



Nomor: 154/IESR/V/DIR-E/ET/2021

Lampiran : Kerangka Acuan Kegiatan dan Rangkaian Acara

Perihal : Undangan Konferensi Pers dan Peliputan Peluncuran Laporan "Deep

decarbonization of Indonesia's energy system: A pathway to zero

emissions by 2050"

Kepada Yth.

Jurnalis/Editor Media

Di tempat Dengan hormat,

Demi membatasi kenaikan suhu di bawah 1,5 derajat celcius dan mengurangi potensi bencana iklim global, Indonesia perlu mempunyai ambisi yang kuat dalam mitigasi perubahan iklim dengan menetapkan netral karbon pada 2050. *Institute for Essential Services Reform* (IESR) telah melakukan kajian "Deep decarbonization of Indonesia's energy system: A pathway to zero emissions by 2050" dan menemukan bahwa, di sektor energi, Indonesia secara ekonomi dan teknologi, mampu mencapai emisi nol karbon di tahun 2050.

IESR mengundang Bapak/Ibu untuk mengikuti konferensi pers dan peliputan pemaparan lengkap hasil kajian berjudul "Deep decarbonization of Indonesia's energy system: A pathway to zero emissions by 2050", yang akan dilaksanakan pada:

Konferensi Pers

Hari/Tanggal: Kamis, 27 Mei 2021 Waktu: 14.00 – 15.00 WIB

Tempat :

https://iesr.zoom.us/j/98916087651?pwd=TW9EYWZtOFpLc0REOUJ3TDZJV

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Peluncuran Kajian

Hari/Tanggal: Jumat, 28 Mei 2021 Waktu: 13.30 – 17.00 WIB Tempat: s.id/ZeroEmission2050

Beserta surat undangan ini kami lampirkan pula kerangka acuan kegiatan. Besar harapan kami kiranya Bapak/Ibu dapat memenuhi undangan kami. Atas perhatian dan kesediaannya, kami mengucapkan terima kasih.

Hormat Kami,

Fabby Tumiwa

Eksekutif Direktur IESR

Narahubung: Uliyasi Simanjuntak (081236841273)



Term of Reference Report Launching and Webinar "Deep decarbonization of Indonesia's energy system: A pathway to zero emissions by 2050"

Jakarta, 28 May 2021

Background

Indonesia has ratified the Paris Agreement through the Law no 16/2016. As a result, Indonesia is legally binding to contribute to the global struggle of climate change through ambitious efforts and action in mitigating Greenhouse Gas (GHG) emission and limiting the increase of the global temperature below $1.5\,^{\circ}$ C. In one of the IPCC climate model result for limiting the rise of the global temperature below $1.5\,^{\circ}$ C, the total Greenhouse Gas (GHG) emission must decrease by 45% in 2030 compared to 2010 and reach net zero emission by 2050^{1} . As of now, Indonesia is amongst the top 10 greenhouse gas (GHG) emitters and still projected to increase its emissions with the energy sector as the highest GHG contributor by 2030.

The government of Indonesia has yet to put a clear target to reach climate neutrality. Most recent press release from the coordinating ministry of maritime and investment indicated that the country could reach carbon neutral by 2060 or earlier, which will depend on the availability of international financing and technology transfer². However, question remains whether achieving carbon neutrality by 2060 will be enough to limit the temperature rise below 1.5 $\,^{\circ}$ C and avoid the potential global climate catastrophe. Increasing the country's climate mitigation ambition might still be required and potentially feasible, especially in the energy sector.

Meanwhile, the rapid declining trend of solar PV and wind turbine cost continues. BloombergNEF reported that the decrease in the cost of solar PV modules, wind turbine and Li-ion battery has reached 89%, 59%, and 89% respectively in just one decade (2010-2019). BloombergNEF further projected that 74% out of 15 trillion USD investment in the global power generation for the next three decades would go toward solar, wind and battery/ electricity storage system³. The continuing decline of renewable energy and increased investment in the technologies have given Indonesia an economical option to decarbonize the power sector while attracting necessary investment to foster a more sustainable economy growth in the future.

Indonesia also has the necessary renewable energy potential to achieve a fully decarbonized energy system. For example, technically, there is about 3000-20000 GW of solar potential, which take up 4-24% of the country total land mass, that could be utilized for generating low carbon energy⁴. Considering the technological innovation rate, this potential could be an underestimation as the solar PV efficiency could still increase and the required land use would also decrease in that case to produce the same amount of energy. Aside from the solar, the country is also blessed with other renewable potential such as wind, hydro, and geothermal with a total of more than 200 GW capacity known so far.

To increase the Indonesia's climate ambition and better address the country's potential to decarbonize its whole energy system, IESR in a collaboration with Lappeenranta University of Technology (LUT) and Agora Energiewende, has conducted a modelling of energy system toward

¹ https://www.ipcc.ch/sr15/chapter/chapter-2/

² https://maritim.go.id/pemerintah-terus-mendorong-indonesia-untuk-capai-zero-emission/

³ Izadi (2020). BloombergNEF.

⁴ https://iesr.or.id/pustaka/beyond-207-gigawatts-unleashing-indonesias-solar-potential



achieving carbon neutral in 2050. The summary of modelling results as well as the stepwise energy system transformation as part of the analysis of the model results are discussed in the report "**Deep decarbonization of Indonesia's energy system: Pathways to carbon neutrality by 2050**". Through this report, IESR intends to describe a vision of zero emissions in the Indonesian energy sector by 2050. Though based on existing technology and the best available assumptions, this vision is not meant as the only feasible scenario. Rather, it shows the magnitude of the transformation needed in Indonesia to reach the targets.

This study report will be launched in a webinar which is also intended to gain insights and perspectives from other key stakeholders on the feasibility and pathway for the country to reach carbon neutral by 2050. The dialogue and discussion in the webinar will be focused on the pathway, as well as challenges and opportunities in realizing the necessary energy transformation for climate neutral Indonesia.

Objective

- 1. To inform and launch an IESR report named "Deep decarbonization of Indonesia's energy system: Pathways to carbon neutrality by 2050" as well as the model and the modelling results that the study is based on
- 2. To gain insight of the key stakeholder's perspective on achieving net-zero energy system as soon as 2050
- 3. To discuss on key policy supports that could enable Indonesia to realize net-zero energy system by 2050

Time and Place

Press Conference will be held on:

Day, Date : **Thursday, 28 May 2021** Time : **14.00 - 15.30 WIB**

Place :

https://iesr.zoom.us/j/98916087651?pwd=TW9EYWZtOFpLc0REOUJ3TDZ

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The Study report launching, and webinar "Deep decarbonization of Indonesia's energy system: A pathway to zero emissions by 2050" will be held on:

Day, Date : **Friday, 28 May 2021**Time : **13.30 - 17.00 WIB**Place : **s.id/ZeroEmission2050**

Agenda

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Time	Agenda	
Press Conference, 27 May 2021		
14.00-14.05	Greeting and housekeeping	
	Uliyasi Simanjuntak, IESR	
14.00-14.15	Opening remarks	
	Fabby Tumiwa, Executive Director IESR	
14.15-14.30	Study report presentation	
	Pamela Simamora, IESR	
14.30-15.00	Discussion with journalist	
	Moderated by Uliyasi Simanjuntak, IESR	
Study report launching, and webinar, 28 May 2021		



Time	Agenda	
13.20-13.25	Registration and Preparation	
13.25-13.30	Webinar opening, rules, and governance Gandabhaskara Saputra, Outreach & Engagement Adviser IESR	
13.30-13.40	Opening remarks Fabby Tumiwa, Executive Director IESR	
1 st Session		
13.40-13.45	Group photo	
13.45-14.00	Presentation: "The global race to meet the Paris Agreement target" Philipp Godron, Agora Energiewende	
14.00-14.20	Presentation: "The energy system transition model: model construction and robustness" Prof. Christian Breyer, LUT University	
14:20-15:00	Discussion with Prof. Christian Breyer, LUT University Philipp Godron, Agora Energiewende Moderated by Agus Tampubolon, IESR	
2 nd Session		
15:00-15:30	Study report presentation: Pamela Simamora, IESR "Deep decarbonization of Indonesia's energy system: A pathway to zero emissions by 2050"	
15.30-16.15	First round of responses from panelist (6-8 minutes for each panelist): 1. Dr. Dadan Kusdiana, MEMR 2. Josaphat Rizal Primana, Bappenas 3. Basilio Dias Araujo, Coordinating Ministry of Maritime and Investment 4. Laksmi Dhewanthi, MoEF 5. Darmawan Prasodjo, Ph.D, PLN 6. Dr. Surya Darma, IRES/METI Moderator: Agus Tampubolon, IESR	
16.15-16.45	Open discussion with all presenter and panelist:	
	Moderator: Agus Tampubolon, IESR	
16.45-16.55	Summary remarks and virtual launching Fabby Tumiwa , Executive Director IESR	

Participants

The target number of participants is 500 people which will consist of representatives from the various government institutions, business, bank and financial institutions, the bilateral/multilateral cooperation, NGO, academics, and media.