## First Class Assignment - ENG5226 Energy Law and Policy in a Carbon Constrained World

# **Class Schedule and Learning Materials**

## Class 1 - Introduction to Energy Policy in a Carbon Constrained World - The Challenge

In our first class, we will discuss the big questions and themes of the course. Like, why are we here? What do we want to accomplish over the next 28 classes? What do you want to takeaway from Energy Policy in a Carbon Constrained World? We will spend the first part of the class going over the syllabus, the course goals, getting to know each other, and discussing student and professor expectations. The second half of the class will focus on how we will evaluate energy problems and create energy solutions.

#### Learning Materials

## Class 1 - The Challenge

- 1. Carbon Brief, *In-depth Q&A: The IPCC's sixth assessment on how to tackle climate change*, April 5, 2022, <a href="https://www.carbonbrief.org/in-depth-qa-the-ipccs-sixth-assessment-on-how-to-tackle-climate-change/">https://www.carbonbrief.org/in-depth-qa-the-ipccs-sixth-assessment-on-how-to-tackle-climate-change/</a>. Read the following sections (which can be accessed via hyperlinks at top of reading) and be ready to answer reading questions posted in Canvas.
  - a. What is the Working Group III report?
  - b. How have global emissions been changing?
  - c. How do current policies and pledges compare to scenarios assessed by the IPCC?
  - d. What would it take to limit warming to 1.5 or 2C?
  - e. How can shifting peoples' demand for products and services cut emissions?
  - f. How must global energy systems change to limit warming?
  - g. What needs to happen to the transport sector to cut CO<sub>2</sub>?
  - h. How can industry be decarbonized?
  - i. What climate policies are being implemented and are they working?
  - j. How much innovation and new technology is needed to hit climate goals?
- 2. Sandia National Laboratory and ourenergypolicy.org, *The Goals of Energy Policy:*Professional Perspectives on Energy Security, Economics, and the Environment (2012)

  <a href="https://www.ourenergypolicy.org/wp-content/uploads/2012/09/The-Goals-of-Energy-Policy-Sandia-and-OurEnergyPolicy.org\_.pdf">https://www.ourenergypolicy.org/wp-content/uploads/2012/09/The-Goals-of-Energy-Policy-Sandia-and-OurEnergyPolicy.org\_.pdf</a>. Read pages 1-4.
- 3. Sovacool, Brown, and Valentine, *Fact and Fiction in Global Energy Policy: 15 Contentious Questions*. Read pages 345-352.
- 4. Evan Halper, Washington Post, *Amid explosive demand, America is running out of power*, March 7, 2024, <a href="https://www.washingtonpost.com/business/2024/03/07/ai-data-centers-power/">https://www.washingtonpost.com/business/2024/03/07/ai-data-centers-power/</a>.
- 5. Jeffrey Tomich, EnergyWire, *Big Tech drives staggering power demand projections*. *Is it all hype?* August 9, 2024, <a href="https://www.eenews.net/articles/big-tech-drives-staggering-power-demand-projections-is-it-all-hype/">https://www.eenews.net/articles/big-tech-drives-staggering-power-demand-projections-is-it-all-hype/</a>.
- 6. [Recommended] IPCC, Working Group III Technical Summary (2022). https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC\_AR6\_WGIII\_TechnicalSummary.pdf. Read the following pages (sections are in parentheses).
  - a. TS-2 to TS-13 (TS. 2 The changed global context, signs of progress and continuing 1 challenges and TS. 3 Emission trends and drivers)

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b. TS-52 to TS-60 (TS. 5 Mitigation responses in sectors and systems and TS. 5.1