

Course Schedule Information	
Course Code / 時間割コード	881263
Semester / 開講区分(開講学期)	Fall and Winter Term
Day and Period / 曜日・時間	Tue3
Course Name (Japanese) / 開講科目名	気候変動とエネルギートランジションガバナンス
Course Name / 開講科目名(英)	Climate Change and Energy Transition Governance
Capacity / 定員	0
Room / 教室	人/本館 3 2 講義室
Course Numbering Code / ナンバリング	88INES9U100
Required/Optional / 必修・選択	受講対象：特別聴講学生のみ Z26029
Type of Class / 授業形態	Lecture Subject
Credits / 単位数	2.0
Student Year / 年次	1,2,3,4,5,6
Instructor / 担当教員	BABOVIC ALEKSANDRA
Course of Media Class / メディア授業科目	Not Applicable

Detailed Syllabus Information	
Course Subtitle / 授業サブタイトル	Climate Change and Energy Transition Governance
Language of the Course / 開講言語	English
Learning Methods / 学習方法	<p>Listening and watching face-to-face/online class: Listening and watching a lecture, video, or demonstration, face-to-face or via online (e.g., attending a face-to-face lecture, watching an on-demand video)</p> <p>Reading: Reading books and academic papers (e.g., summarizing an academic paper, reading information on a website)</p> <p>Discussion: Learning through question-and-answer interactions and exchanges of opinions among students and between students and the instructor (e.g., pair/group discussion, online chat, one-on-one guidance for writing an academic paper)</p> <p>Collaborative work: Working as a pair or a group (e.g., producing a poster through group work)</p> <p>Research: Collecting information from books and academic papers; gathering and analyzing data by fieldwork (e.g., review of previous research, fieldwork)</p> <p>Presentation: Writing papers, making presentations, and creating works (e.g., report writing, oral/poster presentation, creation of works, portfolio development)</p> <p>Online lecture, on-demand content reading, research to deepen the existing concepts and forum contribution write up and discussion, in-class panel discussion/presentation (group coordination), group case study research</p>
Course Objectives / 授業の目的と概要	<p>The course approaches energy transition (ET) as one of the essential aspects of governing and tackling the issue of climate change. The subject of the energy transition is highly technical and requires a polycentric approach to its management which requires government, business, scientific, and community actors to be involved and interact around the same goal. The first module looks at the government-level domain of climate and energy transition governance, its tools, efficiency/ effectiveness, and limitations of their implementation across case studies. The second module observes the role and necessity of government financial intervention in the renewable energy markets, the role of energy and procurement companies (EPCs) that are day-to-day operators of renewable projects, and the role of the nuclear (another clean energy source) and fossil fuel industries in the process of energy transition. The third module offers an insight into the role of science and technology in pacing the ET process and the environmental challenges posed by renewable energy sources. The fourth part focuses on social acceptance and the role of indigenous and specialized knowledge as key components of a successful ET. The course explores multi-dimensional challenges that climate change and ET as complex governance problems face and offers a better understanding as to why outcomes might take longer and imperfect paths until they are visible.</p>
Learning Goals / 学習目標	<p>1</p> <ul style="list-style-type: none"> <li>- Basic knowledge of the climate change and ET politico-legal instruments, their financial technological, and societal contexts through lenses of different disciplines</li> <li>- Broaden your understanding of climate change and ET policies beyond narratives advanced by ideological and political agendas.</li> </ul>

		<ul style="list-style-type: none"> <li>- Critically evaluate the policy objectives/instruments of climate and ET governance and think more holistically about the topic to include multi-disciplinary tools required for an uncertain and unpredictable nature of the topic studied.</li> <li>- Critical thinking and effective use of concepts and findings from other disciplines, beyond political science related to climate change and ET.</li> <li>- Ability to conduct independent research; organize an engaging discussion that revolves around relevant questions and arguments to be demonstrated; ability to present your work in coherent/pedagogical way.</li> <li>- Learning from first-hand experiences of individuals that are involved in climate change and ET process on an everyday basis.</li> </ul>
Requirements, Prerequisites / 履修条件・受講条件		
Attendance and Student Conduct Policy / 出欠席及び受講に関するルール		
Class Plan / 授業計画	1st	Title:Introduction lecture
		What is climate governance and why is energy transition important? Mapping out the themes, structure of the course, requirements.
		Instructor:
		Independent Study Outside of Class:Brief introduction to climate governance and energy transition (exercise) Mapping out class content and its structure Overview of the assignments requirements, work modality and plan for the semester
	2nd	Title:Climate governance - definition, elements, actors
		Jordan, A. et al. " Governing Climate Change Polycentrically: Setting the Scene, " In in Governing Climate Change: Polycentricity in Action?. Cambridge University Press, 2018, 3-20 (excerpts).
		Van Asselt, Harro and Zelli Fariborz " Domains and Actors of Governance, " in Governing Climate Change Polycentricity in Action?. Cambridge University Press, 2018, 27 – 96
		Instructor:
	3rd	Independent Study Outside of Class:Lecture
		Title:Security and geopolitical aspects of energy transition
		Hartley, Peter, " Climate Change and Energy Security Policies: Are They Really Two Sides of the Same Coin?, In Looney, R. (ed.). Handbook of Transitions to Energy and Climate Security.New York: Routledge, 2017.
		Church, C. and Crawford, A. (2020). " Minerals and the Metals for the Energy Transition: Exploring the Conflict Implications for Mineral-Rich, Fragile States, " In Hafner, M. and Tagliapietra, S. (eds.) The Geopolitics of the Global Energy Transition: Lecture Notes in Energy 73, 279-304.
	4th	Instructor:
		Independent Study Outside of Class:Independent study and mini essay preparation
		Title:Implementation of energy transition policies
		Vigoya, Marlen Fonseca/Mendoza, José García et. al. (2020). " International energy transition : a review of its status on several continents. " International Journal of Energy Economics and Policy 10 (6), 216 - 224. <a href="https://www.econjournals.com/index.php/ijeep/article/download/10116/5439">https://www.econjournals.com/index.php/ijeep/article/download/10116/5439</a> . doi:10.32479/ijeep.10116.
	5th	Ohta, H. (2021). " Why Japan is No-Longer a Front-Runner: Domestic Politics, Renewable Energy, and Climate Change Policy, " In Midford P. and Moe, E. (eds.). New Challenges and Solutions for Renewable Energy: Japan, East Asia and Northern Europe. Cham: Palgrave Macmillan, 51-76.
		Instructor:
		Independent Study Outside of Class:Panel discussion (presentations)
		Title:Policy framework for governing and financing energy transition
		Dell ' Aquila, Marco, Daniel Atzori, and Ofelia Raluca Stroe, " The Role of Policy Design and Market Forces to Achieve an Effective Energy Transition: A Comparative Analysis Between the UK and Chinese Models, " In The Geopolitics of Global Energy Transition (2020), 227-255.

		Van de Putte, Alexander, Akshu Campbell-Holt and George Littlejohn, " Financing the Sustainable Energy, " In The Geopolitics of Global Energy Transition (2020), 257-277.
		Instructor:
		Independent Study Outside of Class:Independent study and mini essay preparation
	6th	Title:Financial tools and market players of energy transition
		" Carbon Pricing for Energy Transition and Decarbonization, " ADB Report, November 2022.
		Vizcarra, Hana, " Shifting Perspectives: E&P Companies Talk Climate and the Energy Transition, " Corporate Climate Disclosures, Environmental and Energy Law program, March, 26, 2019.
		" The thorny path to energy transition: Why EPC companies need to reposition themselves, " Roland Berger report, July 2022, 1-8.
		Instructor:
		Independent Study Outside of Class:Panel discussion (presentations)
	7th	Title:Fossil fuels and nuclear energy in energy transition
		" The Oil and Gas Industry in Energy Transitions, " World Energy Outlook special report, IEA, 2020. (excerpts)
		Bowen, Matt and Kat Guanio, " A Critical Disconnect: Relying on Nuclear Energy in Decarbonization Models While Excluding it from Climate Finance Taxonomies, " Columbia SIPA Commentary (July 2023).
		Mansouri et al. " The Role of Nuclear Power in Clean Energy and Green Transitions, " Observer Research Foundation, T20 Policy Brief, July 26, 2023.
		Instructor:
		Independent Study Outside of Class:Panel discussion
	8th	Title:Technology as enabler of energy transition
		The Role of Technology and Science in Energy Transition
		" Innovation to Net Zero: The Role of Technology in the Energy Transition, " Panel Discussion, Center on Global Energy Policy, Columbia SIPA, 2023. <a href="https://www.youtube.com/watch?v=SfAzcMnrndI">https://www.youtube.com/watch?v=SfAzcMnrndI</a>
		Gitelman, L., D. and Kozhevnikov, M.V. (2023), " New Approached to the Concept of Energy Transition in the Time of Energy Crisis, " Sustainability 15 (6), 5167.
		Gitelman, Lazar D. And Mikhail V. Kozhevnikov, " New Approached to the Concept of Energy
		Instructor:
		Independent Study Outside of Class:Lecture
	9th	Title:Innovation and energy transition: running at different paces?
		Khan, Khalid and Chi Wei Su, " Does Technology Innovation Complement the Renewable Energy Transition, " Environmental Science and Pollution Research 30, 30144-30154 (2023).
		" Accelerating the Energy Transition through Innovation, " IRENA Working Paper, (2017).
		Instructor:
		Independent Study Outside of Class:Independent study and mini essay preparation
	10th	Title:Environmental safety of renewable energy
		Moore, Andrew, " Renewable Energy Poses Challenge for Wildlife Conservation, " College of Natural Resources News, November 13, 2019.
		Karlsson, Carl-Johan and Katarina Zimmer, " Green Energy ' s Dirty Side Effects, " Foreign Policy, June 18, 2020.
		" Environmental Impact of Renewable Energy - A Value Chain Approach, " AIIB, November 17,
		Instructor:
		Independent Study Outside of Class:Panel discussion (presentations)
	11th	Title:Guest Lecture
		TBA
		Instructor:
		Independent Study Outside of Class:Guest lecture

	12th	Title:Social acceptance and reputation of renewable energy sources				
		Ellis, Geraint, Nina Schneider, Rolf Wüstenhagen, “ Dynamics of social acceptance of Renewable Energy: An Introduction to the Concept, ” Energy Policy 181, October 2023.				
		Howlett, Alex, “ ‘ Culture war ’ threatens to undermine green energy transition, ” Financial Times, September 11, 2023.				
		Instructor:				
	Independent Study Outside of Class:Lecture					
	13th	Title:Indigenous knowledge and citizen science in renewable energy transition				
		Barborsa, Luisa, Carlos del Canizo, Hema Revuelta, “ Participatory citizen science in solar energy research: going beyond data collection to promote the energy transition, ” Journal of Science Communication 21 (02), N06, 2022.				
		“ Renewable energy and jobs, “ Annual Review 2022, IRENA. (excerpts)				
		Instructor:				
	Independent Study Outside of Class:Independent study and mini essay prepration					
	14th	Title:Panel discussion				
		Presentations				
Instructor:						
Independent Study Outside of Class:Panel discussion (presentations)						
15th	Title:Final report presentation					
	Final report					
	Instructor:					
	Independent Study Outside of Class:Final report presentations and submission					
Textbooks / 教科書・指定教材						
Reference / 参考図書・参考教材						
Grading Policy / 成績評価		Evaluation Methods / 評価方法	Report/paper	Presentation	Forum contribution (mini essay)	Learning engagement
		Learning Goals1	○	○	○	○
		Allocation of Marks / 評価割合	30%	30%	30%	10%
Additional Information on Grading / 成績評価に関する補足情報						
Reasonable Accommodation / 合理的配慮		<ul style="list-style-type: none"> <li>• If you need reasonable accommodation to participate in this class due to disability (including intractable disease and chronic condition), please contact the office for students with disabilities (e.g., Educational Affairs Section, Academic Affairs Section, Student Affairs Section) at your school/faculty or graduate school, or the Disability Advisory and Support Service Office of the Health and Counseling Center.</li> <li>• For more information, please visit the following website or contact the Disability Advisory and Support Service Office of the Health and Counseling Center. Website : <a href="https://acs.hacc.osaka-u.ac.jp">https://acs.hacc.osaka-u.ac.jp</a> Tel : 06-6850-6107 E-mail : <a href="mailto:campuslifekenkou-acs@office.osaka-u.ac.jp">campuslifekenkou-acs@office.osaka-u.ac.jp</a></li> </ul>				
Special Note / 特記事項		This course will be conducted in hybrid form, with a mixture of in-person/Zoom meetings, and on demand content.				
Office Hours / オフィスアワー		Wednesday, 15:10 (by prior appointment)				
Course Conducted by Instructors with Practical Experience / 実務経験のある教員による授業科目						