Course Overview: Repowering Leadership in European Energy and Food

DAY 1

Topic 1	Energy relations
Faculty	Michael LaBelle Alberto Pototschnig Margarita Balmaceda
Teaching mode	Interactive discussions and presentations, consultations and group work
	Session titles and descriptions:
	The food that is available in local markets, and its price, is often affected by a whole range of factors that may occur at places far away, or at scales that are very large: given the global interconnectedness of supply chains, their potential to be disrupted is high. This session will examine some of the factors that give rise to the fragility (economically, politically and environmentally), highlighting the role of cascading and systemic risks. What can build resilience in food systems, and is this likely to happen? **Ensuring resiliency of the Eu energy system - Pototschnig** The first session will focus on the dimensions of resiliency, which include the diversification of energy sources and, for imported energy, routes, but also adequate infrastructure across the EU. It will also look at how resiliency could be guaranteed in an energy system with a greater penetration of renewable resources, some of which are intrinsically more variable in their energy output than conventional resources. The second session will assess the way in which resource adequacy and network expansion are dealt from a policy and regulatory perspective. It will explore which regulatory measures could be put in place to ensure that the energy sector remains resilient even during the energy transition and beyond.

DAY 2

Topic 2	Resiliency and crisis
Faculty	Tim Benton Alberto Pototschnig Margarita Balmaceda Eric Sievers (non-faculty)
Teaching mode	Interactive discussions and presentations, consultations, group work, podcast recording
	Session titles and descriptions:
	Food systems and their famility. Better

Food systems and their fragility - Betton

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Ensuring resiliency of the Eu energy system - Pototschnig

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Topic 3	Food and fuel security	
	Volodymyr Demkine	
Faculty	Tim Benton	
	Ana Stojilovska	
Teaching mode	Interactive discussions and presentations, group work, bus tour to visit bioethanol facility	
	Session titles and descriptions:	

Food systems and food security – Betton

Food security is a term that is often mis-defined as keeping markets functioning, or ensuring calorie supply to those going hungry. Properly, the term includes the provision of a healthy diet to all people at all times; the "at all times" implies intergenerational equity and therefore sustainability. Given the food crisis of 2022, the issue of food security is rising up the political agenda and there are discussions in some governments about taking a more securitised view of food supply, rather than a market-led focus. Within the multilateral process, COP27 saw many discussions about the need to transform food systems to be more resilient and more sustainable. This session will be a deep dive into the nuances of food security and discussion about what would be needed to ensure it.

Nexus energy and agriculture - Human well-being - Demkine

The Ukrainian case: Insights for analyzing challenges to development goals and options for policy response are provided. The analysis presents a critical review and synthesis of the best available information on the consequences of the war for developmental policies at the regional (or global if relevant) level. Attention is especially given to the alterations in energy and food production and supply patterns and implications for climate change mitigation and adaptation action. We discuss necessary enabling environments and options for action, but findings and conclusions are not prescriptive. While examining not only challenges but also opportunities, we advocate for an integrated approach for the analysis of the case that should help figure out entry points and building blocks for future policy making.

DAY 4

Topic 4	Leadership and adaptability	
Faculty	Austin Lee Nichols Elana Nichols Michael LaBelle Ana Stojilovska	
Teaching mode	Interactive discussions and presentations, podcast recording	
	Continue titles and deconistions.	

Session titles and descriptions:

Influencing consumers and governments - Austin Nichols

Two of the biggest challenges that leaders face are being able to influence others to make a change and successfully navigating the change process. In the first session, we will focus on various tactics that facilitate influencing others and persuading them to engage in a certain course of action. This includes topics related to motivation, cognitive processing, and the importance of context.

Climate Change Communication in the Digital Age - Alana Nichols

This course is designed to explore the evolution of climate change communication from the first IPCC report (International Panel on Climate Change) to our current time. Specifically, we will explore the existing research, including Agenda Setting in the media. Students will learn how communication modalities affect the overall temperature of the public towards the acceptance or denial of climate change. Finally, we will take a deeper dive into social media and how it has changed the public climate change narrative. After taking this class, students will have a better understanding of how words and images affect the communication of climate change and its potential policies for mitigation. Students will also demonstrate a better understanding of how social media can be an effective vessel for climate change communication.

Energy Vulnerabilities - Ana Stojilovska

Before the energy crisis, we thought of energy vulnerability as a phenomenon of limited energy services affecting primarily low-income households. Now, we need to talk about expanding the scope of energy vulnerability spilling over the household, the private, and the public building sector. Is energy scarcity a new way of defining energy use at a European level? This presentation will engage with the energy justice and energy poverty scholarship to provide reflections about the short- and medium-term challenges of insufficient energy services (and other basic services) and their long-term societal and development impacts. At the same time, it will open a discussion about the need to build a greater cohesion between energy, climate, and social goals to achieve a socially just energy transition. Finally, a debate will be started to rethink the current system of energy decision-making to consider new governance models, such as energy communities, the Ombudspersons, local authorities, and other actors.

DAY	5
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Topic 5	Future of Energy
	Austin Lee Nichols
Faculty	Kim Talus
	Logan Strenchock
Teaching mode	Interactive discussions and presentations, group work, outdoor activity
	Session titles and descriptions:

Leading change - Nichols

Two of the biggest challenges that leaders face are being able to influence others to make a change and successfully navigating the change process. In the second session, the goal will be to understand how to successfully lead change. Topics covered will range from taking the perspective of those undergoing the change to using psychology to help people buy into and navigate the change process.

Regulatory future of energy – the transformation from natural gas to hydrogen - Talus

The transition from natural gas to hydrogen is in the horizon. However, there are a number of challenges that need to be addressed. This session will provide for an overview of these challenges from a comparative law perspective, focusing on EU, US and Australia.

Future direction of EU energy law - Talus

The Russian attack on Ukraine has created a need to adapt the EU regulatory frameworks. This session will examine the current changes and potential future directions.

Visit **Zsámboki Biokert** - Strenchock

Summer school participants will have the chance to visit <u>Zsámboki Biokert</u>, a four-hectare organic market garden which has served as a center for education in sustainable food production and food-community outreach in Hungary for over ten years. The farm's team members are active participants in the Hungarian Agroecology Network and national organic and regenerative agriculture movements. The farm is a regular host and learning site for farmer apprentices, students, novice gardeners, fellow organic growers and active local food community advocates. The visit will provide the opportunity to discuss complex challenges for local-oriented agriculturalists in a globalized food system, and the embedded resiliency principles in farm ecosystems which aim to close nutrient and energy loops while working in collaboration with nature.

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Topic 6	Energy risks and transformations	
Faculty	Kim Talus Sirja-Leena Penttinen Volodymyr Demkine	
Teaching mode	Interactive discussions and presentations, group work and consultations, podcast recording	

Session titles and descriptions:

Risks and challenges for fossil fuel investments -Talus

The transition to a net-zero world will create tensions between the need to reconsider the regulatory frameworks that apply to energy activities and different sources of energy and the rights of private investors. This session will consider the role of international investment protection in the context of the energy transition.

Regulations for energy change - Penttinen

For decades, energy systems have been organized following centralized model, whereby energy is produced at large-scale – conventional – generation facilities. However, as is well-known, energy systems are undergoing an evolution and new technologies are gaining market share across the board. The ambitious goals set globally to move from a fossil-fuel-dominated to a low-carbon electrical system make achieving balance in power grids an ongoing challenge for utilities and system operators. The increase of energy generated by renewable energy sources, preservation of natural resources, ageing infrastructure, energy storage, and new customer demands are all having an impact on evolving regulatory landscapes. This session examines the evolving energy system amidst the low-carbon transition and what it requires from the regulatory framework.

Energy storage in the energy transition - Penttinen

As governments across the world decarbonize their economies, the shift toward clean energy is highlighting new geopolitical tensions, supply chain vulnerabilities, and sustainability challenges associated with raw material extraction. With electrification as the main pathway to achieving decarbonization, one key technology—the battery—plays an outsize role. As electric vehicle and battery energy storage deployment accelerates, several factors—ranging from trade war-, pandemic-, and conflict-induced supply chain shocks to resource availability and investor-led ESG demands—have spurred national and regional efforts to protect supply chains. These efforts involve a combination of onshoring and regionalization, development of novel battery chemistries, and circular production processes. Countries and regions with the highest growth in the manufacturing of lithiumion batteries—currently the dominant battery technology for electric vehicles and grid energy storage—have made some efforts to secure supply chains and build circularity into battery life cycles. This session will examine the regulatory pathways adopted by the EU and the US to address security and sustainability challenges associated with batteries.

Nexus energy and agriculture - Human well-being - Demkine

The Ukrainian case: Insights for analyzing challenges to development goals and options for policy response are provided. The analysis presents a critical review and synthesis of the best available information on the consequences of the war for developmental policies at the regional (or global if

relevant) level. Attention is especially given to the alterations in energy and food production and supply patterns and implications for climate change mitigation and adaptation action. We discuss necessary enabling environments and options for action, but findings and conclusions are not prescriptive. While examining not only challenges but also opportunities, we advocate for an integrated approach for the analysis of the case that should help figure out entry points and building blocks for future policy making.

DAY 7

Topic 7	Energy relations and energy transformations
Faculty	Michael LaBelle Rachel Guyet Leslie Vinjamuri
Teaching mode	Interactive discussions and presentations, group work and consultations, podcast recording Session titles and descriptions:

Session titles and descriptions:

Are energy communities contributing to the just transition in Europe? - Guyet

On the eve of COP26 in Glasgow, Susan Aitken, leader of the city council in Glasgow, declared "anything but a just transition we will come to regret". The EU Green Deal has developed a strategy to promote a just transition in Europe. One of the tools for this just transition could be the renewable energy communities defined in REDII. Energy communities are expected to contribute to a fairer and greener energy transition based on the inclusive participation of broader social groups of citizens, on the democratic ownership of renewable energy installations, on sharing the benefits of the energy transition with a large share of population including the most vulnerable households. This session aims at unraveling this ambitious but still limited link between energy communities and energy justice and examine possible solutions to make it happen.

Energy Cultures – Michael LaBelle

The presentations will introduce the 'energy cultures' approach which can expose the struggles of individuals and society to produce a socially just energy system. The path countries take to model their energy system can be inspected at the cross-section of geopolitics and the energy justice framework. The novelty of the energy cultures framework applied to Central and Eastern Europe exposes the power dynamics behind the energy decisions of countries. They can either dwell on their post-socialist past based on the dependence on Russian gas and domestic fossil fuels or take actions to align their policies with the EU's Green Deal envisaging a low-carbon transition. Furthermore, the presentation will discuss radical energy justice, a critique of the mainstream energy justice framework, which aims to expose injustices in the energy system rather than surface-level injustices happening within the energy system. These inquiries are especially relevant in a post-COVID and ongoing Ukraine crisis which have magnified the tension between achieving a socially just transition and ensuring energy security.

DAY8

Topic 8	Communities leading geopolitics
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Faculty	Rachel Guyet Leslie Vinjamuri Michael LaBelle
Teaching mode	Interactive discussions and presentations, group work and consultations
	Session titles and descriptions:
	World café session: what solutions to link better energy communities and just transition? - Guyet
	The last day of the summer school will highlight the interconnectedness of the different themes and topics.

Suggested Readings:

Day 1

European_Commission (2022) 'State of the Energy Union 2022'.

Penttinen, S.-L. (2022). Regulatory and policy instruments to promote decarbonization in the energy sector. In L. Reins, & J. Verschuuren (Eds.), Research Handbook on Climate Change Mitigation Law EE Elgar. doi:https://doi.org/10.4337/9781839101595.00022.

POTOTSCHNIG, Alberto, Jean-Michel GLACHANT, Leonardo MEEUS, and Pippo RANCI. *Recent Energy Price Dynamics and Market Enhancements for the Future Energy Transition*. European University Institute, 2022. https://hdl.handle.net/1814/73597.

Hunter, Tina. "Redefining Energy Security: The New Prize in a Time of Arctic Petroleum Resources and Technological Development." In *The International Political Economy of Oil and Gas*, edited by Slawomir Raszewski, 9–21. Cham: Springer International Publishing, 2018. https://doi.org/10.1007/978-3-319-62557-7 2.

Balmaceda, Margarita M. Russian Energy Chains: The Remaking of Technopolitics from Siberia to Ukraine to the European Union. Columbia University Press, 2021.

Day 2

Benton, T. G., & Harwatt, H. (2022) 'Sustainable agriculture and food systems Comparing contrasting and contested versions'. Chatham House.

Meeus, Leonardo. *The Evolution of Electricity Markets in Europe*. Edward Elgar Publishing, 2020. https://cadmus.eui.eu/handle/1814/69266.

Joint Research Centre. "Electricity Security in the EU: Features and Prospects | JRC Smart Electricity Systems and Interoperability." Electricity security in the EU: features and prospects, 2016. https://ses.jrc.ec.europa.eu/electricity-security.

"State of the Energy Union - European Commission." Accessed December 1, 2015. http://ec.europa.eu/priorities/energy-union/index en.htm.

Jasiūnas, Justinas, Peter D. Lund, and Jani Mikkola. "Energy System Resilience – A Review." *Renewable and Sustainable Energy Reviews* 150 (October 2021): 111476. https://doi.org/10.1016/j.rser.2021.111476.

LaBelle, Michael Carnegie, Roxana Bucată, and Ana Stojilovska. "Radical Energy Justice: A Green Deal for Romanian Coal Miners?" *Journal of Environmental Policy & Planning*, October 22, 2021, 1–13. https://doi.org/10.1080/1523908X.2021.1992266.

Day 3

"The Ukraine War and Threats to Food and Energy Security | Chatham House – International Affairs Think Tank." Chatham House, April 13, 2022. https://www.chathamhouse.org/2022/04/ukraine-war-and-threats-food-and-energy-security.

Jasiūnas, J., Lund, P. D., & Mikkola, J. (2021). Energy system resilience – A review. Renewable and Sustainable Energy Reviews, 150, 111476. doi:https://doi.org/10.1016/j.rser.2021.111476.

Bodirsky, B. L., Chen, D. M.-C., Weindl, I., Soergel, B., Beier, F., Molina Bacca, E. J., et al. (2022). Integrating degrowth and efficiency perspectives enables an emission-neutral food system by 2100. Nature Food, 3(5), 341-348. doi:10.1038/s43016-022-00500-3.

Benton, T. G., & Harwatt, H. (2022) 'Sustainable agriculture and food systems Comparing contrasting and contested versions'. Chatham House.

Gerber, J.-F. (2020). Degrowth and critical agrarian studies. The Journal of Peasant Studies, 47(2), 235-264. doi:10.1080/03066150.2019.1695601.

Energy_&_Climate_Intelligence_Unit (2022) 'CLIMATE, FOSSIL FUELS AND UK FOOD PRICES'.

Reganold, J. P., & Wachter, J. M. (2016). Organic agriculture in the twenty-first century. Nature Plants, 2(2), 15221. doi:10.1038/nplants.2015.221.

Silici, L. (2014) 'Agroecology What it is and what it has to offer'.

Day 4

Gill, R. (2002). Change management or change leadership?. Journal of Change Management, 3(4), 307-318.

Kotter, J. P. (1995). Leading change: Why transformation efforts fail. Harvard Business Review, 73 (2), 59-67.

Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. Personality and Social Psychology bulletin, 34(7), 913-923.

Wood, W. (2000). Attitude change: Persuasion and social influence. Annual Review of Psychology, 51(1), 539-570.

LaBelle, Michael, Eli Cloonan, and Zivar Mammodova. "Innovating Ethanol in Europe: The Story of Political Risk and Diversification," 2019.

Stojilovska, Ana. "Energy Poverty and the Role of Institutions: Exploring Procedural Energy Justice – Ombudsman in Focus." *Journal of Environmental Policy & Planning*, June 21, 2021, 1–13. https://doi.org/10.1080/1523908X.2021.1940895.

Stojilovska, Ana, Hyerim Yoon, and Coralie Robert. "Out of the Margins, into the Light: Exploring Energy Poverty and Household Coping Strategies in Austria, North Macedonia, France, and Spain." *Energy Research & Social Science* 82 (December 2021): 102279. https://doi.org/10.1016/j.erss.2021.102279.

Talus, Kim. "The Interpretation of the Principle of Energy-Solidarity." The Oxford Institute for Energy Studies, April 2021. https://a9w7k6q9.stackpathcdn.com/wpcms/wp-content/uploads/2021/04/Insight-89-The-interpretation-of-the-principle-of-energy-solidarity-.pdf.

LaBelle, Michael. *Energy Cultures: Technology, Justice, and Geopolitics in Eastern Europe*. Cheltenham, UK: Edward Elgar Publishing, 2020. https://www.e-elgar.com/shop/gbp/catalog/product/view/id/16734/s/energy-cultures-9781788975759/

Day 5

European Commission (2022) 'State of the Energy Union 2022'.

Gill, R. (2002). Change management or change leadership?. Journal of Change Management, 3(4), 307-318.

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Aalto, Pami, Ilkka Ruostetsaari, Kim Talus, and C. Johannes Muth. "Energy Policies in the Context of Sustainable Development." In *Affordable and Clean Energy*, edited by Walter Leal Filho, Anabela Marisa Azul, Luciana Brandli, Amanda Lange Salvia, and Tony Wall, 496–507. Cham: Springer International Publishing, 2021. https://doi.org/10.1007/978-3-319-95864-4 10

Day 6

Penttinen, Sirja-Leena: 'Regulatory and policy instruments to promote decarbonization in the energy sector', in L. Reins and J. M. Verschuuren (eds.), Research Handbook on Climate Change Mitigation and Adaptation (Edward Elgar 2022), pp. 337 - 362.

Nolan, J. M., Schultz, P. W., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2008). Normative social influence is underdetected. Personality and Social Psychology bulletin, 34(7), 913-923.

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Day 7

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Hanke F., Guyet R, Feenstra M., "Energy communities' social role in a just energy transition", in Löbbe S. et al., Energy communities Customer centered, market driven, welfare enhancing?, London: Academic Press, 195-208, 2022

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