

Guidelines for the Policy Brief

The major assignment for this class is a policy brief on a current issue in environmental policy. A list of topics from which you may choose is at the end of this document. The goal of this assignment is to apply topics raised in class to a current policy debate and to communicate these issues to a broader audience. Think of this as a document prepared by a think tank or advocacy group designed to inform the public about a current policy issue. The brief should be professionally presented, include figures and/or graphs when appropriate, and be suitable for posting on the web site of an environmental organization. You will work in groups of up to three students on each brief. I will ask each member of the group to submit a self-evaluation of the group's efforts along with the assignment.

Your paper should begin with a brief description of your issue: both the environmental problem to be addressed, and the policy or policies under consideration. The brief should review the theory that is relevant to your topic and provide examples of the implementation of related policies. Your brief should apply the theory to the topic at hand in a way that allows you to draw *your own conclusions* about the policy under consideration. Applying theory is important. It isn't enough to say that policy X reduces pollution. Different policies work in different ways and have different outcomes. The reader should understand how and why your recommended course of action works.

Note that you are free to cite the views of others in your policy brief. However, the final paper must be *in your own words*. You should not quote directly from another paper unless the exact wording of the author is important. Rather, you should incorporate materials from other sources into your paper using your own words. Finally, when you use ideas, facts, or analysis taken from another source, it is important that you cite the source. This is true *whether the material is directly quoted or merely paraphrased*. Be aware that failure to properly acknowledge the contributions of others can be considered plagiarism and will be severely punished.

To get you thinking about your topic, each group should meet with me at least once **prior to spring break**. A short 1-2 page outline proposing what you will discuss in your policy brief is due on **Wednesday, March 26**. The short outline should briefly discuss the background on your chosen policy, including any relevant examples you have found, and include some preliminary ideas of how you will proceed with your analysis. You are encouraged to come talk with me about ideas for the policy brief before the March 26th deadline. *Even though the outline is not due until March 26, you should begin preliminary research on your policy soon! The late due date gives students a chance to see what topics covered in class are relevant for the brief and allows time to do preliminary research on these topics.*

The final policy brief will be due at the beginning of our last class meeting **Monday, April 28**. The brief should be roughly 10 and 15 pages in length, single-spaced (about 5,000 to 7,500 words). Figures, tables, and references do not count against the page limits or word count.

The end of this document includes potential topics for policy brief. Each group will be assigned to one of these topics. I will ask each of you to rank the topics in order of preference and will assign groups based on these rankings. The survey where you will indicate project preferences will also allow you to indicate if you prefer not to work in a group on the policy brief.

On the next page are guidelines for writing a good policy brief. Examples of policy briefs taken from various environmental policy think tanks are available in Blackboard.

- Content:
 - The paper should apply theories and techniques used in class to a *specific* policy problem. Avoid generalities.
 - For example, don't just provide a general summary of how a carbon tax works. Provide specific examples of how it has been used (or could be used).
 - Things I will look for:
 - Description of the problem
 - Is it clear? Are sufficient details provided?
 - Does it draw the reader in? Is the reader motivated to care about the environmental problem you are addressing?
 - Depth of analysis
 - The research paper should include more in-depth analysis than a policy memo. It isn't just longer – *it should include original thought*.
 - Does the policy brief make appropriate use of theory to explain how and why different policies work the way they do?
 - Does the paper simply describe what happened (or will happen), or provide analysis and recommendations?
 - Do the recommendations follow from the analysis? Are they consistent?
 - Figures and graphs
 - Do figures and graphs present information clearly?
 - Do they illustrate important information?
 - Are figures and graphs referenced in the text? Is sufficient explanation of each figure and graph provided? Including notes with the figures can be helpful.
 - Be sure to cite where your information comes from. Don't just include a list of references. You also need to show where those references are used in the paper.
 - When you use facts, ideas, or analysis from another source, they must be cited. This is true even if you paraphrase the argument in your own words.
- Writing
 - Presentation matters. Think carefully about how to organize your argument.
 - "Stream of consciousness" writing that bounces from topic to topic is hard to follow, particularly in a longer paper. It leads to your arguments getting lost in the confusion. Use section headings to organize your policy brief.
 - Is the writing clear?
 - Make sure that your arguments make sense.
 - Will the reader understand what you are writing about? Do you provide sufficient background information?
 - Your target audience is someone with a college education, but not necessarily an economics major.
 - It may help to have a friend who is less familiar with the paper read it. It is easy to take for granted specialized knowledge after you've spent a while researching a topic.
 - Think about what you would have known about the topic before beginning your research. If you wouldn't have known about something before, don't assume that your reader will know it.
 - Are there typos?
 - Proofread carefully. There should not be typos and grammar should be correct.
 - Is your final product something you would be willing to show to a prospective employer? If not, more editing is needed.

Helpful Resources

To get started, you may find it helpful to check current events magazines, such as the *Economist*. A journal likely to be particularly helpful is the *Review of Environmental Economics and Policy*. This journal aims to review the latest environmental economics research in a way accessible to policy makers and other non-economists. In addition, the *Journal of Economic Perspectives*, which is the source of many of the articles on the reading list, is written to be accessible to a wide audience, and often have articles pertaining to environmental issues. Other more advanced journals that focus on the environment are the *Journal of Economics and Environmental Management*, *Land Economics*, *The Energy Journal*, and *Resource and Energy Economics*. Each of these should be available either at the library or on-line. In addition, general-interest economic journals such as *American Economic Review* and the *Journal of Political Economy* often include articles related to the environment.

A good source for journal articles in economics is EconLit. This is available on-line from the SU library. To access it, go to:

<http://library.syr.edu/>

Once there, click on the Databases tab to search for individual database titles.

Another good search option is Google Scholar (<https://scholar.google.com/>), which includes articles from a wide variety of disciplines.

Another useful database available through the library is ProQuest. ProQuest includes both professional journal articles and current event articles from newspapers and magazines such as the *Economist* and *New York Times*.

If you are looking for statistics, the Internet can be a great help, if you know where to look. In particular, when using the Internet, pay close attention to the source of your information. Many groups with specific agendas have sites on the Internet. ***Be aware of the policies being advocated at a particular site when examining their information and considering its credibility.*** When looking for data, the following are some useful sources:

- Perhaps the most useful page for economists is *Resources for Economists on the Internet*, found at:

<https://www.aeaweb.org/resources>

- The U.S. government also has many useful sites. For starters, the Environmental Protection Agency's home page is:

<http://www.epa.gov/>

- In addition, for energy-related data (including some pollution data), the Energy Information Administration is an excellent source:

<http://www.eia.gov/>

Links to these, as well as many other useful sites, can be found on the useful links section of the class home page:

<https://dcpopp.expressions.syr.edu/pai-777-useful-links/>

Should you need any assistance in finding a topic or a source, please do not hesitate to ask.

Potential Policy Brief Topics

To minimize time spent choosing a topic, you will be asked to write a policy brief on one of the topics listed below. I will ask everyone to rate their preferences for each project and will assign groups based on those preferences.

Forever Chemicals in Agriculture

Perfluoroalkyl and polyfluoroalkyl substances (PFAS), colloquially known as “forever chemicals,” are receiving increased attention from regulators. These chemicals are used in many household items. Because they never fully degrade, scientists are finding new evidence on how they accumulate in the environment. While scientists are still learning about the health risks of PFAS, efforts to regulate PFAS have begun. As we’ll discuss in class, in 2024 the Environmental Protection Agency (EPA) required municipal water systems to remove six PFAS from drinking water.

The EPA recently released a report identifying high concentrations of PFAS in sludge from municipal wastewater plants. Previously, the EPA encouraged the use of this sludge as fertilizer. The sludge is inexpensive. Moreover, using it as fertilizer reduces the use of fertilizers produced using fossil fuels and avoids the need to dispose of the sludge in landfills. At this point, the federal government has released no new regulatory guidance on PFAS. However, the state of Maine banned sewage sludge as fertilizer in 2022, and other states are considering similar action.

This policy brief asks you to consider what, if anything, should be done in response to this new evidence on PFAS. The policy brief should:

1. Provide an overview of the risks posed by PFAS, both generally and specifically to the food system through the use of municipal sludge as fertilizer.
2. Discuss the potential benefits and potential costs of regulating the use of municipal sludge as fertilizer,
3. Conclude with a recommendation for what, if anything, should be done about the use of municipal sludge as fertilizer. Note that concluding the benefits outweigh the risks, so that no changes should be made, is a possible conclusion. You are not required to recommend any regulation. If you do recommend regulation, discuss what type of policy instrument should be used and how it could be implemented.

Decarbonizing Heavy Industry

As many countries move towards net zero emission goals, a remaining technical challenge is reducing emissions in hard to decarbonize sectors. Examples include cement, iron and steel production and heavy-duty transportation. For these sectors, low-cost alternatives to fossil fuels do not yet exist. For this policy brief, please pick one example of an industrial sector that is hard to decarbonize. The policy brief should describe the challenges faced by the industry and discuss policy options. The policy brief should:

1. Describe current production processes in the industry, and explain why they are difficult to decarbonize
2. Discuss potential innovations that could reduce emissions in this industry,
3. Consider what barriers exist to the implantation of these innovations, and
4. Make recommendations for future policy to help reduce emissions in your chosen industry.

Using Offsets in Cap and Trade

Offsets provide opportunities for actors not otherwise regulated to receive credit for reducing greenhouse gas emissions. Offsets can be purely voluntary (e.g., to show a commitment to environmental causes). But they can also be used by regulated polluters to comply with emission reductions mandates. Many, but not all, cap-and-trade programs allow some use of offsets.

In 2019, New York established a mandate of net-zero greenhouse gas emissions by 2050. However, meeting that target remains a challenge. One option under consideration is a trading program known as “cap and invest.” Like other cap-and-trade programs, it would set a limit on pollution companies can emit. Firms would buy permits through a state-run auction. The state would invest the revenue raised would be invested in other climate programs, such as electrification infrastructure.

As New York considers whether to move forward with its cap-and-invest program, state regulators will need to decide on the rules for the program. One important rule is whether offsets should be allowed. This policy brief should:

1. Explain how offsets work, discussing both the advantages and disadvantages of offsets.
2. Should provide examples of offset policies in place elsewhere and discuss what New York can learn from these experiences.
3. If you recommend offsets be allowed, the brief should provide guidelines for assessing the quality of offsets. If you recommend against offsets, explain why the use of offsets is problematic.

The Future of Environmental Justice

Environmental justice concerns received growing attention during the Biden administration. The Justice40 initiative set a goal that 40 percent of the benefits of some Federal programs flow to disadvantaged communities. Major spending bills such as the 2021 Infrastructure Investment and Jobs Act and the 2022 Inflation Reduction Act included provisions such as funding for clean drinking water, cleaning toxic waste sites, and block grants for pollution reduction in disadvantaged communities intended to improve environmental quality in disadvantaged communities.

These goals are likely to go away under the Trump administration. This policy brief asks you to consider how much impact the Biden administration had on environmental justice, and what the future may hold. Your policy brief should:

1. Describe the environmental justice initiatives of the Biden administration.
2. What were the impact of these initiatives? Given the broad scope of the Justice40 initiative, providing specific examples may help.
3. Discuss what is likely to change under the Trump administration. To what extent, for example, are the investments made previously likely to lead to permanent changes?
4. Do the different experiences across administrations lead to any policy recommendations moving forward?

While the policy brief should include at least a brief description of the overall set of programs targeting environmental justice concerns, feel free to select representative examples from these to evaluate more in depth to evaluate the potential impact of these initiatives.

Debt for Climate Swaps

Financing international aid for climate change mitigation and adaptation projects in low-income countries is challenging. High-income countries struggled to meet earlier pledged commitments. Moreover, the bulk of climate-focused aid currently goes to middle-income countries, rather than those with the lowest-income. Both lenders and borrower countries are seeking solutions to the rising debt crisis. One proposal receiving attention in both environmental and development policy circles is a debt-for-climate swap. Under such a plan, low-income countries could have debts owed to other nations or to multilateral institutions such as the World Bank and International Monetary Fund (IMF) forgiven if the money owed is instead spent on projects related to climate mitigation or climate adaptation.

While examples of individually negotiated debt-for-climate swaps exist, for this policy brief you should consider whether debt-for-climate swaps should be scaled up to become a formal part of international climate policy. This policy brief should:

1. Provide an overview of how debt-for-climate swaps work, including examples previously implemented
2. If a debt-for-climate swap is used to finance climate mitigation investments, should institutions providing relief from debt receive assurances that the resulting emissions reductions are permanent? If so, how can such agreements be enforced?
3. While vulnerable low-income countries demand more assistance adapting to climate change and potential compensation for damages caused by emissions they are not responsible for, the bulk of international climate finance supports climate mitigation, rather than adaptation. Could debt-for-climate swaps be used to increase funds available for climate adaptation? If so, how can such investments be incentivized?

Insurance and Climate Change

Due to a changing climate and increased investments in at-risk areas, losses from climate-related natural disasters continue to grow. More frequent wildfires, rising sea levels, and increased flood risks are examples of natural disasters expected to become more frequent and more severe due to climate change. As a result, insuring against future losses becomes more challenging. Customers looking for insurance face higher rates, and insurers have chosen to stop issuing new policies in some states due to increased risk.

This policy brief should consider the challenges faced by both consumers and insurance companies to provide insurance against more frequent natural disasters. How might insurance markets adapt to accommodate new risks? Should new development in some areas be “uninsurable”? What role, if any, should government regulators play in these markets?