

3<sup>rd</sup> Quarter | July-September 2020



Purnomo Yusgiantoro Center

# E-NEWSLETTER

Energy Events  
Social Initiatives  
Academic Corner  
Publications  
Upcoming Events

# A Message from the Chairperson

---

Hello from Purnomo Yusgiantoro Center (PYC)!

We have passed these two quarters with drastic changes to our work and it has not been an easy transition for all of us. Despite the on-going difficulties through this pandemic, PYC has several progresses that we are excited to share with you.

Knowledge sharing is a part of our mission as a non profit organization. In this third quarter, PYC has published three podcasts titled “Apa Kabar Industri Migas? Bincang Santai Dengan Komisaris Milenial Pertamina”, “IPO BUMN” and “Mengintip Peluang Carbon Tax di Indonesia”. We are very grateful to Mr. Fadli Rahman (Commissioner of PT Pertamina Hulu Energi), Mr. Saptono Adi Junarso (Executive Vice President of BEI) and Ms. Andhyta Firselly Utami (Environmental Economist) for taking the time to share their insights.

We have also published Indonesian Journal of Energy (IJE), IJE Vol. 3, No. 2 (2020). This edition presents manuscripts within the areas of renewable energy, such as bioenergy, solar energy and geothermal. We would like to thank all the author(s) who have submitted their manuscripts and therefore contributed to our journal significantly.

Besides sharing of knowledge, PYC also believes that giving back to the society in a form of social activities is an important mission for the organization especially in this time of difficulties. In this quarter, PYC held 2 noteworthy events. The first event, held to celebrate the 75<sup>th</sup> Anniversary of Republic of Indonesia, was a virtual poetry reading competition for Indonesian primary school students. To our surprise, we received 133 entries from 12 provinces across Indonesia. We deeply appreciate the enthusiastic participations from these young students from across Indonesia. The second one was the support from PYC to the National Kolintang Competition held by PINKAN Indonesia and Ministry of Information and Technology. The efforts to preserve Indonesia’s musical instrument through this event was one of our organization’s achievements.

We would also like to inform you that you are welcomed to send in your opinion to us. Through this opportunity, we would like to thank Mr. Ilyas Taufiqurrahman and Mr. Ichsan Saif for sending in their opinions. There are also opinions coming from our own research team. You may find insightful remarks on the energy sector through their opinions.

To stay updated and learn more on PYC’s activities, please stay tuned to our social media on Instagram, LinkedIn as well as YouTube and Spotify.

Lastly, we would like to again appreciate all who have had supported PYC to this day. During the last quarter of this year, let us make the best time in our life and be more productive in any way we can.

Wishing you all good health and thank you for your continued support!

Regards,  
Filda C. Yusgiantoro

Regards,

*Filda Citra Yusgiantoro, Ph.D.*

Chairperson

3<sup>rd</sup> Quarter | July-September 2020

Events in

# Energy Sector

# EVENTS IN ENERGY SECTOR

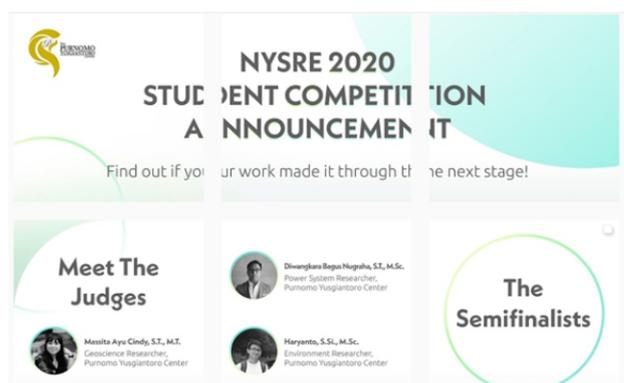
## IUGC Webinar Series: Creating Surge on Renewable Energy Usage in Indonesia during Coronavirus Pandemic



On 12 September 2020, one of PYC's researchers, Massita Ayu Cindy was invited as a webinar speaker with the topic Creating Surge on Renewable Energy Usage in Indonesia During Coronavirus Pandemic. Also present as speakers in this webinar were Sugeng Mujiyanto as the Head of the Bureau of Energy and Trial Policy Facilitations of Dewan Energy Nasional (DEN) and I Made Aditya Suryawidya as the Head of Business Solutions of SUN Energy as speakers.

This webinar was part of the International Undergraduate Geophysical Competition (IUGC) 2020 series of events. The global massive movement in the energy transition has created new opportunities for geophysical engineering students which are usually linked to oil and gas to explore renewable energy. Therefore, this webinar not only discussed the regulations, targets and progress of Indonesia's renewable energy but also the role of geophysical engineering in the renewable energy industries.

## NYSRE 2020 Student Competition



As part of PYC's mission to spread awareness of energy issues within communities, we were delighted to be able to collaborate with the Society of Renewable Energy (SRE), Institut Teknologi Bandung (ITB). Massita Ayu Cindy, Diwangkara Bagus and Haryanto were invited as PYC's representatives to be the semi-final juries of the NYSRE Student Competition. There were three competitions held as part of the NYSRE series of events: *Kajian Lembaga* (institutional studies), Innovative Project and Essay. Hundreds of students from various academic institutions submitted their best masterpiece to these competitions. In this semi-final round, the top 2

*Kajian Lembaga*, the top 10 innovation projects and the top 20 Essays were chosen to continue on the final round. Congratulations to the winners!

# EVENTS IN ENERGY SECTOR

## NYSRE 2020 Webinar Day 6 : “Peran Think Tank untuk Kemajuan Indonesia”



On 7 August 2020, Chairperson of the PYC, Filda Yusgiantoro, was invited to be one of the speakers on the NYSRE 2020 Webinar. The webinar discussed the role of think tank for Indonesia's energy sector development. Besides PYC, The Program Manager of IESR, Marlistya Citraningrum, was also invited to the webinar to be a speaker alongside our Chairperson. This webinar was part of the NYSRE 2020 Webinar Series, that discussed many topics in the energy sector. Various speakers were invited to the webinar series, including representatives from the private companies, governments and NGOs.

3<sup>rd</sup> Quarter | July-September 2020

# Social Initiatives

# EVENTS IN SOCIAL SECTOR

## Poetry Reading Competition for Primary School Students



To commemorate the 75<sup>th</sup> Independence Day of the Republic of Indonesia, Purnomo Yusgiantoro Center held an online Poetry Reading Competition for Primary School Students. The participants for this competition was divided into two age-group categories; the first category was for children aged 7-9 years and the second one was for children aged 10-12 years. The process of this competition started from early August, with registration for participants and uploading the videos into their own

social media account like Facebook and Instagram. There were 133 participants from 12 provinces uploaded the video, who were then reduced to 10 finalists for each category eligible to enter the grand final to read a poetry online in front of the judges. The titles for the poetry that were read in the final round were “Museum Perjuangan” by Kuntowijoyo for the finalists in the first category and Chairil Anwar’s “Stories for Dien Tamaela” for the finalists in the second category. The supporters from each finalists provided a lot of support and encouragement in the PYC YouTube live chat column where the Purnomo Yusgiantoro Center Poetry Reading Competition was broadcast live.

## PYC Support on Kolintang Competition



Purnomo Yusgiantoro Center (PYC) supported an activity carried out by the Persatuan Insan Kolintang Nasional (PINKAN) Indonesia, in commemoration of the 75<sup>th</sup> Independence Day of the Republic of Indonesia. The highlight of this activity was the Virtual Kolintang Creativity Competition (LKVV) to win the Minister of Communication and Information of the Republic of Indonesia's Cup on Saturday, 29 August 2020 which was broadcast live on PINKAN Indonesia's YouTube channel.

PYC also supported activities carried out by PINKAN Indonesia on Indonesia's 75<sup>th</sup> Independence Day, 17 August 2020, which were the kolintang performances on Mount Klabat and Lake Tondano. All of the kolintang players simultaneously played the national anthem, *Indonesia Raya*, followed by the song *Hari Merdeka*. The Fantastic Primavista Studio from Lembean gave a wonderful performance at Mount Klabat while The Moraya Fortress Cultural and Language Arts Group performed on a floating stage on Lake Tondano. The 9 finalists of Virtual Kolintang Creativity Competition were judged by 3 panelists: Samuel A. Pengorpton, B.Sc., Director-General of Aptika, Ministry of Communication and Information; Dr. Drs. Henri Subiakto, S.H., M.A., Expert Staff to the Minister for Communication and Mass Media and Berty Rarun, a kolintang expert.

3<sup>rd</sup> Quarter | July-September 2020

# Academic Corner

## Indonesia's Demand-Side Management Actions Need More Spotlights

By: Diwangkara Bagus Nugraha  
Researcher at Purnomo Yusgiantoro Center



Appliance's energy efficiency label (freeimages/Gratuit)

Indonesia's approaches to energy management tend to use supply-side management (SSM), rather than demand-side management (DSM). Despite the inclusion of demand-side management in Indonesia's current regulations, gaps are still existing in the implementation.

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

## Good News is a Bad News: Indonesia's Electricity Subsidy

By: Massita Ayu Cindy  
Researcher at Purnomo Yusgiantoro Center



Maintenance of electricity transmission and distribution infrastructure in Indonesia's remote area. (IEC 2019/ Giovanni Piere)

Electricity subsidy in Indonesia is both good and bad news. On one hand, it gives benefits to people to be able to access affordable energy. But on the other hand, it causes a massive debt to the government, disruption to the PT PLN cash flow and environmental damage. It is such a complex issue and without proper calculation, could lead to social, economic and political turmoil within the country. What should be considered to deal with Indonesia's electricity dilemma?

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

## The Urgency of the New and Renewable Energy Law in Indonesia

By: Akhmad Hanan  
Researcher at Purnomo Yusgiantoro Center



New and Renewable Energy Illustration: Solar Power Generation ([PxHere](#))

Currently, Indonesia does not yet have a Law on New and Renewable Energy (NRE). Regulations regarding NRE are currently limited to government, presidential or ministerial regulations. These laws' urgency is very important because the existing regulations are considered unrepresentative and the rules at the ministerial level are considered inconsistent and volatile. It is hoped that the NRE law will become a more substantial legal basis for regulating NRE in Indonesia. Besides, It is also expected to increase the use of new and renewable energy, which is targeted to reach 23% in 2025 of the national energy mix according to national energy policy regulations (KEN).

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

## Optimizing Geothermal Energy for Green Economy Recovery in Indonesia

By: I Dewa Made Raditya Margenta  
Research Assistant at Purnomo Yusgiantoro Center



Geothermal energy in the middle of the paddy field. (IEC 2019/Ady Agustian)

The biggest challenge for developing countries after being severely struck by the COVID-19 pandemic is reviving the economy sector. Indonesia, as one of them, should learn from the 1997-1998 crisis that economic recovery will not happen in a single night. Therefore, Indonesia needs to consider a sustainable solution. Optimizing the available green energy sources, such as geothermal energy, can be the best option. It will not only confirm Indonesia's commitment to the Paris Agreement but also strengthen its energy security.

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

## Unlocking the Blue Energy Potential in Indonesia

By: Haryanto

Research Assistant at Purnomo Yusgiantoro Center



Tidal and wave in the ocean. (Unsplash/Max Kukurudziak)

Nowadays, renewables have been a topic of broad discussion. Renewables such as solar energy, bioenergy, geothermal, wind and hydro are commonly discussed in many forums. The use of renewables is closely associated with the increasing energy security. Nevertheless, other renewables, such as energy from the ocean or what is known as a blue energy, is still rarely discussed. Indonesia, as the largest archipelago country in the world, has a huge potential of blue energy that needs to be explored and leveraged.

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

## The 23% NRE Target, Within Grasp or Not?

By: Muhammad Razin Abdullah

Research Assistant at Purnomo Yusgiantoro Center



Wind turbine is one of the renewable energy options (Pexels).

The global energy trend is heading towards clean energy. This common goal has been stated in the 2015 Paris climate agreement, which has been ratified by 190 countries, including Indonesia. The agreement stated that the ultimate goal is to maintain the global temperature rise for this century to below 2°C above pre-industrial levels and even further to 1.5°C. This goal involved energy and climate policy including the so-called 20/20/20 targets. This policy aims to reduce carbon dioxide (CO<sub>2</sub>) emissions by 20%, increase renewable energy's market share to 20% and improve energy efficiency by 20%. Based on this global movement, the Government of Indonesia set a national renewable energy target through the Government Regulation No. 79/2014 on National Energy Policy. This policy stated that Indonesia's target for the new and renewable energy (NRE) contribution to the national energy mix is 23% by 2025 and 31% by 2050.

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

## More Strategies for Solar PV Acceleration After Pandemic

By: Ilyas Taufiqurrohman<sup>1</sup> and Muhammad Ichsan Saif<sup>2</sup>

<sup>1</sup>Green Building and Energy Consultant at PT Narama Mandiri;

<sup>2</sup>Natural Resource Policy Analyst and Lecturer at Institut Teknologi Bandung



Solar PV has promising potential in Indonesia. (IEC 2019/Tonisuria Kurniadi)

Despite promising increase in rooftop solar PV adoption in the last few years, pandemic is expected to hit Indonesia's solar PV development hard. Government of Indonesia needs to remap the current strategies to reaccelerate solar PV development after the pandemic.

In the last five years, we had watched the increasing contribution of solar electricity in our energy mix from 51 MW in 2015 to 152 MW in 2019. The number of rooftop solar PV owners had quadrupled from 351 in 2017 to 1435 owners in 2019, accounting for 16.66 MW or 10.92% of total solar capacity.

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

### The Greening of Indonesia-Gulf Relations

By: Diwangkara Bagus Nugraha (Researcher at Purnomo Yusgiantoro Center)

Published on: The Diplomat

---

Recently, the United Arab Emirates's leading firm on renewable energy, Masdar, inked an agreement with Pembangkitan Jawa Bali, the subsidiary of Indonesia's state electricity company Perusahaan Listrik Negara (PLN), on the development of Indonesia's first floating solar power plant. Such projects exemplify how the energy partnership between Indonesia and the Gulf is increasingly moving toward renewable energy.

Over the years, energy relations between Indonesia and Gulf countries have been dominated by conventional energy in the form of trade in oil and gas. Indonesia's imported crude oil supply relies on Saudi oil. From January to November 2019, the value of Indonesia's crude oil imports reached \$4.29 billion with almost 50 percent coming from Saudi Arabia.

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

### China could be a Partner for Indonesia's Renewable Energy Goal

By: Diwangkara Bagus Nugraha (Researcher at Purnomo Yusgiantoro Center)

Published on: The China Story

---

Indonesia is currently working towards its renewable energy goals. To achieve that, it needs a large amount of investments in the next few years. China, as one of the global leading investors in renewable energy, presents many opportunities for Indonesia. However, there is much homework that needs to be done by both Beijing and Jakarta to tap valuable potential in their ties in the renewable energy field.

The progress towards renewable energy is slow in Indonesia. In 2019, renewable energy comprised only 8.8 per cent of total energy supply, far below the national target of 23 per cent of the total energy mix by 2025. The number has only increased by 3 per cent since the target was enacted in the National Energy Plan in 2015. Currently, Indonesia's power plants are predominantly coal-based, which accounts for over 60 per cent of power generation.

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

### “Perbaikan Iklim di Persimpangan Jalan akibat Pandemi COVID-19”

By: Diwangkara Bagus Nugraha (Researcher at Purnomo Yusgiantoro Center)  
Published on: [katadata.co.id](http://katadata.co.id)

---

Covid-19 pandemic puts the fight against climate change at a crossroads. Now, the future of climate change depends on the government's perspective on the pandemic. Is Covid-19 pandemic an obstacle or a stepping stone for emissions reduction actions?

Please kindly check Diwangkara Bagus Nugraha's (PYC researcher) article on Katadata on how the pandemic urges countries to diversify their energy supply.

[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.

## Indonesia's Carbon Emission Reduction Progress



During this Covid-19, much attention is given to the prevention of coronavirus spreading and also to economic recovery. But how about Indonesia's greenhouse gas (GHG) emissions? What is Indonesia's progress so far in reducing the carbon emissions? This infographic highlights the key sources of GHG emissions and Indonesia's achievement so far to reduce it. Some policies enacted by the government contributing to this cause are also presented. Please visit our data center: <https://datacenter-pyc.org/>

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

## Indonesian Coal Updates: Upstream to Downstream



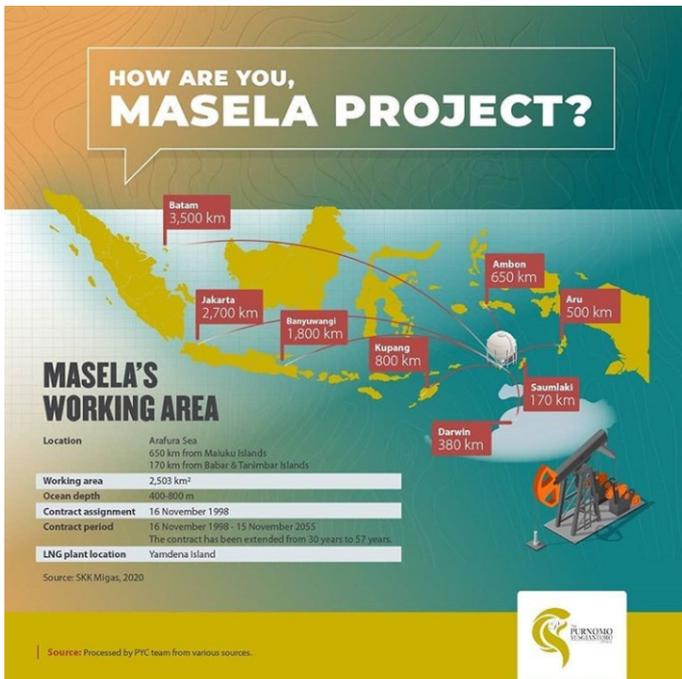
Did you know that Indonesia have abundant coal resources and reserves? In 2019, the total coal resources were 149 million tons and the total coal reserves were 37.6 million tons. These can be processed through various types of downstream activities to increase their value. Among them are coal gasification, liquefaction, upgrading, briquetting, cokes making, underground coal gasification and coal slurry/coal water mixture. For more information on Indonesian coal data updates, please visit the PYC Data Center website ([www.datacenter-pyc.org](http://www.datacenter-pyc.org)).

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

# INFOGRAPHICS

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

## How Are You, Masela Project?



In 2017, Masela Block development had been classified as one of the national strategic projects, following a government plan to increase natural gas production. Developing such a huge natural gas field was challenging. The Masela Project has experienced many challenges that affect their project timeline. This infographic summarizes the Masela Project's potential and its long journey from the very beginning in 1998 to date.

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

## Indonesian Coal Updates: Upstream to Downstream



The energy sector is one of the main drivers for Indonesia's economic growth. Therefore, accelerating investment in the energy sector is required to enhance energy security and further develop the country's economy. By increasing the investment, the revenue from the energy sector should increase as well, and thus, will positively impact the state budget.

For more information on the investment and revenue data updates in energy sector, please visit the PYC Data Center website ([www.datacenter-pyc.org](http://www.datacenter-pyc.org)).

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

3<sup>rd</sup> Quarter | July-September 2020

Our  
**Publications**

## Energy Drink by PYC Ep. 7 - “Apa Kabar Hulu Migas?” (ft. Fadli Rahman)



In this podcast, PYC invited a millennial BUMN Commissioner. Fadli Rahman is currently serving as a commissioner of PT Pertamina Hulu Energi. How was his career journey to get his current position? What is the development of upstream oil and gas in the future, especially after this pandemic condition? What are the key factors in developing Indonesia's oil and gas industry in the future? Everything will be discussed exclusively with Fadli Rahman and one of our research team, Razin.

Click the logo below to access our podcast!



## Energy Drink by PYC Ep. 8 - “Memahami IPO BUMN” (ft. Saptono Adi Junarso)



In this podcast, PYC had the opportunity to understand more deeply about the concept of an IPO with the Executive Vice President of the Indonesia Stock Exchange (BEI), Saptono Adi Junarso. The issue that has erupted in the past 2 months regarding the IPO plan for PT Pertamina's sub-holding has given mixed reactions in the community. However, what exactly is an IPO? How far the IPO can affect the internal company? How is the performance of BUMN that have conducted IPO? And what does a company need to be successful at an IPO? All these questions will be discussed thoroughly and exclusively with Saptono Adi Junarso and one of our research team, Ayu.

Click the logo below to access our podcast!



## Energy Drink by PYC Ep. 9 - “Mengintip Peluang Carbon Tax di Indonesia” (ft. Andhyta Firselly Utami)



In this podcast, PYC discussed the carbon tax implementation in Indonesia with Andhyta Firselly Utami (Afutami). The carbon tax is an economic instrument that assigns a cost for emitted carbon by an entity. Some economic experts argue that carbon tax is a strong and effective policy to reduce emissions. Furthermore, the policy can be a gateway to restructure the highly subsidized fossil-based economy.

How is the carbon tax implementation opportunity in Indonesia? What are the challenges to implement carbon tax? What can Indonesia learn from other countries that have implemented a carbon tax? Please find out the answers in our podcast where Afutami and PYC’s researcher, Haryanto, discussed this topic.

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 cover the latest news in the energy sector and present it to you every Saturday. Keep updated with the latest energy updates by listening to Energy 24/7!

Click the logo below to access our podcast!



## Indonesian Journal of Energy Vol. 3 No. 2

Indonesian Journal of Energy Vol. 3 No. 2 (August 2020) has been published with six papers in the journal. The following papers are:

1. Biomass Waste and Low Rank Coal Gasification Technology with Carbon Capture System to Optimize A Clean Energy Production as An Alternative Solution to Achieve Energy Security in Indonesia, by Ardian N. Baskoro (Institut Teknologi Bandung) and Odara E. Aptari (Institut Teknologi Bandung).
2. Facing Indonesia's Future Energy with Bacterio-Algal Fuel Cells, by Intan Subadri (Institut Teknologi Bandung), Adhi Satriyatama (Institut Teknologi Bandung) and Ignatius D. M. Budi (Institut Teknologi Bandung).
3. The Role of Fixed-Dome and Floating Drum Biogas Digester for Energy Security in Indonesia, by Ibnu Budiman (Wageningen University and Research).
4. Can Energy Trading be a Solution for Indonesia's Energy Mix Goal through Solar Energy? by Zagy Y. Berian (Institut Teknologi Bandung) and Vincent O. Kaulika (Institut Teknologi Bandung).
5. Performance Enhancement of Solar Panels Using Adaptive Velocity-Particle Swarm Optimization (AVPSO) Algorithm for Charging Station as an Effort for Energy Security, by Luthfansyah Mohammad (Institut Teknologi Sepuluh Nopember), Muhammad K. Asy'ari (Institut Teknologi Sepuluh Nopember), Mokhammad F. Izdiharrudin (Institut Teknologi Sepuluh Nopember) and Suyanto (Institut Teknologi Sepuluh Nopember).
6. Geothermal Salt Factory (GSF) Design in Parangwedang Geothermal, Bantul, Special Region of Yogyakarta, by Alfian Gilang (UPN "Veteran" Yogyakarta), Mohammad H. Jauhari (UPN "Veteran" Yogyakarta) and Maria T. Kristiati (UPN "Veteran" Yogyakarta).



[Click here to access our journal](#)

3<sup>rd</sup> Quarter | July-September 2020

Upcoming  
**Events**

## The Enight

---



**THE ENSIGHT**

The Enight is for you who wants to know more about Indonesia's energy sector. Come and join us soon on October 2020! We will invite experts to do a discussion with you. Check our social media for the news update.

3<sup>rd</sup> Quarter | July-September 2020

**More from Us**



## Congratulations to the winner

### Category 1



1

**Dzakwaa Suartriko P.**  
SD Muhammadiyah 2 - Samarinda



2

**Brilliyon Ayu Fadhila R.**  
SDN Tompokersan 03 - Lumajang



3

**Putu Kesava Ananda Putra**  
SD Melania III - Central Jakarta



4

**Syalom G. Erlus**  
SD Melania III - Central Jakarta



5

**Tristan Devano**  
SD Santo Yakobus - North Jakarta

### Category 2



1

**Monica Verlyn Christyarini**  
SD Santo Yakobus - North Jakarta



2

**Bianca Maura Filia**  
SDN Padurenan 01 - Bekasi



3

**Ida Ayu Made Kirana Anjani**  
SD Negeri 1 Semarapura Kangin - Bali



4

**Nala Ksatriaputri**  
SDT Bina Ilmu - Parung Bogor



5

**Adinda Elmira Alkhalifi**  
MIN 10 - Blitar

Lomba

**Baca Puisi Anak Online**

Memperingati Hari Kemerdekaan Republik Indonesia



## Favorite Finalists

### Category 1



**Tristan Devano**

SD Santo Yakobus - North Jakarta

### Category 2



**Ngakan Made Agus D. P.**

SD Negeri 1 Pejeng - Bali

## Favorite Contestant



**Khansa Nafisa**

Sekolah Fajar Hidayah Kota Wisata - Bogor



**Save Lives, Stop COVID-19**

# CALL FOR PAPERS

Indonesian Journal of Energy  
Volume 4 No. 1 | February 2021



Visit [ije-pyc.org](http://ije-pyc.org) for submission guideline



## SHARE YOUR OPINION

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



Submit it to:

[publication@pycenter.org](mailto:publication@pycenter.org)  
Subject: [OPINION] Your opinion title

Selected opinion will be published on PYC website

# 「JOB OPPORTUNITIES 2021」



We are looking for enthusiastic people to work with us in 2021. If you are interested to be a part of our team, please send your cover letter and CV to [hr@pycenter.org](mailto:hr@pycenter.org) (via e-mail only). Also, mention which following area(s) you are excellent for:

- Senior Researcher
- Communication & Publication Staff
- Finance & Administration Staff
- IT Staff

**Stay tuned on our social media and publication  
for more information!**

 [www.pumomoyusgiantorocenter.org](http://www.pumomoyusgiantorocenter.org)

 @pumomoyusgiantorocenter

 Pumomo Yusgiantoro Center

 Pumomo Yusgiantoro Center

 Pumomoycenter

 [pyc@pycenter.org](mailto:pyc@pycenter.org)

