

## Climate and Energy Policy FA #1 - Japan Case Studies

Now that we have explored the various issues involved with climate change and energy policy, we will begin to look at one nation, Japan, as a case study. The class will be split into three groups, and each group will be responsible for researching one of the following topics. Each member of the group should be assigned one of the 4 major questions (parts B and C for each group should have 2 group members if possible). The group will report their results by creating a shared Google Doc that the entire group can edit. This document must be submitted electronically to Mr. Levesque in order to make copies for the class.

### 1. Energy profile

- a. What happened in Japan in 2011 involving Nuclear power?
- b. What was the balance of Japan's electricity production before and up to that event? (What percentage of electricity production comes from each source? Fossil fuels, nuclear, renewable.)
- c. What is the balance of Japan's electricity production today?
- d. Where is Japan getting natural resources for energy production?

### 2. Economic profile

- a. What does Japan's economy look like? Where do they stand in the world as far as the size and power of their economy? (Look into overall GDP, PPP, and GDP per capita.)
- b. What types of industries does Japan rely mostly on? Meaning, what industries contribute most to Japan's GDP?
- c. Identify any major issues currently facing Japan's economy. What is Japan doing to fix them?
- d. What about budget? Does Japan have a deficit or surplus currently? Is Japan in debt? How about how much Japan is owed by outside countries/companies?

### 3. Public opinion

- a. What is the general opinion of the Japanese about their current status in the world economically? Do they think they have an economic problem?
- b. What is the opinion of the Japanese about their current energy issues? Do they feel there is an energy problem?
- c. What is the opinion among the Japanese about types of energy usage? How do they feel about using fossil fuels, nuclear energy, and renewable energy?
- d. Japan just had a recent election. What were the results? Do they indicate that Japan is happy or unhappy with their previous government? Were there any major changes? (Was the president replaced, etc.?)

## **Climate and Energy Policy FA #2 - Expert Group Presentations**

Now that we have explored the issues involved with climate change, energy policy, and Japan's current economic situation, we will look further at the possible solutions to the problem. In your group, you will research one of the following forms of electricity production:

- A. Fossil Fuels
- B. Nuclear
- C. Wind
- D. Water
- E. Solar

Your group must cite at least 5 sources of information as part of your research. These can be either text or electronic sources, and must be cited accordingly. Since we all already know the situation that faces Japan and where the nation currently stands, you do not need to repeat that information for this assignment. Instead, you will focus on the following requirements.

### **Requirements:**

1. Describe the technology, and how it is used to produce electricity (there may be multiple different versions of this technology, please cover them all). Is it "sustainable?"
2. Pros - What are the positive aspects of the electricity production technology that your group is researching?
3. Cons - What are the negative aspects?
4. What is the general opinion among Japanese people about the use of your assigned technology?
5. What public opinion issues do you think you would encounter when suggesting that Japan use this technology? How could you work around this?
6. Lastly, do you think that this technology is a good option for Japan? Why or why not? (Here you must discuss the economic and social impacts.)

**Climate and Energy Policy Presentation Tracking Sheet**

**Name:**

**Pros**

**Cons**

Fossil Fuels:

Nuclear:

Wind:

Water:

Solar:

## Climate and Energy Policy FA #3 - Evaluation of Proposals

Name:

Now that the groups have presented their findings on the various options to fixing the problem and the pros and cons associated with it, it is your job to assess these options as an individual. Using the tracking sheet you filled out during presentations, for each option below, explain whether you think the pros outweigh the cons or the cons outweigh the pros (be sure to identify which pro/con you are referencing). Then, make an argument for the best option or combination of options in about 3-5 sentences. **Quiz Grade**

Fossil Fuels:

Nuclear:

Wind:

Water:

Solar:

Final argument: