# Maghfira "Afi" Ramadhani

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★ maghfiraer.github.io

**G** [google scholar]

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School of Economics Georgia Institute of Technology 221 Bobby Dodd Way NW Atlanta, GA 30332

#### CURRENT EMPLOYMENT

Graduate Teaching Assistant and Graduate Research Assistant School of Economics, Georgia Institute of Technology 2022 - present

#### RESEARCH INTERESTS

Energy and Environmental Economics, Political Economy, Decarbonization of Energy System, Renewable Energy Development, Petroleum Economics and Management

#### **EDUCATION**

Ph.D. in Economics, Georgia Institute of Technology

M.S. in Petroleum Engineering, Institute of Technology Bandung

ADVISOR: Purnomo Yusgiantoro

B.S. in Petroleum Engineering, Institute of Technology Bandung

July 2021 July 2017

Expected 2027

## **PUBLICATIONS**

#### Peer-Reviewed

"National oil companies and fossil fuel subsidy regimes in transition: The case of Indonesia" (with Muhammad Ichsan and Matthew Lockwood). *The Extractive Industries and Society.* 2022. [Published Version]

## Conference Proceeding

"Comparative Study on Fixed-Price Contract versus Incentive-Based Contract in Indonesia's Oil and Gas Industry" (with Stephen Salomo, Muhammad Rahmadhani, Asep Permadi, and Ari Iskandar). Proceeding of the 46th Indonesia Petroleum Association Convention and Exhibition. 2022. [Final Draft Version] [Gated Version]

"CO2 sink and source matching for better CO2 utilization in increasing oil production: Case study of field X and Y in Indonesia" (with Steven Chandra, Prasandi Abdul Aziz, and Wijoyo Daton). Proceeding of 3rd International Conference on Earth Science, Mineral, and Energy 2020. 2021. [Published Version]

"Is cheap fuel policy a (short-term) remedy for costly transportation in rural Indonesia?" (with Muhammad Ichsan, Yusuf Martak, Chitra Septyandrica, and Purnomo Yusgiantoro). Proceeding of Medan International Conference on Energy and Sustainability 2020. 2021 [Published Version]

#### POLICY BRIEF

"Persembahan ITB: Energi untuk Indonesia [ITB's Policy Recommendation: Energy for Indonesia]". 2020. ITB Press: Bandung. ISBN 978-623-297-022-9 (Editor)

#### WORK IN PROGRESS

"Dynamic Model of Production Sharing Contract in Indonesia."

# SCHOLARSHIP, HONORS, AND AWARDS

School of Economics Graduate Fellowship, Georgia Institute of Technology	2022 - 2027
Richard House Fellowship, Georgia Institute of Technology	2022 - 2024
Best Master Graduate, Institute of Technology Bandung	2021
Society of Petroleum Engineers Undergraduate Scholarship	2015 - 2017
Dean's List, Faculty of Mining and Petroleum Engineering, Institute of Technology Bandung	2013 - 2017

# FUNDED RESEARCH

Co-Investigator. "Development of Upstream Petroleum Economics Algorithm in Python" Indonesian Upstream Oil and Gas Special Task Force, IDR 2,800,000,000.	2022
Co-Investigator. "Study of Strategic Alliance & Partnership with Advanced Technology Provider" Indonesian Upstream Oil and Gas Special Task Force, IDR 1,000,000,000.	2021
Co-Investigator. "Economic Impact Evaluation of One Price Fuel Policy" Institute of Technology Bandung Research and Community Services Fund, IDR 50,000,000.	2020

# TEACHING EXPERIENCE

# Georgia Institute of Technology

### **Head Teaching Assistant**

ECON 4170: International Financial Economics (undergraduate). Instructor: Tibor Besedes	Spring 2023
ECON 4170: Mathematical Economics (undergraduate). Instructor: Matthew Oliver	Spring 2023
ECON 3161: Econometric Analysis (undergraduate). Instructor: Shatakshee Dhongde	Fall 2022

## Institute of Technology Bandung

## Instructor

TM 4021: Energy Economics (undergraduate)	Spring 2021 - 2022
Head Teaching Assistant	
TM 6051: Energy Policy and Planning (graduate). Instructor: Purnomo Yusgiantoro	Spring 2018 - 2022
TM 4021: Energy Economics (undergraduate). Instructor: Purnomo Yusgiantoro	Spring 2018 - 2020
TM 4025: Optimization in Oil and Gas Industry (undergraduate). Instructor: Silvya Rahmawati	Fall 2017

Spring 2022

# PROFESSIONAL ACTIVITIES

#### Associations

Association of Environmental and Resources Economics (AERE)

TM 4215: Petroleum Economics and Project Management (undergraduate)

International Association of Energy Economics (IAEE)

United States Association of Energy Economics (USAEE)

Society of Petroleum Engineers (SPE)

Indonesian Society of Petroleum Engineers (IATMI)

# Training/Workshop

Evidence-based Teaching Practices for Economics School of Economics, Georgia Institute of Technology	2022
South East Asia Energy Transition Partnership - Roundtables Executive Training Institute for Climate, Energy, and Disaster Solutions, Australian National University	2022
Graduate Course Credit: SP6015 Quantitative Methods for Public Policy Analysis School of Architecture, Planning and Policy Development, Institute of Technology Bandung	2022
Online Course: Fundamental Data Analysis in Energy with R Practisee.id	2021
Workshop: Systems Thinking in Digital Transformation Era School of Business and Management, Institute of Technology Bandung	2020

### Consulting

Feasibility Study of Carbon Credits in Geothermal Power Plant, PT Geo Dipa Energi	2021 - 2022
Feasibility Study of ANG Market in West Java province, Pangaea Energy Ltd.	2021 - 2022
Study of Subsurface Engineering using Big Data Analytics,	2021
Study of Decarbonization Roadmap to Achieve Net Zero Emission, PT Pertamina	2021
Recommendations for Increasing Petroleum Production in Indonesia, Indonesian Presidential Office	2020
Background Study of Medium Term Development Plan 2020-2024, National Planning Agency	2018

# University Service

# Institute of Technology Bandung

Proceeding Publication Organizer for National Seminar	2021 - 2022
Liaison Officer Coordinator for National Seminar	2021
Organizing Committee for International Virtual Courses on Improved Oil Recovery	2021
Judge in Case Study Competition SPE SUPERBOWL, SPE ITB Student Chapter	2021
Judge in Energy Presentation Competition, IATMI ITB Student Chapter	2020
Judge in Energy Debate Competition, IATMI ITB Student Chapter	2019
Organizing Committee for Undergraduate Final Projects Expo	2018 - 2022
Vice Coordinating Minister of Student Welfare, ITB Students Assembly	2017 - 2018
Head of Student Development Division, Petroleum Engineering Students Associations	2016 - 2017

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Head of Student Development Division, Petroleum Engineering Students Associations	2016 - 2017
Previous Employment	
Academic Professional	2017 - 2022
Petroleum Engineering Department, Institute of Technology Bandung	
Affiliations: Drilling, Production, and Oil and Gas Management Research Group,	
Center for Research on Energy Policy, Institute for Research and Community Services,	
Carbon and Environmental Research.	
Expert Staff at the Energy and Mineral Resource Services	2019 - 2020
Office of the West Java Governor	
Facilitator at the Energy and Mineral Resources Working Group	2018 - 2019
Optimization and Synchronization Team of the West Java Governor	
Consultant	2018
Indonesia Strategic Institute (INSTRAT)	

## OTHERS

Software	Stata, R, Python, Julia, MATLAB, EViews, LATEX
Languages	English (Fluent), Bahasa Indonesia (Native)
Citizenship	Indonesia (F-1 Visa)

# References

# Purnomo Yusgiantoro Professor of Energy Economics Institute of Technology Bandung Senior Advisor at Indonesia Presidential Office purnomoys@tm.itb.ac.id

# Luky Yusgiantoro

Chairman of Indonesian Oil and Gas Institute at Indonesian Upstream Oil and Gas Special Task Force layusgiantoro@skkmigas.go.id

# Utjok W.R. Siagian

Associate Professor Institute of Technology Bandung Chairman of Center for Research on Energy Policy ucokwrs@tm.itb.ac.id

# Syahrina Anggraini

Director of Carbon and Environmental Research Interim Country Coordinator at Governors' Climate and Forest Task Force (GCF-TF) Indonesia syahrina@cerindonesia.org