

# Project Planning Template

## Clean Energy: Legal Issues

<b>COURSE:</b> Clean Energy	<b>DURATION:</b> 2.5 weeks	<b>TEACHER:</b>	<b>Legal Issues</b>
<b>GLOBAL ISSUE OVERVIEW</b>			
<p>Every country has specific regulations when it comes to helping reduce pollution from manufacturing plants and power plants. The legal issues are based on not only the emissions but also the security regulations to protect such facilities as a wind energy field. It is important for countries to protect the energy sources. Not only do they need to protect them, they need to also prevent any security problems within the different laws that regulate the countries.</p> <p><b>Global Competencies Addressed:</b></p> <ul style="list-style-type: none"> <li>• <i>Investigate the World:</i> Initiate investigations of the world by framing questions, analyzing and synthesizing relevant evidence, and drawing reasonable conclusions about global issues</li> <li>• <i>Recognize Perspectives:</i> Recognize, articulate and apply an understanding of different perspectives.</li> <li>• <i>Communicate Ideas:</i> Select and apply appropriate tools and strategies to communicate and collaborate effectively, meeting the needs and expectations of diverse individuals and groups</li> <li>• <i>Take Action:</i> Translate ideas, concerns, and findings into appropriate and responsible individual or collaborative actions to improve conditions</li> </ul>			
<b>STANDARDS ADDRESSED</b>			
<b>Career/Technical Knowledge and Skills</b>	<b>Academic Knowledge and Skills</b>		<b>21<sup>st</sup> Century Skills</b>
<ol style="list-style-type: none"> <li>1. Develop security procedures for a wind energy field.</li> <li>2. Develop strategies to help meet existing legal criteria.</li> </ol>	<p><b>Writing:</b> Communicate information and ideas in narrative and informative writing with clarity and effectiveness.</p> <p><b>Speaking:</b> Deliver planned and impromptu oral presentations.</p>		<p><b>Learning and Innovative Skills:</b></p> <ul style="list-style-type: none"> <li>• Critical Thinking and Problem Solving</li> <li>• Communication and Collaboration</li> </ul>

		<b>Life and Career Skills:</b> <ul style="list-style-type: none"> <li>• Initiative and Self-Direction</li> <li>• Leadership and Responsibility</li> </ul>
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**PROJECT DEFINITION & GOALS/OBJECTIVES**

Students will acquire the skills needed to research different legal regulations on the security of wind energy fields, such as investigating the laws that are in place. Students will adapt their security procedures and regulations for global use. The teacher can select particular countries for students to research or have different students research different countries. Students will prepare a security plan and written summary and present it.

Project Goals/Objectives:

- Develop a global security procedure for a wind energy field.
- Compare the difference in clean energy security regulations between the U.S. and China.

**SCENARIO OR PROBLEM: What scenario or problem will you use to engage students in this project?**

You are a member of the EPA and have been tasked with creating a new security procedure for both China and the U.S. There has been a joint agreement made by China and the U.S. to have a joint wind energy field in Asia to help develop more energy. With the threat of terrorism and a growing concern for global warming, threats have been made toward wind energy fields in China and the U.S. This joint project has also caused concern from other political leaders. U.S. leaders fear that the security of the facility will be compromised based on the location in Asia. The concern from Chinese leaders is the lack of concern for their regulations and security.

<b>Essential Questions</b>	<b>Grade Level Adaptations</b>
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<ul style="list-style-type: none"> <li>• How can the regulations of different countries affect the security of wind energy fields?</li> <li>• How do you effectively create a security plan when you have to take two different types of legal regulations into consideration?</li> </ul>	<p>Lower grade levels:</p> <ul style="list-style-type: none"> <li>• Focus on only one part of the project objective at a time, and work all the students through the same process.</li> <li>• Provide additional research or resources prior to starting the project.</li> </ul>
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**ASSESSMENT: How will you determine what students have learned? (Check all that apply)**

FORMATIVE		SUMMATIVE	
Quizzes/Tests		Multiple Choice/Short Answer Test	
Notes/Graphic Representations		Essay Test	X
Rough Draft	X	Written Product with Rubric	X
Practice Presentation	X	Oral Presentation with Rubric	X
Preliminary Plans/Goals/Checklists of Progress		Other Product or Performance with Rubric	
Journal/Learning Log		Self-Evaluation or Reflection	X
Other:		Evaluation by Authentic Audience	X
		Other: 3D model	

**MATERIALS, RESOURCES, or CONSTRAINTS: What materials and resources will be needed? Are there any perceived challenges?**

**Materials:**

- Computer access
- Internet access
- Self-reflection – Buck Institute form [http://www.bie.org/object/document/project\\_presentation\\_audience\\_feedback\\_form](http://www.bie.org/object/document/project_presentation_audience_feedback_form)

**Internet Resources:**

- Ministry of Environmental Protection, China: <http://english.mep.gov.cn/>
- <https://www3.epa.gov/>
- World Bank Group, Energy Law and Regulation: <http://ppp.worldbank.org/public-private-partnership/sector/energy/laws-regulations>
- Sustainable Energy Regulation and Policymaking for Africa, Module 3 Introduction to Energy Regulation: <http://africa-toolkit.recep.org/modules/Module3.pdf>
- Sustainable Energy Regulation and Policymaking for Africa –Module 5 Regulation Types and Options: [http://www.unido.org/fileadmin/import/83247\\_Module5.pdf](http://www.unido.org/fileadmin/import/83247_Module5.pdf)
- List of Energy Regulatory Bodies: [https://en.wikipedia.org/wiki/List\\_of\\_energy\\_regulatory\\_bodies](https://en.wikipedia.org/wiki/List_of_energy_regulatory_bodies)

**SUPPORT, MODIFICATIONS, AND EXTENSIONS: What is needed to provide support for students who have difficulty learning the content, modify for students with special learning needs, or to provide enrichment for advanced students?**

Additional time can be arranged if needed by the resource teacher.

**CALENDAR OF MAJOR LEARNING ACTIVITIES—What are the learning activities or tasks for each day? Are there any project milestones? When will formal assessment activities occur?**

Week 1				
Monday	Tuesday	Wednesday	Thursday	Friday
Introduce project and assign groups.	Guest speaker from local EPA office. Explain how the EPA enforces rules and regulations in the U.S. What security measures do they have to protect these sources of energy?	Research the different government agencies that regulate wind energy fields in China as well as security procedures that are in place.	Review the research from yesterday. Research the security measures that are in place to the facilities.	Continue to research the U.S. and China.

Week 2				
Write a summary on each of the countries' different procedures and security protection.	Small presentations to the class on the differences in the two countries.	Work on creating a universal security procedure for a wind energy field that would meet regulations for each country.	Formative assessment from observations.	Continue working on presentations.

Week 3				
Give presentations.				
Reflection writing.				

**STUDENT REFLECTION ACTIVITIES—How will students reflect on their work? Add reflection questions and/or activities here.**

Reflection writing – self-reflection form (Buck Institute).