exciting topic that is aligned with PYC's main focus in the energy sector.

As usual, since the pandemic began, our Energy 24/7 podcast remains one of our top publications to help provide a short update for those who are busy and would like to listen briefly to what's going around the energy sector for that week. We also had guests for two episodes of our Energy Drink podcast, discussing the development of electric vehicles in Indonesia and the voice of generation Z on education integration of energy and environment.

Several collaborations with other institutions have also conducted; a webinar with the Indonesian embassy in Den Haag and PPI Netherlands on the economic feasibility of green hydrogen development in Indonesia. There were webinars on a regular course with Antasena ITS and academic writing sessions with SRE community.

We also would like to remind again that our flagship conference for this year is PYC International Energy Conference (IEC) 2021 on the 6th-7th of October 2021. PYC IEC 2021 will highlight the importance of energy security enhancement in Indonesia to support a sustainable future. We also have several pre-events before the conference that we encourage you to participate in. They are paper competition, essay competition, infographics competition and photo competition. We have also opened PYC Energy Awards applications and urge start-ups on energy or sustainable projects to apply. You can find more details about the conference at <https://2021.iec-pyc.org/>.

Lastly, the second quarter of a year is always special for us. This year, PYC celebrated its 5th anniversary on the 16th of June, 2021, with a book launch event. The book authored by Prof. Purnomo

Yusgiantoro reveals his experiences and insights during his two consecutive periods serving as the Minister of Energy and Mineral Resources of the Republic of Indonesia from 2000 to 2009. Some special guests are invited to give their remarks about the book. Stay tuned to our social media to receive updates when the book is released to the public.

We also would like to express our gratitude for those who have provided continuous support to PYC, through sharing sessions, collaborations and tremendous encouragement in the past four years. We look forward to more robust and sustainable partnerships to work for a better future.

We do hope that the pandemic will be over soon, the economy will rise again, children will go to school offline and all of us could meet directly without the fear of getting COVID-19. We also hope that everyone stays safe and healthy during this time.

Stay safe and stay healthy.

Regards,

Filda Citra Yusgiantoro, Ph.D.

Chairperson

2nd Quarter | April - June 2021

Academic Corner

Leveraging the Potential of Crowdfunding for Financing Renewable Energy

By: Massita A. Cindy Putriastuti, Vivi Fitriyanti
Research Department, Purnomo Yusgiantoro Center

Highlights

- Renewable energy (RE) projects in Indonesia usually have IRR between 10% and 15% and PP around 6 to 30 years.
- Attractive return usually could be found in large scale RE projects, although there are numerous other factors involved including technology developments, capacity scale, power purchasing price agreements, project locations, as well as interest rates and applied incentives.
- Crowdfunding (CF) has a big potential to contribute to the financing of RE projects especially financing small scale RE projects.
- Peer-to-Peer (P2P) lending usually targeted short-term loans with high interest rates. Therefore, it cannot be employed as an alternative financing for RE projects in Indonesia.
- Three types of CF that can be employed as an alternative for RE project funding in Indonesia. Namely, securities, reward and donation-based CF. In addition, hybrid models such as securities-reward and reward-donation could also be explored according to the project profitability.
- Several benefits offer by securities crowdfunding (SCF) compared to conventional banking and P2P lending, as follows: (1) issuer do not need to pledge assets as collateral; (2) do not require to pay instalment each month; (3) issuer share risks with investors with no obligation to cover the investor's loss; (4) applicable for micro, small, medium, enterprises (MSMEs) with no complex requirements; and (5) there is possibility to attract investors with bring specific value.
- Several challenges that need to be tackled such as the uncertainty of RE regulations; (1) issuer's inability in managing the system and business; (2) the absence of third parties in bridging between CF platform and potential issuer from RE project owner; (3) the lack of financial literacy of the potential funders; and (4) lastly, the inadequacy of study regarding potential funders in escalating the RE utilisation in Indonesia.

[Click here to read the full article](#)

Carbon Tax Implementation in the Energy Sector: A Comparative Study in G20 and ASEAN Member States (AMS)

By: Filda Citra Yusciantoro, I Dewa Made Raditya Margenta, Haryanto, Felicia Grace Ratnasari Utomo
Research Department, Purnomo Yusciantoro Center

Highlights

- Since the industrial revolution occurred in 1942, state development for industrialization and economic growth has been highly dependent on fossil resources as a capital for nation-building and resulted in ecosystem degradation. On the other hand, negative externalities arising from these activities have not been valued as it profoundly impacts the next generation like a snowball effect. One indicator that can describe the impact resulting from the previous industrialization is the high greenhouse gas (GHG) emissions.
- Most countries agree that environmental economy approaches, such as carbon pricing, are necessary to combat the negative externality of global GHG emissions. Governments have a wide variety of policy alternatives to address the negative externality of emissions depending on the degree and depth of the policy intervention, and carbon tax can be one of the options. Carbon pricing schemes work by placing a direct cost on each emission produced. The revenue obtained from a carbon tax can be recycled for various purposes such as general government spending, compensation for carbon cost burden, mitigation support for covered sectors and mitigation activities in industry sectors not already covered.
- This report shows that six G20 countries (Japan, South Africa, Argentina, France, Ireland and Mexico) and one ASEAN Member States (Singapore) have implemented a carbon tax. For each ton of CO₂ generated, France charges the highest price at USD 52.4, while Japan charges the lowest at USD 2.6. However, each country has different targets for this carbon tax implementation as the sectors covered differ. On the other hand, Indonesia has not implemented a carbon tax and plans to introduce it as one of its latest fiscal instruments to mitigate climate change and seek more revenue in the year 2022.
- Some countries have shown that carbon tax could generate additional revenue that can be recycled for further direct and/or indirect carbon mitigation plans. For example, Argentina, Ireland and Mexico allocated their carbon tax revenue to general government spending and non-mitigating earmarking. France and South Africa compensate the burdened stakeholders by reducing the electricity generation levy and lowering the income and corporate taxes. Japan and Singapore recycle all of their carbon tax revenue for green spending. France and Ireland also recycled their remaining spending to support energy efficiency in low-income households. While Indonesia, which will soon implement a carbon tax, is planning to combine all the revenue recycling approaches.

[Click here to read the full article](#)

Mapping Indonesia's EV Potential in Global EV Supply Chain

By: Luky A. Yusciantoro, Akhmad Hanan, Budi Prayogo Sunariyanto, Mayora Bunga Swastika
Research Department, Purnomo Yusciantoro Center

Highlights

This study discusses the opportunities and challenges of the Electric Vehicles (EV) supply chain from global and Indonesia perspective, and focuses on mapping the potential role of Indonesia in the global EV supply chain. The abundance of Indonesian nickel reserves provide Indonesia a great opportunity to be one of the main players in EV battery manufacturing. In addition, with the right government policies, Indonesia can become the EV market hub in Southeast Asia because Indonesia has the largest automotive sales and production market in ASEAN. The absence of incentive policies that are directly target EV consumers and producers, problems with the composition of the domestic component level, lack of public awareness, and the unprepared supporting EV infrastructures in all regions of Indonesia are the main obstacles to meet the EV development and utilization targets in Indonesia.

[Click here to read the full article](#)

Why Indonesia Should Abandon its Natural Gas Pricing Regulation

By: Massita Ayu Cindy (Researcher at Purnomo Yusgiantoro Center)

Inka B. Yusgiantoro (Senior Researcher at Purnomo Yusgiantoro Center)



The Jakarta headquarters of PT Pertamina. (Depositphotos)

It has been a year since the Indonesian government decided to enforce a natural gas price policy to the industrial and power sector in the country. The results, however, are still far from what was expected at the time, and may end up worsening both the investment climate in the natural gas industry and the national economy as a whole. The high domestic price of Indonesia's natural gas has generally been cited as one of the main causes of the inadequate performance of the country's industrial sector. The natural gas pricing regulation, which enforces a single standard price for the resource, was issued to keep prices low for the industrial sector and, thus, improve its performance. However, the

implementation of this regulation has raised some concern as it would potentially affect the profitability and viability of the natural gas industry.

[Click here to read the full article](#)

EV Indonesian Nickel Battery: Potentials, Issues, and What Must be Improved

By: Budi Prayogo Sunariyanto (Research Assistant at Purnomo Yusgiantoro Center)

Luky A. Yusgiantoro (Senior Researcher at Purnomo Yusgiantoro Center)



An electric vehicle is charging. (from PxHere)

Electric Vehicle (EV) adoption in Indonesia aims to reduce fossil dependence and improve national energy security through energy diversification in the transportation sector. The transportation sector in Indonesia is one of the highest energy consumed sectors that took about 45% of the total energy consumption and fossil fuels fuel about 96% of them. Indonesia's fuel consumption is currently around 1.2 million barrels of oil per day (bopd), mainly supplied from imports. Thus, EV adoption in Indonesia will improve the national energy security and national trade balance while contributing to the Nationally Determined Contribution (NDC) reduces CO₂ emissions by 29% in 2030.

[Click here to read the full article](#)

Indonesia's Political Will is the Key to a Successful Carbon Tax

By: I Dewa Made Raditya Margenta (Researcher at Purnomo Yusgiantoro Center)

Filda Citra Yusgiantoro (Senior Researcher at Purnomo Yusgiantoro Center)



Carbon Emission. (Modern Diplomacy)

A carbon tax should be viewed as an oasis of post-pandemic recovery. The proper carbon tax scheme will solve two of Indonesia's extensive homework; reducing greenhouse gas (GHG) emissions and boosting revenue to support economic recovery. In the end, Indonesia's political will is crucial in completing this mission. Recently, the carbon tax has become an exciting topic of discussion in Indonesia. This carbon tax was introduced in a revised General Taxation Law bill and became this year's Indonesia National legislation Program. According to the bill, the government plans to collect a carbon tax of IDR 75,000 (US\$ 5.25) per tonne of GHG (tCO_{2e}). The carbon tax could target emissions on the use of fossil fuels such as coal, diesel and gasoline by factories and vehicles.

[Click here to read the full article](#)

How Phasing Out Coal-Fired Power Plants Will Benefit Indonesia's Economy

By: Felicia Grace Ratnasari Utomo (Research Staff at Purnomo Yusgiantoro Center)

Filda Citra Yusgiantoro (Senior Researcher at Purnomo Yusgiantoro Center)



PLN has successfully tested the independent power producer (IPP) coal-fired power plan in West Kalimantan. (from PLN)

Recently, the Indonesian government has issued a plan for a moratorium or termination of coal-fired power plants. New coal-fired power plant projects will be phased out after 2025, except for projects that are already under construction or in the completion stage. However, the moratorium is not the end of the coal-fired power plants. State Electricity Company (PLN) and the government can integrate several efforts, so that the coal-fired power plants can still contribute to the energy transition, especially in pursuing emission targets and realizing Indonesia's future economy security and energy security. Research also shows that the moratorium will increase investment in renewable energy which will benefit Indonesia in the future.

[Click here to read the full article](#)

Can Chinese EV Makers Get a Jump on Tesla and Tap Partners in Southeast Asia for Expansion?

By: Akhmad Hanan (Researcher at Purnomo Yusgiantoro Center)

Luky A. Yusgiantoro (Senior Researcher at Purnomo Yusgiantoro Center)



A child eyes up a NIO ES8 electric vehicle at a NIO House in Shanghai. (Bloomberg)

The world is in transition with regards to energy sources, especially in the transport sector, where the shifting from fossil fuel-powered cars to electric vehicles using batteries and hydrogen fuel cells is gaining pace. Electric vehicle manufacturers from various countries are now competing against China, the world's largest source of electric vehicle sales and business. US President, Joe Biden, admitted that his country is a few steps behind China. Under the governance of President Xi Jinping, China has set a target for EVs to account for 40% of all passenger vehicles sold in 2030. The Chinese government has supported the transition to electric vehicles, at least for the development of the domestic EV industry.

[Click here to read the full article](#)

Indonesia Needs to Seek Out Alternative Sources for Biofuel

By: Haryanto (Researcher at Purnomo Yusgiantoro Center)

Filda Citra Yusgiantoro (Senior Researcher at Purnomo Yusgiantoro Center)



Aerial footage of a palm oil plantation in West Kalimantan, Indonesia. (Nanang Sujana/CIFOR)

If the Indonesian government is to meet its self-appointed targets for the reduction of greenhouse gas emissions in response to climate change, the development and utilization of bioenergy looms as an important part of its strategy. Indonesia has abundant resources of biomass. Indeed, many of the forms of biomass that can be used to generate bioenergy, such as food crops, forest residues, urban waste, and algae, among others, are present in the country in considerable quantities. As a result, Indonesia is now the world's third-biggest biofuel producer, producing 77 Terawatt-hours in 2019, behind only the United States (433 TWh)

and Brazil (276 TWh). Even though bioenergy may come in the form of biofuel, biogas and biomass, Indonesia has placed special focus on fostering the development and utilization of biofuel, especially biodiesel.

[Click here to read the full article](#)

Can Palm Oil-Based Biodiesel Enhance Energy Security in Indonesia?

By: Vivi Fitriyanti (Research Assistant at Purnomo Yusgiantoro Center)

Massita Ayu Cindy (Researcher at Purnomo Yusgiantoro Center)



Palm Oil Fruit (PxHere)

The utilization of biodiesel is part of Indonesia's energy diversification to reduce the dependence on oil import and to provide alternative fuel for the transportation sector. Moreover, biodiesel's enhancement can stimulate the economy by promoting more investment in the energy mix and leading energy security enhancement in Indonesia. However, the missing context in the biodiesel industry in energy security dimension and indicator may lead to energy insecurity.

The Government of Indonesia (GoI) determines that the compulsory biodiesel program is an ideal scheme for enhancing national energy security. The mandatory program is still implemented due to the multiplier effects

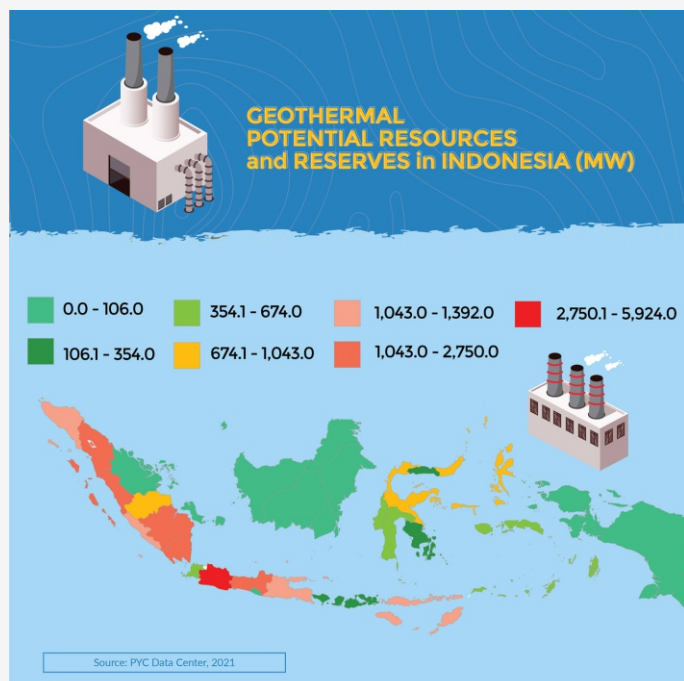
despite the pricing issue. For instance, it will save the foreign exchange, increase labour absorption, increase crude palm oil (CPO) price, decrease greenhouse gas (GHG) emission and reduce fossil fuel. Biodiesel also has a positive potential as an export commodity. According to the Indonesian Biofuel Producers Association (APROBI), GoI will consider an initiation to boost the blending ratio into 50% Biodiesel (B50) in 2023 and even up to B100 after a successful car test in 2019. In contrast with the hindrance of mandatory blending of biodiesel B30 and B40. The GoI needs to integrate the road map with EV development, consider optimizing ISPO certification, intensifying the traceability and transparency in energy security indicators.

[Click here to read the full article](#)

INFOGRAPHICS

This section is a collection of infographics arranged by our research team. The data is gathered from our Data Center and various sources.

A Glimpse of Geothermal Energy in Indonesia



Indonesia is one of the top two geothermal countries with ~24 GW installed power capacity in 2020 with an additional new program this year across the region. Moreover, the enactment of Job Creation Law strengthens the geothermal exploration program and will help in boosting the 23% renewable energy mix target. However, what challenges will Indonesia face in implementing geothermal?

So let's read and understand the information on geothermal in Indonesia and what challenges it is facing today!

You can access updates on the energy sector through the PYC Data Center website (www.datacenter-pyc.org).

[Click here to see the full infographic](#)

2nd Quarter | April-June 2021

Our
Publications

The Ensign: Sovereign Wealth Fund: Mewujudkan Pendanaan Berkelanjutan dalam Meningkatkan Ketahanan Energi



The Ensign or Energy Insight is a program of the Purnomo Yusgiantoro Center (PYC) with the purpose of sharing views with those interested in energy issues. In this session, The Ensign discussed "Sovereign Wealth Fund: Mewujudkan Pendanaan Berkelanjutan dalam Meningkatkan Ketahanan Energi". We had two notable speakers, Dr. Ir. Darwin Cyril Noerhadi, MBA. (Supervisory Board of Indonesia Investment Authority) and Dr. Ir. Dadan Kusdiana, M.Sc. (Director General of New Renewable Energy and Energy Conservation, Ministry of Energy and Mineral Resources), sharing their invaluable insights.

Mr. Noerhadi presented the Sovereign Wealth Fund concept and its potential for financing new and renewable energy projects. While Mr. Kusdiana delivered his insights on new and renewable energy role in enhancing the national energy security.

Click the logo below to access our Ensign!



Diskusi Lingkar Inspirasi PYC dan PPI Belanda



Aiming to add insights on clean and sustainable energy concerning energy security & sustainability issues, the Purnomo Yusgiantoro Center (PYC) and the Department of Research and Strategic Studies of the Dutch-Indonesian Student Association (Kastrat PPIB) @PPIBelanda held an Inspirational Circle Discussion forum with the topic "Economic feasibility of green hydrogen development in Indonesia". This discussion forum was a part of series events of the PYC International Energy Conference 2021 and was expected to introduce Indonesian students, especially in the Netherlands and

in Indonesia, to hydrogen which is seen as the clean energy for the future.

Can hydrogen be a clean and sustainable energy solution amidst energy security & sustainability issues? When and how did hydrogen develop into an important energy source in the global energy system? What challenges and additional values Indonesia will have in developing green hydrogen? The answers can be found in this webinar.

Click the logo below to access the webinar!



Energy Drink by PYC Ep. 16 - “Bincang-Bincang Perkembangan Kendaraan Listrik di Indonesia” (ft. Faela Suva)



In this podcast, PYC invited Faela Suva, Director of Institute for Transportation & Development Policy Southeast Asia, to discuss the development of electric vehicles in Indonesia. This podcast discussed the future implementation of electric vehicles in the world and in Indonesia, the challenges and the supports needed in the development of electric vehicles, and Indonesia's potential in playing a role in increasing the development of the world's electric vehicles. Everything was discussed exclusively with Faela Suva and our research team member, Vivi.

Click the logo below to access our podcast!



Energy Drink by PYC Ep. 17 - “Generasi Z Bicara Soal Integrasi Pendidikan dengan Energi & Lingkungan” (ft. Reiner and Pandu)



In this episode, which was also coincided with the momentum of National Education Day and National Awakening Day, the PYC Energy Drink Podcast had a discussion with representatives of Generation Z from the Society of Renewable Energy (SRE). The theme of this episode was "Generation Z Talks About Integration of Education with Energy and Environment". We would found out how Generation Z would contribute to the energy transition and what their expectations are in terms of classroom education and also the applications for the community, directly from Reiner Nathaniel (President of SRE ITB), Pandu Lang Turonggo Jati (President of SRE UNTAN) and the PYC research team member, Budi.

Click the logo below to access our podcast!



Energy 24/7

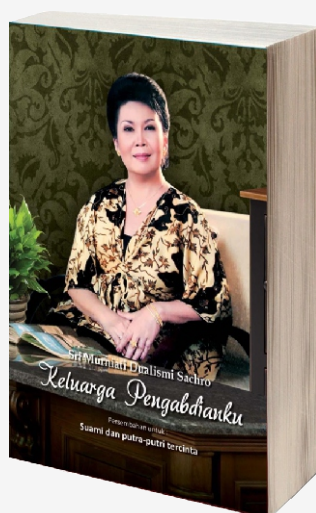


Hey! We created a new series, Energy 24/7, in our Energy Drink Podcast. We are covering the latest news in the energy sector and presenting it to you every Saturday. Keep yourself informed with the latest energy updates by listening to Energy 24/7!

Click the logo below to access our podcast!



“Keluarga Pengabdianku”

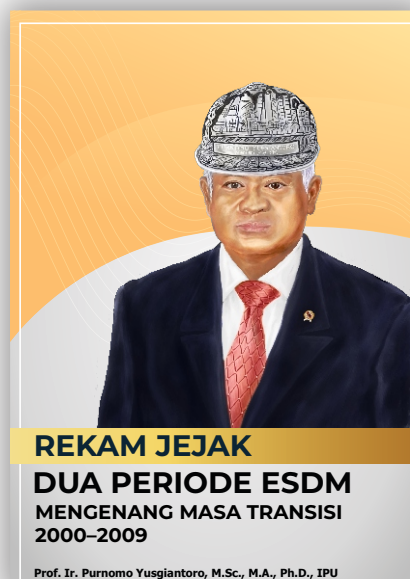


This biographical book tells the story of member of PYC Governing Board, Lis Purnomo growing up as the sixth child of nine siblings until she studied in the IKIP Negeri Semarang. This book begins with the story of Lis Purnomo, who came from a simple family, and her love story since high school with a young Purnomo Yusgiantoro. They eventually tied the knots and worked their way up from the bottom. They moved to America in order for Purnomo to continue his study at their own expense and returned to serve in Indonesia. Lis Purnomo faithfully accompanied her husband to the peak of his career. In the course of her life, Lis Purnomo active in various organizations and socio-cultural activities at the national level. She also proudly told her success in educating her three children until they reached the highest level of education.

Book Information

Title : Keluarga Pengabdianku
Size : 17.6 x 25 cm, 248 pages.
ISBN : 978-623-95942-5-1

“Rekam Jejak Dua Periode ESDM: Menguak dan Mengenang Masa Transisi 2000-2009”



Prof. Purnomo Yusgiantoro, Founder of Purnomo Yusgiantoro Center (PYC), wrote two books on his experiences in managing the energy and mineral resources sector in Indonesia during 2000–2009. The first book, titled “*REKAM JEJAK DUA PERIODE ESDM: MENGUAK MASA TRANSISI 2000–2009*”, told the story of how Prof. Purnomo managed one of the strategic sectors in the country, especially during the national economic recovery post economic and political crisis in 1997/1998. The book aims to provide an overview of the intricacies and developments of Indonesia's energy and mineral resources sector during the transition period at the beginning of Reformation Order, covering management, technological development, law and regulation aspects, among others. Energy practitioners could learn about national strategic issues and the book could also be used as a reference for the journey of energy and mineral resources sector over the two periods (2000–2009).

The second book, titled “*REKAM JEJAK DUA PERIODE ESDM: MENGENANG MASA TRANSISI 2000–2009*” complemented the first one, presenting photos and documentation of major events during the transition era in the energy and mineral resources sector.

Book Information

Title : Rekam Jejak Dua Periode ESDM : Menguak Masa Transisi 2000-2009
Size : 15.5 x 24 cm, 320 pages.
ISBN : 978-623-95942-3-7

Title : Rekam Jejak Dua Periode ESDM : Mengenang Masa Transisi 2000-2009
Size : 15.5 x 24 cm, 258 pages.
ISBN : 978-623-95942-4-4

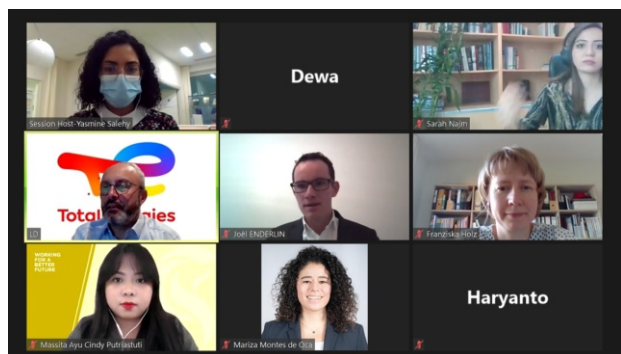
2nd Quarter | April-June 2021

Events in

Energy Sector

EVENTS IN ENERGY SECTOR

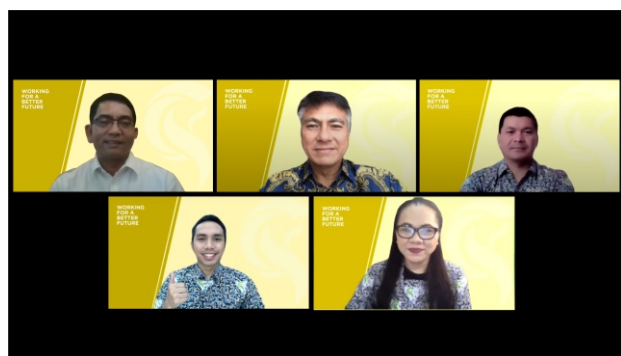
PYC in International Association for Energy Economics (IAEE) Virtual Conference 2021: Energy, COVID, and Climate Change



On 7-9 June 2021, PYC's research paper of "Feasibility Study of Flare Gas Utilization through a Small-Scale LNG in South Sumatera, Indonesia" authored by Massita Ayu Cindy, Filda Citra Yusgiantoro, Haryanto & I Dewa Made Raditya Margenta, was presented at the IAEE Online Conference. Massita Ayu Cindy, PYC's energy economic & financing researcher, presented in the LNG Economics concurrent session. Joining the discussion was Laurent David as the moderator, Joel Enderlin from Total Energies, Franziska Holz from DIW Berlin and Sarah Najm from King Saud University as speakers. The

virtual session provided many interesting perspectives regarding issues and most updated research in the LNG sector worldwide, from Europe to Asia. We were grateful for the opportunity to join such an insightful conference.

The Ensignt: Sovereign Wealth Fund: Mewujudkan Pendanaan Berkelanjutan dalam Meningkatkan Ketahanan Energi



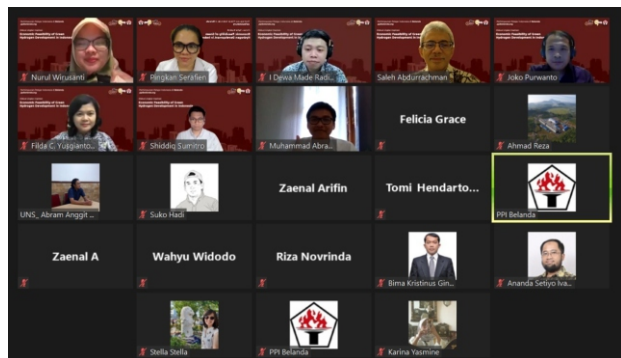
On 8 May 2021, Purnomo Yusgiantoro Center (PYC) held another The Ensignt session with the theme "Sovereign Wealth Fund: Creating Sustainable Financing to Increase Energy Security." In this discussion, PYC invited two distinguished speakers; Dadan Kusdiana, the Director-General of New, Renewable Energy and Energy Conservation (NREEC) of the Ministry of Energy and Mineral Resources (MEMR), and Darwin Cyril Noerhadi, the Supervisory Board of the Indonesia Investment Authority (INA). This discussion was opened by the Head of PYC Supervisory

Board, Inka B. Yusgiantoro, and moderated by Muhammad Razin Abdullah, PYC Researcher. This discussion was held to understand the role of INA in the development of renewable energy in Indonesia. The establishment of INA will give new hope and enthusiasm for Indonesia, especially in mobilizing funds from within and outside the country, which will be utilized in various investment opportunities in Indonesia, including for the new and renewable energy sector (NRE).

Currently, the Government of Indonesia is aggressively developing solar panel technology as renewable energy sources to accelerate the energy transition. The government has implemented several strategies to increase the share of the NRE mix in Indonesia. Apart from increasing energy security, the development of NRE is also aimed to reduce carbon emissions in Indonesia following the 2015 Paris Agreement. INA seeks to become a strategic partner in attracting foreign direct investment (FDI) and improving Indonesia's investment climate.

EVENTS IN ENERGY SECTOR

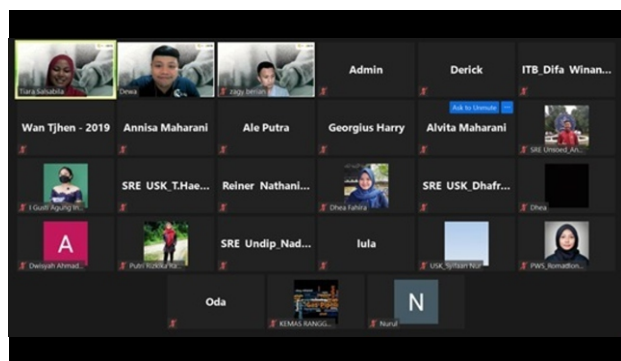
Diskusi Lingkar Inspirasi PYC dan PPI Belanda



On 29 May 2021, *Diskusi Lingkar Inspirasi* was held by the *Perhimpunan Pelajar Indonesia Belanda (PPIB)* and The Purnomo Yusgiantoro Center (PYC) with the topic "Economic Feasibility of Green Hydrogen Development in Indonesia." This event was held via Zoom and broadcasted live via PYC's YouTube channel. The event was opened by Filda C. Yusgiantoro (Chairperson of PYC). She emphasized that green hydrogen is a future energy source that plays a strategic role in sustainable energy supplies in various countries, especially Indonesia. Other speakers at the discussion

were Coordinator of Economic Functions of the Embassy of the Republic of Indonesia (KBRI) in The Hague, Netherlands Christine Refina, Secretary-General of PPIB Reiffel Rezqiriandhana, Managing Director of PT Transition Enjiniring Muhammad Shiddiq Sumitro, Economic Research Institute for ASEAN and East Asia (ERIA) researcher Alloysius Joko Purwanto, Expert Staff for Environment and Spatial Planning at the Ministry of Energy and Mineral Resources (KESDM) Saleh Abdurrachman, and I Dewa Made Raditya (PYC) as moderators.

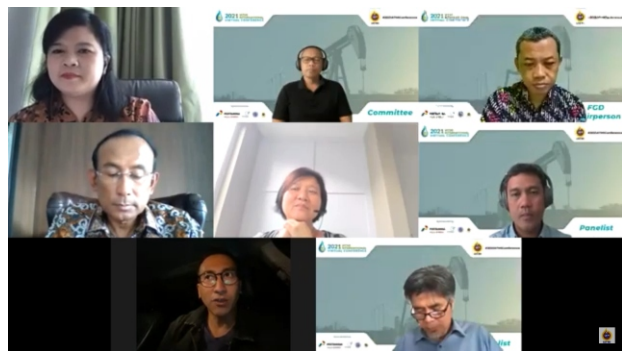
PYC-SRE ITB Academic Writing



On 15 May 2021, PYC and the Society of Renewable Energy (SRE) ITB conducted a collaborative event to introduce PYC and the PYC paper competition. This event was also held to introduce PYC International Energy Conference, which will be held in October 2021. In this webinar, I Dewa Made Raditya (PYC) was invited as one of the speakers. At his session, he presented the details of the PYC Paper Competition and some notes that authors should comprehend before submitting their papers. He also underlined some mistakes that should be avoided to excel the paper's quality. Apart from Dewa, Zagy Berian (ITB) was also invited to deliver his experiences on winning the competition in 2019.

EVENTS IN ENERGY SECTOR

IATMI International Virtual Conference “Bending the Production Curve and Transitioning to New Energy Landscape”



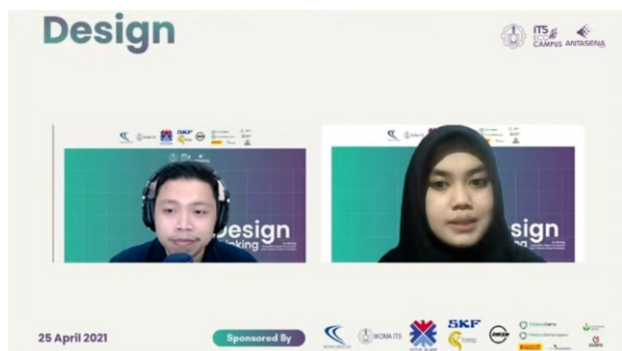
On 10 April 2021, Filda Citra Yusgiantoro, Chairperson of PYC, acted as the moderator for one of the Focus Group Discussions at the 2021 IATMI International Virtual Conference, “Bending the Production Curve and Transitioning to New Energy Landscape”. The topic of the FGD was “Preparation of Energy Transition: Where are we now?”

The first panelist, Nuki Agya Utama from ASEAN Center for Energy presented that the outlook for energy needs in ASEAN countries would continue to increase and

become a net importer for all types of fossil energy sources by 2040. The development of technology supporting the energy transition need to be carried out immediately by considering renewable elements, security, and affordability. Furthermore, Satya Widya Yudha from National Energy Council Indonesia mentioned that the achievement of the energy mix is still not as expected. The National Energy General Plan (RUEN) target and related policies need to be updated periodically following national economic growth and the dynamic level of energy demand. In addition, the transition process still needs to utilize environmentally friendly fossil energy sources. The following panelist, Dannif Danusaputro from Pertamina Power Indonesia, described that Pertamina is projected to supply 71% of national energy needs. Pertamina has started the transition, and Pertamina is ready to lead the energy transition in Indonesia. The last panelist, Becky Unidjaja from BP Indonesia shared that BP is currently implementing an integrating energy system that allows low carbon electricity, energy, and fossil fuel are expected to be mutually sustainable in meeting energy needs driven by mobility levels.

To conclude, in realizing the energy transition, multi-sector support is needed, collaboration from the Government, the Private, Academics, and the Community is essential. Indonesia's energy needs will continue to increase, but we are also faced with environmental issues where carbon emissions need to be suppressed. Therefore, renewable energy and environmentally friendly fossil energy are needed in realizing sustainable national development.

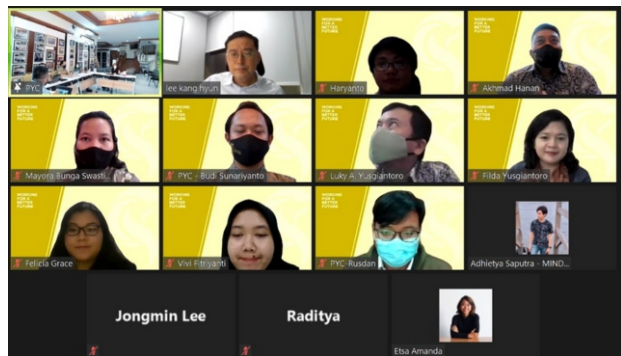
Webinar Antasena Regular Course 2: Design Thinking



On 25 April 2021, PYC was invited to participate in Design Thinking Online Webinar held by Antasena Institut Teknologi Sepuluh November (ITS). This webinar aimed to encourage the students and researchers to publish their writings in journals and media. In this webinar, I Dewa Made Raditya (PYC) was invited as PYC's representative. At his session, he shared his experiences and emphasized some critical notes for writing a scholarly opinion or an academic paper. Apart from Dewa, Mr. Syaiful Anwar (LIPI) and Mrs. Azzah Dyah Permata (ITS) were also invited as panelists.

EVENTS IN ENERGY SECTOR

Focus Group Discussion: Indonesia's Position in the Global Supply Chain and EV Industry

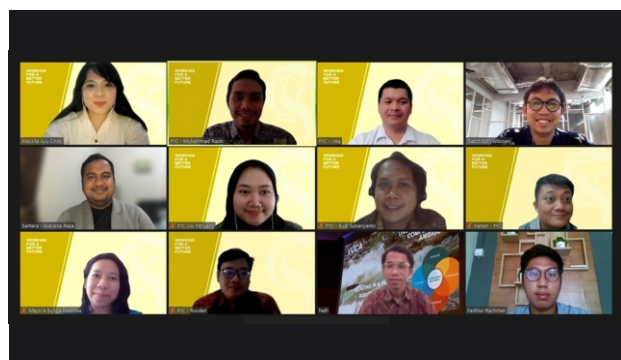


On 6 May 2021, researchers from the Energy Law and Geopolitics (ELG) sub-department of The Purnomo Yusgiantoro Center (PYC) held a Focus Group Discussion (FGD). This event was held as a Hybrid event (online and offline at the PYC office) and attended only by internal participants from the PYC Research Department. The topic of the event was Indonesia's Position in the Global Supply Chain and EV Industry. This event was a part of the research activities carried out by researchers from the ELG sub department who are studying EV issues. The research team of the ELG Sub

Department include; Dr. Luky A Yusgiantoro (Research Supervisor), Akhmad Hanan, Budi Prayogo Sunariyanto and Mayora Bunga Swastika.

The speaker in this event is Mr. Agus Tjahajana Wirakusumah (Head of the National Electric Vehicle Project Acceleration Team), Mr. Lee Kang-Hyun (Chief Operating Officer of Hyundai Asia Pacific), and Mrs. Faella Sufa (Director of Southeast Asia of the Institute for Transportation and Development Policy). The final goal of the event is for PYC researchers to get an overview of the development of the Indonesian EV industry. In addition, researchers could be asked to describe the potential role of Indonesia in the Global Industrial EV supply chain.

PYC's FGD Feasibility Study of Crowdfunding as an Alternative Renewable Energy Funding Source in Indonesia

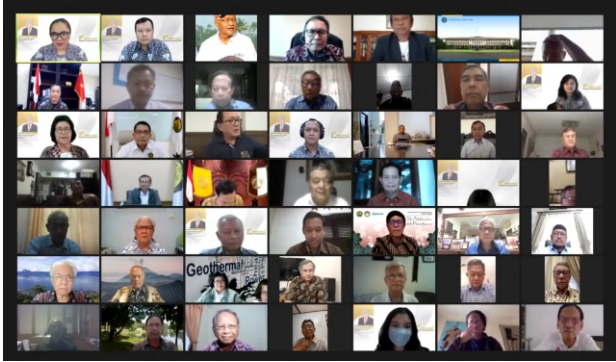


On 28 May 2021, PYC's energy economics & financing research sub department held a FGD. This FGD aims to collect insights from crowdfunding platforms and seek opportunities to introduce renewable energy projects as potential prospects. Massita Ayu Cindy, energy economics & financing researcher of PYC moderated the FGD. There were three crowdfunding platforms joining the discussion, two equity crowdfunding and one donation based crowdfunding. Avesena Reza from Santara and Gatot Adhi Wibowo from Bizhare attended the FGD as equity crowdfunding representatives.

Fadhlur Rachman and Nafi Putrawan both from Indonesia Green represented donation based crowdfunding that focus on financing renewable energy projects. The FGD result will be a valuable input for the PYC research team in analyzing the potential of crowdfunding as an alternative renewable energy funding source in Indonesia. Don't forget to check out our website and social media for more info.

EVENTS IN ENERGY SECTOR

Book Review Webinar “Rekam Jejak Dua Periode ESDM : Menguak Masa Transisi 2000–2009”



On Wednesday, 16 June 2021, Purnomo Yusgiantoro Center (PYC) celebrated its 5th anniversary. PYC held a virtual book review event for Prof. Purnomo Yusgiantoro's latest book: “REKAM JEJAK DUA PERIODE ESDM: MENGUAK MASA TRANSISI 2000–2009”. Filda Yusgiantoro, Chairperson of PYC, opened the book review event, followed by opening remark from Muhammad Lutfi (Minister of Trade of Indonesia 2020–present) and keynote speech from Ego Syahrial (Secretary General of Ministry of Energy and Mineral Resources 2017–present).

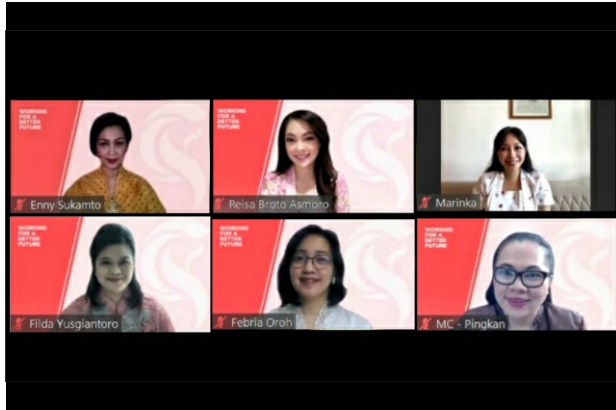
For the book review session, PYC invited four notable reviewers: Simon Sembiring (Director General of Mineral and Coal 2004–2008), Evita Legowo (Director General of Oil and Gas 2008–2012), Rida Mulyana (Director General of Electricity 2019–present), and Dadan Kusdiana (Director General of New and Renewable Energy and Energy Conservation 2020–present). Lastly, Prof. Purnomo Yusgiantoro gave a brief remark on his experiences in writing the book. The event was held successfully and attended by more than 100 people, including some of the experts who reviewed the book.

2nd Quarter | April-June 2021

Social Initiatives

EVENTS IN SOCIAL SECTOR

Webinar Hari Kartini: Tips Cantik Bugar dan Sehat di era New Normal



In commemoration of Kartini Day 2021, the Purnomo Yusgiantoro Center (PYC) held a Webinar with the theme "Beauty, Fit, and Health Tips in the New Normal Era of the Covid-19 Pandemic". This webinar invited three speakers representing their respective fields; dr. Reisa Broto Asmoro (Spokesperson for the Covid-19 Handling Task Force), Enny Sukanto (Indonesia's Senior Model), and Rinrin Marinka (Celebrity Chef). This webinar was hosted by Febria Oroh as the moderator of the event.

Reisa emphasized that besides washing hands, maintaining distance and wearing a good quality mask are essential in preventing the transmission of the

COVID-19. In addition, it is also essential to maintain a healthy body by consuming proper and nutritious food. Enny Sukanto as a senior Indonesian model also shared her tips on managing women's appearances to look healthy and beautiful. According to her "by taking good care of yourself, It will give a good impact especially to your happiness and your body immunity". In line with Enny, Chef Rinrin also stressed the importance of food consumption quality, nutrition, and hygiene to increase the body's immunity during the COVID-19 pandemic

Other Events

OTHER EVENTS

PYC's In-house Training Development



All the staff and researchers of Purnomo Yusgiantoro Center (PYC), attended the in-house training development held on 19, 21, 25 and 27 May 2021. The fasilitator for this training were Mr. Danny Kosasih and Ms. Dina Kosasih from Didik.co. The theme of this training was “Making Collaboration Works in Digital Era” with an explanation of two modules, design thinking and agile methodology.

The purpose of implementing this training was to improve competence and expertise of PYC staffs in terms of:

1. Understanding the needs of target users of services offered by PYC in the fields of research, education and policy making.
2. Improving the ability to think and act in finding solutions and creative ideas for target users and stakeholders.
3. Strengthening the team collaboration between functions and departments, to be more agile in carrying out various research projects, education and social.

The team learned the mindset that needed to be applied to solve a problem. We also practiced to analyze based on existing facts and data. In delivering solutions, we have learned how to collaborate in an agile way to convey solution ideas on a visual form (prototype). Furthermore, we expect that we can find and explore out-of-the-box ideas or solutions for the challenges we might face in the future.

2nd Quarter | April-June 2021

Upcoming
Events

PYC International Energy Conference 2021



PYC INTERNATIONAL ENERGY CONFERENCE 2021

The Enhancement of Energy Security for a Sustainable Future

6-7 October 2021 | Indonesia

www.iec-pyc.org

This year, PYC will hold its biennial flagship program, PYC International Energy Conference 2021, aiming to bring local and global stakeholders, including but not limited to students, researchers, experts, governments and private sectors to discuss energy security in the world and Indonesia in particular.

The plenary and parallel sessions are open to the public and free of charge. The conference will mainly be set for students, academicians, researchers, experts, governments, and private and public entities. PYC will hold the PYC International Energy Conference 2021 in an online concept.

The plenary session aims to provide insights and latest findings on the strategies of renowned experts on global energy security seen from various perspectives. The session also aims to educate participants on the importance of enhancing energy security in order to achieve a sustainable future, especially in Indonesia.

The parallel sessions aim to dig deeper on the strategy and efforts in strengthening Indonesia's energy security for a sustainable future viewed from (4) four different energy sources; oil and gas, coal, electricity and new and renewable energy. The parallel sessions details are as follows:

1. Oil and Gas Session (Topic: Mapping Out the Role of Oil & Gas Industry to Achieve a Sustainable Future).
2. Coal Session (Topic: Advancing the Downstream of Coal Industry to Support Energy Security).
3. Electricity Session (Topic: Electrifying the Last Mile for a Sustainable Future).
4. New and Renewable Energy Session (Topic: Role of International Organizations, Non-Governmental Organizations (NGOs) and Local Communities to support NRE development).

More from Us

Paper Competition 2021

"The Enhancement of Energy Security for a Sustainable Future"



Sub-themes:

- Energy Security
- Energy Economics
- Energy analysis
- Energy Modeling
- Energy Planning
- Energy Conservation
- Energy Efficiency
- Energy Innovation
- Energy Geopolitics
- Integrated Energy Systems
- Environmental and Energy Management
- Fuel and Energy Technology
- Biomass and Bioenergy
- New and Renewable Energy
- Energy Storage
- Energy Finance
- Energy Law and Policy

TOTAL PRIZE: IDR 18,750,000

Submit: papercompetition@pycenter.org

Deadline: **20 August 2021**

Paper Guidelines:

bit.ly/PYC2021-PAPERCOMPETITIONTEMPLATE

For more information, please visit www.iec-pyc.org



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PYC International Energy Conference 2021

Pre-event Competition



Infographic Competition

With a total prize **IDR 9,000,000**

Topics:

- Energy Security
- Dynamics and Geopolitics
- Clean Energy Regulation and Environmental Policy
- Eradication of Energy Poverty
- Energy-Economic Forecast and Modelling
- Sustainable Energy Investment
- Energy Market Analysis
- Sustainable Development and Utilization of Fossil Fuel
- Sustainable Technology Innovation
- Clean Energy Integration



Essay Competition

With a total prize **IDR 8,000,000**

Topics:

- Energy Security
- Dynamics and Geopolitics
- Clean Energy Regulation and Environmental Policy
- Eradication of Energy Poverty
- Energy-Economic Forecast and Modelling
- Sustainable Energy Investment
- Energy Market Analysis
- Sustainable Development and Utilization of Fossil Fuel
- Sustainable Technology Innovation
- Clean Energy Integration



Photo Competition

With a total prize **IDR 7,250,000**

Topics:

- Energy Security
- Energy and Environment
- Human and Energy Interaction
- Energy Poverty
- Green Energy

Submit to **bit.ly/IEC2021-COMPETITION**
prior to **6 August 2021**

For more information, please visit **www.iec-pyc.org**



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Community Partner:



PYC ENERGY AWARDS 2021

PYC opens an opportunity for energy activists who have activities in the energy sector, with positive impacts on the environment and society, to participate in the 2021 PYC Energy Awards.

Total Prize: IDR100,000,000

Register Yourself:

<http://bit.ly/PYCENERGYAWARDS-2021>

For more information, please visit www.iec-pyc.org

CALL FOR PAPERS

Indonesian Journal of Energy
Volume 4 No. 2 | August 2021

The journal welcomes papers on related topics such as energy conservation, energy efficiency, energy innovation, fuel and energy technology, biomass and bioenergy, new and renewable energy, energy storage, energy finance, energy geopolitics, as well as energy law and policy.

Visit www.ije-pyc.org for submission guideline



SHARE YOUR OPINION

We want to hear your opinion and share it to the world



Submit it to:

<https://bit.ly/PYC-OPINION>

Selected opinion will be published on PYC website



Fight COVID-19

**Let's Get
Vaccinated**



**And also,
never forget!**



**Physical
Distancing**



**Wear
Your Mask**



**Wash
Your Hands**



**Avoid the
Crowds**



**Reduce
Mobility**

5th

ANNIVERSARY

Purnomo Yusgiantoro Center

Working for a better future.

TO OUR DEAREST
PROF. PURNOMO YUSGIANTORO,

Happy
Birthday!

You have been a great
inspiration for so many
people, especially us at PYC!

Best wishes,

PYC Team



Happy
birthday
Ibu Lis
Yusgiantoro!

We only have the very best
birthday wishes for a
remarkable woman. May you
continue to do what you do
best: amaze and inspire us!

- PYC Team -





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