Energy Economic Policy (ENES 801003-6 Credits)

Instructors
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Guest Lecture
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Course description

This course covers topics such as energy economics theory, energy transition (fundamentals, innovation, and related technologies, the role of government, its impact on job inequality), renewable energy from an economic perspective, decarbonization policies, and carbon pricing. It also discusses the role of public policy instruments (taxes, regulations, incentives) in accelerating the transition from traditional fossil fuels. Learning is conducted in person and is student-centered, using methods such as small group discussions and problem-based learning. Assessment for this course is carried out through individual assignments, group assignments, midterm exams, and final exams. The course is delivered in Indonesian.

Course objective

Students who complete this course will be able to:

1 Analyze the economics of an energy system (energy demand, energy supply, and energy pricing).
2 Analyze the energy market and its key players, including the government, industry, and consumers.
3 Apply economic theories and models to analyze contemporary energy policies.
4 Analyze various energy policies worldwide.

Course content

Week/Instructor /Date	Topic	Reading	Assignments
W1/ WWP/ 26 Aug	Introduction to Energy Economics and Policy	SCB Ch. 1, R&H Ch. 1, F&D	
W2/ WWP/ 2 Sept	Energy Demand Analysis	SCB Ch. 2-6	
W3/ DH/ 9 Sept	Energy Economics: Energy Demand and Supply	R&H Ch. 4	
W4/ - / 16 Sept	***LIBUR***		
W5/ DH/ 23 Sept	Energy Economics Modeling: A Deterministic Approach.	MMP, R&H Ch. 4	
W6/DH/30 Sept	Energy and Sustainable Development: Current Issues and Policies	SCB Ch. 18-27	
W7/ WWP/ 7 Okt	Energy supply	SCB Ch. 7-11	HW1
W8/ WWP/ 14 Okt	**MIDTERM EXAM**		

Week/Instructor /Date	Topic	Reading	Assignments
W9/EAS/ 28 Okt	Fundamentals of Energy Markets and Supply-Demand	VK, SCB Ch. 12-17	HW2
W10/ EAS/ 4 Nov	Externalities in the Energy Market	VK, SCB Ch. 12-17	
W11/ EAS/ 11 Nov	Organization and Regulation of the Energy Market	VK, SCB Ch. 12-17	
W12/ EAS/ 18 Nov	Energy Transition and Its Impact on the Energy Market	VK, SCB Ch. 12-17	
W13/ WWP/ 25 Nov	Energy pricing	SCB Ch. 12-17	
W14/ WWP/ 2 Des	Energy Policy	SCB Ch. 28-29, R&H Ch. 5	
W15/ EAS/ 9 Des	*Presentation Project Assignment*		
W16/ EAS/ 16 Des	**FINAL EXAM**		

Grading System (4 credits)

HW	= 10%
Essay (@5 orang/kelompok)	= 15%
Class Project (@5 orang/kelompok)	= 15%
Mid Exam	= 30%
Final Exam	= 30%

Required Books

1. Munasinghe, Mohan, and Peter Meier. Energy policy analysis and modelling. Cambridge University Press, 1993. **(MMP)**
2. Farhad Taghizadeh-Hesary, Dayong Zhang. The Handbook of Energy Policy. Springer, 2023. **(F&D).**
3. Vincent Kaminski. Energy Markets. 2012. **(VK)**
4. Subhes C. Bhattacharyya. Energy Economics.Springer. Springer, 2011. **(SCB)**
5. Brian Roach & Jonathan M. Harris. Energy Economics and Policy. Boston University, 2021. **(R&H)**