

Number : 154/IESR/V/DIR-E/ET/2021
Attachment : Term of Reference and Event Agenda
Subject : Press Conference and Study Launching Coverage of **“Deep decarbonization of Indonesia’s energy system: A pathway to zero emissions by 2050”**

Dear Journalist,

To limit the temperature rise to below 1.5 degrees Celsius and reduce the potential of global climate disaster, Indonesia needs to have a stronger ambition in climate change mitigation through setting the goal of carbon neutrality by 2050. The Institute for Essential Services Reform (IESR) has conducted a study of **“Deep decarbonization of Indonesia's energy system: A pathway to zero emissions by 2050”** and found that, in the energy sector, it is economically and technologically possible for Indonesia to achieve zero carbon emissions by 2050.

IESR invites you to attend a press conference and cover the complete presentation of the results of the study entitled **“Deep decarbonization of Indonesia's energy system: A pathway to zero emissions by 2050”**, which will be carried out on:

Pers Conference

Day, Date : Thursday, 27 May 2021
Time : 14.00 – 15.00 WIB (GMT+7)
Place : <https://iesr.zoom.us/j/98916087651?pwd=TW9EYWZtOFpLc0REOUJ3TDZJVVF0UT09> Password: EmisiNol

Study Launch and Webinar

Day, Date : Friday, 28 May 2021
Time : 13.30 – 17.00 WIB (GMT+7)
Place : s.id/ZeroEmission2050

Please kindly find the attachment of the Term of Reference along with this invitation letter. We hope that you will join us in the pers conference as well as study launch and webinar. We thank you for your attention and cooperation.

Sincerely yours,



Fabby Tumiwa
IESR Executive Director

Contact Person : 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 °C. In one of the IPCC climate model result for limiting the rise of the global temperature below 1.5 °C, the total Greenhouse Gas (GHG) emission must decrease by 45% in 2030 compared to 2010 and reach net zero emission by 2050¹. 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 °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 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**

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>

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=TW9EYWZtOFpLc0REOUJ3TDZJVVF0UT09> Password: EmisiNol

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](https://www.youtube.com/watch?v=s.id/ZeroEmission2050)**

Agenda

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
1st 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
2nd 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): Dr. Dadan Kusdiana, MEMR Josaphat Rizal Primana, Bappenas Basilio Dias Araujo, Coordinating Ministry of Maritime and Investment Laksmi Dhewanthi, MoEF Darmawan Prasodjo, Ph.D, PLN Dr. Surya Dharma, 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.