# Maghfira "Afi" Ramadhani

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# **Current Appointment**

Student Affiliate, Energy Policy and Innovation Center (EPICenter), 2024-present

### Education

Ph.D. Economics, Georgia Institute of Technology, expected 2027.

Committee: Dylan Brewer (co-chair), Bobby Harris (co-chair), Casey Wichman

M.S. Economics, Georgia Institute of Technology, 2025.

M.S. Petroleum Engineering, Institute of Technology Bandung, 2021.

B.S. Petroleum Engineering, Institute of Technology Bandung, 2017.

### Research Interests

Energy and Environmental Economics, Applied Microeconomics, Empirical Industrial Organization

# Working Paper

- 1. "Digital Dispatch and Demand Response in Grid Emergencies: Evidence from Household Cooling in California's Flex Alerts" (with Dylan Brewer and Soren Anderson)
- 2. "Managing Intermittent Renewable Energy: Review and Synthesis of the Engineering, Economics, and Policy." (with Daniel Matisoff, Matthew Oliver, Santiago Grijalva, Oliver Chapman, and Amanda West). *Under Review*

# Work In Progress

- 3. "Pollution, Avoidance Behavior, and Health" (with Bobby Harris)
- 4. "Battery Storage Entry and Generator Markup"

#### Peer Reviewed Publications

 "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.

### Other Publication

- \* indicates student advised
  - 6. "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

- 7. "Optimization of hydraulic fracturing and economic analysis using production sharing contract and gross split for well-X on a naturally fractured volcanic reservoir: A case study of geothermal well Y in Indonesia" (with Prasandi Abdul Aziz, Willy Dharmawan\*, Steven Chandra, and Wijoyo Daton). Proceeding of 4th International Conference on Earth Science, Mineral and Energy 2021. 2023.
- 8. "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. [Preprint]
- 9. "CO2 sink and source matching for better CO2 utilization in increasing oil production: Case study of field X and Y in Indonesia" (with Prasandi Abdul Aziz, Steven Chandra, and Wijoyo Daton). Proceeding of 3rd International Conference on Earth Science, Mineral, and Energy 2020. 2021.

### Honor, Fellowships, and Awards

Diversity Fellowship in Berkeley/Sloan Summer School in Environmental and Energy Economics, 2025

Georgia Tech EPICenter Summer Research Fellowship, 2025

Best Third Year Paper Award, Georgia Tech School of Economics, 2025

Georgia Tech CRIDC Award (\$1000), 2025

Omicron Delta Epsilon Conference Travel Award (\$500), 2025

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 & Petroleum Engineering, Institute of Technology Bandung, 2013 - 2017

# Conference, Workshops, and Training

\* indicates scheduled presentation

2026 IAEE@ASSA Annual Meeting (Philadelphia, PA)\*

- AERE@SEA Annual Meeting (Tampa, FL)\*; Berkeley/Sloan Summer School in Environmental and Energy Economics (Berkeley, CA)\*; Atlanta Economics PhD Student Symposium (Atlanta, GA); AERE Summer Conference (Albuquerque, NM); Georgia Tech CRIDC (Atlanta, GA); Empirical Method in Energy Economics (Washington, DC)
- 2024 BREAD-IGC PhD course on Urban Economics (Virtual); Southeastern Workshop on Energy & Environmental Economics & Policy at Georgia Tech (Atlanta, GA); CU Environmental and Resource Economics Workshop (Vail, CO); EPICenter at Georgia Tech (Atlanta, GA)
- 2022 Southeast Asia Energy Transition Partnership Roundtables Executive Training, Australian National University (Virtual)

# Professional Membership

Associations of Environmental and Resources Economics (AERE)

International Association of Energy Economics (IAEE), U.S. Association of Energy Economics (USAEE)

### **Professional Activities**

Georgia Tech Economics Chair Search Committee, 2025-2026

AERE Summer Conference Reviewer, AERE@SEA Conference Reviewer, 2025

Founder and Organizer, Georgia Tech Economics PhD Research Workshop, 2025

# Teaching Experience

Georgia Institute of Technology

Instructor of Record

ECON 2250: Statistics for Economists. Fall 2025 [Course Website]

Centre for the Integration of Research, Teaching, and Learning Associate Certificates, 2024 Head Teaching Assistant

ECON 7103: PhD Environmental Economics II. Instructor: Dylan Brewer, Spring 2025

ECON 4440: Environmental Economics. Instructor: Dylan Brewer, Spring 2025

ECON 2250: Statistics for Economists. Instructor: Haoqian Zou, Fall 2024

ECON 4440/6380: Environmental Economics. Instructor: Matthew Oliver, Summer 2023, 2024

ECON 4170: Mathematical Economics. Instructor: Matthew Oliver Spring 2023, 2024

ECON 3110: Advanced Microeconomic Analysis. Instructor: Matthew Oliver, Fall 2023

ECON 3300: International Energy Markets. Instructor: Matthew Oliver, Fall 2023

ECON 4351: International Financial Economics. Instructor: Tibor Besedes, Spring 2023

ECON 3161: Econometric Analysis. Instructor: Shatakshee Dhongde, Fall 2022

#### Institute of Technology Bandung

Instructor

TM4215: Petroleum Economics and Project Management. 2022

TM4021: Energy Economics. 2021-2022 (×3)

Head Teaching Assistant

TM6051: Energy Policy and Planning. Instructor: Purnomo Yusgiantoro, 2018 - 2022 (×5)

TM4021: Energy Economics. *Instructor: Purnomo Yusgiantoro*, 2018 - 2020 (×5)

TM4025: Optimization & Operation Research in Oil and Gas. Instructor: Silvya Rahmawati, 2017

# **Previous Employment**

Academic Professional, Petroleum Engineering Dep., Institute of Technology Bandung 2017-2022.

Internal Affiliations: Drilling, Production, and Oil and Gas Management Research Group, Center for Research on Energy Policy, Institute for Research and Community Services, Indonesia Center of Excellence on Carbon Capture and Storage

External Affiliations: Fellow, Carbon and Environmental Research Indonesia; Expert Staff in Energy, Office of the West Java Governor; Consultant, Indonesia Strategic Institute (INSTRAT)

### Additional Information

Software: Stata, R, Python, LATEX, Julia (basic)

Language: English (fluent), Bahasa Indonesia (native)

Citizenship: Indonesia (F-1 Visa)