

Maghfira “Afi” Ramadhani

Atlanta, GA

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EDUCATION

- **Georgia Institute of Technology** Atlanta, GA
Doctor of Philosophy Student in Economics Aug 2022 - June 2027 (expected)
- **Institute of Technology Bandung** Bandung, ID
Master of Science in Petroleum Engineering Aug 2019 - July 2021
Courses: Econometrics, Energy Policy and Planning, System Modelling for Policy Development
- **Institute of Technology Bandung** Bandung, ID
Bachelor of Science in Petroleum Engineering Aug 2013 - July 2017
Courses: Elementary Statistics, Numerical Method, Computer Programming

SKILLS SUMMARY

- **Computer Software:** Stata, R, Python, Julia, MATLAB, EViews, LATEX
- **Languages:** Bahasa Indonesia (Native), English (Fluent) - TOEFL iBT Score 104 per Dec, 2021

INTERESTS

Energy and environmental economics and policy, Political economy of energy policy, Decarbonization of energy sector, Renewable energy development, Petroleum economics and management

EXPERIENCE

- **School of Economics, Georgia Institute of Technology** Atlanta, GA
Graduate Teaching Assistant (Part-time) Aug 2022 - present
- **Drilling, Production, and Petroleum Economics Research Group, ITB** Bandung, ID
Academic Assistant (Part-time, Contract) Aug 2017 - July 2022
Affiliations: Center for Research on Energy Policy (CREP) ITB, Institute for Research and Community Services (LPPM) ITB
- **Office of the West Java Governor** Bandung, ID
Expert Staff at the Energy and Mineral Resource Services (Part-time, Contract) Jan 2019 - Jan 2020
- **Optimization and Synchronization Team of the West Java Governor** Bandung, ID
Facilitator at the Energy and Mineral Resources Working Group (Part-time, Contract) July 2018 - Dec 2019
- **Indonesia Strategic Institute (INSTRAT)** Bandung, ID
Strategy Consultant at the Think Tank Team for Government (Part-time, Contract) Jan 2018 - June 2018

TEACHING EXPERIENCE

- Georgia Institute of Technology Atlanta, GA
 - ECON 4170: International Financial Economics (undergraduate, TA for Prof. Tibor Besedes), Spring 2023
 - ECON 4170: Mathematical Economics (undergraduate, TA for Prof. Matthew Oliver), Spring 2023
 - ECON 3161: Econometric Analysis (undergraduate, TA for Prof. Shatakshee Dhongde), Fall 2022
- Institute of Technology Bandung Bandung, ID
 - TM 4215: Petroleum Economics and Project Management (undergraduate), Spring 2022
 - TM 4021: Energy Economics (undergraduate), Spring 2021 - Spring 2022
 - TM 4021: Energy Economics (undergraduate, TA for Prof. Purnomo Yusgiantoro), Spring 2018 - Fall 2020
 - TM 6051: Energy Policy and Planning (graduate, TA for Prof. Purnomo Yusgiantoro), Spring 2018 - Spring 2022
 - TM 4025: Optimization in Oil and Gas Industry (undergraduate, TA for Dr. Silvy Rahmawati), Fall 2017

SCHOLARSHIP, HONORS, AND AWARDS

- School of Economics Graduate Fellowship, Georgia Institute of Technology, Aug 2022 - June 2027
- Richard House Fellowship, Georgia Institute of Technology, Aug 2022 - June 2024
- Best Master Graduate, Institute of Technology Bandung, July 2021
- Society of Petroleum Engineers Undergraduate Scholarship, SPE Balikpapan Chapter, July 2015- July 2017
- Dean's List, Faculty of Mining and Petroleum Engineering ITB, awarded in five occasions between 2013-2017

PUBLICATIONS

- “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
- “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
- “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
- “Implementation of Petroleum Fund in Indonesia” [Unpublished master’s thesis]. Institute of Technology Bandung. 2021.
- “Persembahan ITB: Energi untuk Indonesia [ITB’s Policy Recommendation: Energy for Indonesia]”. 2020. ITB Press: Bandung. ISBN 978-623-297-022-9 (Editor)
- “Relationship between Critical Velocity and Gas-Liquid Ratio to Determine Liquid Loading in Gas Well: Preliminary Study” [Unpublished bachelor’s thesis]. Institute of Technology Bandung. 2017.

WORK IN PROGRESS

- “Dynamic Model of Production Sharing Contract in Indonesia.”

PAST PROJECTS

- **Development of Upstream Petroleum Economics Tools**
Lead Petroleum Economist (FTTM ITB) Apr 2022 - July 2022
- **Study of Strategic Alliance & Partnership with Advanced Technology Provider**
Petroleum Economist (PT Gada Energi - PE ITB) Nov 2021 - Mar 2022
- **Feasibility Study of Carbon Credits in Geothermal Power Plant**
Energy Specialist (Carbon and Environmental Research Indonesia - CREP ITB) Dec 2021 - June 2022
- **Feasibility Study of Adsorbed Natural Gas (ANG) Market in West Java province**
Energy Economist (PT LAPI ITB – CREP ITB) July 2021 - Dec 2021
- **Study of Subsurface Engineering using Big Data Analytics**
Petroleum Economist (LPPM ITB – PE ITB) May 2021 - Dec 2021
- **Study of Decarbonization Roadmap to Achieve Net Zero Emission for SOE**
Energy Economist (PT LAPI ITB – CREP ITB) July 2021 - Sep 2021
- **Economic Impact Evaluation of BBM Satu Harga Policy Intervention**
Energy Economist (LPPM ITB – Article 33) Jan 2020 - Dec 2020
- **Recommendations for Increasing Petroleum Production in Indonesia**
Petroleum Economist (Assisted Purnomo Yusgiantoro, Senior Advisor at Presidential Office) Jan 2020 - Mar 2020
- **Background Study of Medium Term Development Plan (RPJMN) 2020-2024**
Energy Specialist (Assisted National Planning Agency) June 2018 - Sep 2018

PROFESSIONAL TRAINING

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

ACADEMIC SERVICES

Institute of Technology Bandung

- Proceeding Publication Organizer for National Seminar, PE ITB, 2021-2022
- Liaison Officer Coordinator for National Seminar, PE ITB, 2021
- Organizing Committee for International Virtual Courses on Improved Oil Recovery, PE ITB, 2021
- Judge in Case Study Competition SPE SUPERBOWL, SPE ITB Student Chapter, 2021
- Speaker in KSEP x SPE ITB Talks: Understanding the Downfall of Oil Price, SPE ITB Student Chapter, 2020
- 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, PE ITB, 2018 - 2022

VOLUNTEER EXPERIENCE

- **Secretary of Alma Mater Relation Division** Bandung, ID
ITB Alumni Association West Java Chapter May 2021 - May 2022
- **Vice Coordinating Minister of Student Welfare** Bandung, ID
ITB Students Association Jan 2017 - Jan 2018
- **Head of Student Development Division** Bandung, ID
Petroleum Engineering Students Association Jan 2016 - Jan 2017

REFERENCES

- **Prof. Ir. Purnomo Yusgiantoro, M.Sc., M.A., Ph.D.**
Professor of Energy Economics, Department of Petroleum Engineering, Institute of Technology Bandung
Minister of Defense Republic of Indonesia, 2009-2014
Minister of Energy and Mineral Resources Republic of Indonesia, 2000-2009
Email: purnomoys@tm.itb.ac.id
- **Ir. Utjok W.R. Siagian, M.Sc., Ph.D.**
Associate Professor, Department of Petroleum Engineering, Institute of Technology Bandung
Deputy Head of Center for Research on Energy Policy (CREP) ITB, 2012-2021
Head of Center for Research on Energy Policy (CREP) ITB, 2005-2011
Email: ucokwrs@tm.itb.ac.id
- **Prof. Ir. Tutuka Ariadji, M.Sc., Ph.D.**
Current Director General of Oil and Gas, Ministry of Energy and Mineral Resources, Republic of Indonesia
Professor of Petroleum Engineering, Department of Petroleum Engineering, Institute of Technology Bandung
Email: tutukaariadji@tm.itb.ac.id
- **Luky A. Yusgiantoro, B.Sc., M.Sc., Ph.D.**
Head of Indonesian Oil and Gas Institute, Upstream Oil and Gas Special Task Force (SKK Migas)
Email: layusgiantoro@skkmigas.go.id
- **Syahrina D. Anggraini, B.Sc., M.Sc.**
Interim Country Coordinator, Governors' Climate and Forest Task Force (GCF-TF) Indonesia
Director, Carbon and Environmental Research (CER) Indonesia
Email: syahrina@cerindonesia.org