

PHY 405/505 - Energy & Sustainability  
Fall 2021

**Assigned:** August 30

**Due:** September 24

**Problem Set #1**

**Chapter 35 Discussion/Investigative Questions:** 35.4

**Chapter 35 Problems:** 35.2, 35.5, 35.6, 35.9 (part a only), 35.11

**Chapter 34 Discussion/Investigative Questions:** 34.1

**Chapter 34 Problems:** 34.1, 34.5, 34.9, 34.9, 34.10, 34.11 (use Fig. 23.6)

**Chapter 36 Discussion/Investigative Questions:** 36.3, 36.5, 36.7

**Chapter 36 Problems:** 36.6, 36.9, 36.15, 36.17

**Critical Analysis #1**

Watch the “Planet of the Humans” video at the link below then answer the following questions. This video is fairly long, so you may want to plan to watch it in segments. You should write at least one paragraph for each answer.

<https://www.youtube.com/watch?v=Zk11vl-7czE>

1. **Check-in question:** Identify the person who spoke in favor of a new energy facility at Middlebury College. What is this person’s name, credentials, and association with any organizations? For what policy, practice, or resource did this person first advocate and then later retract support?
2. **Personal interest question:** What did you find to be the most interesting aspect of the discussion in this video? Provide a few sentences explaining your thoughts on this.
3. **Big picture question:** What is the narrative of the video? That is, what slant does it take on discussions of energy, what are its main criticisms, and what (if any) solutions does it propose?
4. **Detailed analysis question:** Choose one technology, facility, policy, or practice that was presented in the video. What parts of the video’s argument do you think it gets right? What parts of this argument do you think it gets wrong or is misleading/incomplete? Defend your answer with additional information.
5. **Moving forward question:** Regarding government policies, industrial practices/implementation, and economic markets that were discussed in this video, identify what you want to learn more about and three questions you have about this.