

Energy Policy in a Carbon Constrained World – Fall 2023  
Professor Mark James

Reading Questions

Class 1 – The Introduction

Carbon Brief - IPCC 6<sup>th</sup> Assessment

1. What is the focus of Working Group III?
2. What is difference between “confidence” and “likelihood”?
3. How much carbon budget is left to keep global warming to 1.5°C?
  - a. What is warming estimate if stay on current pathway and policies?
4. Which sector is the largest contributor of GHG emissions? Which types of individuals are the largest contributors?
5. What does “no or limited overshoot” mean? What pathways can produce this outcome and are they achievable?
6. Prior reports did not include demand-side mitigation options. What is a demand-side climate measure?
7. What do low-demand pathways do to need for technologies with high uncertainty?
8. The report states, “Warming cannot be limited to 2C or 1.5C without rapid and deep reductions in energy system CO2 and GHG emissions.” and that “future energy transitions may occur more quickly than those in the past.” What are the key characteristics of a low-carbon transition?
9. How has growth of transportation emissions compared to energy supply and industry?
10. What is the “circular economy” and why is it key to curbing industrial emissions? Recycling of materials and production materials
11. What percentage of global emissions are covered by climate targets?
12. What are the three groups of climate policies?

Sandia and Sovacool readings

1. Be able to describe the different analytical frameworks for approaching energy problems.