

## Going Green: APEC Online Classroom Exchange

### Overview

The 21 “member economies” of the Asia-Pacific Economic Cooperation (or APEC) include highly developed as well as rapidly expanding economies. Economic growth in the regions encompassed by APEC has been fueled by dramatic increases in industrial and agricultural production as well as surging consumption over recent decades. This growth has raised living standards and facilitated social progress in many places; however, it is also putting increasing (and some say crisis-level) pressures on the world’s ecosystems and is unsustainable given projections for an ever-burgeoning population, in APEC economies and worldwide.

In recognition of this concern, APEC, along with many other world bodies, has reached beyond its primary goals of promoting economic growth and increasing prosperity through “free trade” (or trade free from tariffs and other barriers) and investment liberalization, and has named sustainable economic development as a preeminent issue. APEC sees the greening of economies as a solution – one that serves as a net generator of economic growth and jobs as well as a vital strategy for reducing carbon emissions, enhancing energy efficiency, and preventing the loss of biodiversity. Innovation (new ideas, methods, or devices) in small and medium enterprises, APEC says, is the key to building a foundation for a green economy that reconciles growth with sustainability.

In this unit, students will learn about APEC and its priorities to promote green growth and innovation. They will conduct research and consult local industries and businesses to learn about their innovations and successes in the global marketplace, and to find out what green growth opportunities as well as limitations exist for these businesses. Students will then propose creative solutions to “greening” a local industry, and submit their ideas in multimedia or written formats to the East-West Center to be featured in the Going Green section of APEC online classroom exchange webpage. Online forums will be created so that students can see and comment on one another’s submissions and respond to questions from students in other APEC economies. They will consider what aspects of sustainable practices depend on local conditions and if one needs to make a trade-off between economic growth and environmental sustainability, or if growth and sustainability are compatible objectives that are mutually necessary for economies, businesses, and citizens.

### Objectives

- Students will explore the complex dynamics between economic growth and environmental sustainability and what role innovation can play in reconciling these potentially competing objectives.
- Students will learn about the global context of local industries and businesses, including those that provide goods and services to their schools.
- Students will research successful local green industries as well as opportunities available to make businesses more sustainable.
- Students will devise an innovative idea for greening an industry and create a written or multimedia piece explaining the problem and their idea.
- Students will engage in online discussions about their ideas and the ideas of students from other APEC economies.

## **Time**

Two class periods framing a research and writing or multimedia assignment.

## **Suggested Educational Level**

High School: Ninth-twelfth grades (depending on the school system in your area)

## **Materials**

Whiteboard, blackboard, smart board, or overhead projection

“Going Green” project description and worksheet (provided below)

List of APEC “topics” (click on the “Topics” tab at [www.apec.org](http://www.apec.org))

World map (enclosed)

Printable map of the APEC region (enclosed)

## **Procedures**

- 1) As a class, brainstorm examples of local industries and write these on the board. Look at the list and discuss how these industries are connected to other countries around the globe—through workers, supply chains, consumers of end products, or by practices that affect local industry (for instance, lack of regulation from another nation that has an adverse effect on a local industry).
- 2) Divide students into teams (four or more per team, depending on the size of the class) and distribute the “Going Green” project description and worksheet. Students will use this as a guide for their research and writing or multimedia project.
- 3) Submit student projects to the East-West Center. They will be posted on the Going Green section of the APEC youth exchange website, where high school students from other APEC economies can view, comment upon, and discuss one another’s submissions.

## **Extensions**

After students submit their projects, view them as a class. Distribute world maps and ask students to mark where their chosen industry or business has connections. Show a map of the APEC region and ask students to draw outlines around the economies in APEC on their world map. As a class, and eventually with students in other APEC economies, discuss the following:

- Are there visible patterns in the way different industries or businesses in your community are connected to other communities around the world?
- Do the different industries and businesses in your community share common or different challenges in making their practices both environmentally and economically sustainable?
- Find out from students in other APEC economies if the sustainability challenges are the same or different in their communities.
- Which green solutions posed by other student teams could be effectively adopted or adapted by local industries or businesses in your community?

## Background Information on APEC for Teachers

Asia-Pacific Economic Cooperation (or APEC) is a 21-member association of Pacific Rim “economies” that work together to advance economic growth through free trade, investment liberalization, and regional cooperation. APEC contends that limiting government interference reduces both production costs and the prices consumers pay for goods and services, ultimately promoting economic growth, job creation, and the expansion of opportunities for businesses, consumers, and citizens.

Established in 1989 by 12 economies, including the United States, APEC’s current members are: Australia; Brunei Darussalam; Canada; Chile; People’s Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; The Republic of the Philippines; The Russian Federation; Singapore; Chinese Taipei; Thailand; United States, and Viet Nam. APEC refers to its members as “economies” rather than countries because this allows Taiwan, which has a vibrant economy, to participate without offending the People’s Republic of China, whose government does not recognize Taiwan as autonomous. It also allows Hong Kong to be treated as a separate member.

Today, APEC’s 21-member economies represent approximately 40 percent of the world’s population<sup>1</sup> (or about 2.8 billion people) across four continents and account for 55 percent of global GDP, 43 percent of world trade, 58 percent of US goods exports,<sup>2</sup> and about 60 percent of world energy demand.<sup>3</sup> Seven of America’s top 15 trade partners are APEC members.

Decisions are reached through consensus, and APEC, unlike the World Trade Organization or other multilateral trade bodies, operates on the basis of non-binding commitments and voluntary compliance instead of treaty obligations. Therefore, critics wonder how APEC can be effective without enforceable agreements, but supporters say by bringing economic and political leaders together, APEC creates a forum for an ongoing and collaborative process that in the end establishes positive norms across the region.

Given that the world’s population is expected to surpass 9 billion by 2050<sup>4</sup> and humankind’s current ecological footprint already exceeds the carrying capacity of the Earth by 1.5 times,<sup>5</sup> many also worry about the consequences of APEC’s current economic growth model, which is based on more consumption and more production. In response, APEC says it recognizes the need for economies to move from the current “energy, resource, and carbon-intensive” development patterns to sustainable consumption and production practices. As such, reconciling

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<sup>1</sup> <http://www.apec.org/About-Us/About-APEC.aspx>

<sup>2</sup> <http://www.apec2011.gov/about/background/>

<sup>3</sup> <http://www.apec.org/Groups/SOM-Steering-Committee-on-Economic-and-Technical-Cooperation/Working-Groups/Energy.aspx>

<sup>4</sup> 2010 statistic used in APEC materials and also supported in projections by UN and others.

<sup>5</sup> United Nations publication: [http://www.un.org/esa/dsd/resources/res\\_pdfs/publications/trends/trends\\_sustainable\\_consumption\\_production/ch2\\_stresses\\_on\\_ecosystems.pdf](http://www.un.org/esa/dsd/resources/res_pdfs/publications/trends/trends_sustainable_consumption_production/ch2_stresses_on_ecosystems.pdf) but this has no date. The Global Footprint Network says 1.5 [http://www.footprintnetwork.org/en/index.php/GFN/page/world\\_footprint/](http://www.footprintnetwork.org/en/index.php/GFN/page/world_footprint/)

economic prosperity with environmental sustainability through “green growth” has become increasingly important for APEC. It sees innovation (new ideas, methods, or devices) as the engine that will drive this shift, and small and medium enterprises, in particular, as the key innovators of environmentally sustainable ideas that can be converted to new products, goods, and services in the marketplace.

In addition to environmental concerns, APEC has greatly expanded its efforts to foster cooperation and communication on other global issues that predicate economic prosperity by, for instance, shaping a healthy, better educated workforce that can add to innovation and productivity and contribute talent to solving problems, as well as creating and protecting infrastructure that stimulates trade and growth. These efforts include extending opportunities to women, increasing access to education, safeguarding public health, coordinating preparations for disaster mitigation, ensuring energy security, and advocating for efficiency in transportation, to name a few. Once again, however, questions are raised about APEC’s priorities: In the face of daunting environmental pressures coupled with population growth, can innovation be the only path to sustainability? Are APEC’s motives and methods ultimately aligned with the goals of politicians and corporations, rather than the concerns of majority populations?

A study of APEC raises important questions about how nations and economies can work together, whose interests they serve, and how organizations can meet disparate and even conflicting needs fairly and effectively.

For more information about APEC, go to the APEC website ([www.apec.org](http://www.apec.org)). Also refer to *APEC AT A GLANCE* (provided as an attachment with permission).

You can also learn about APEC USA 2011 ([www.apec2011.gov](http://www.apec2011.gov)) and APEC Hawaii 2011 events and activities ([www.apec2011hawaii.com](http://www.apec2011hawaii.com)) at their respective websites.

## Going Green Project Description and Worksheet

### Team member names:

The Asia-Pacific Economic Cooperation (APEC) works to promote open trade and practical economic cooperation among economies in the Asia Pacific region. One of its key priorities is promoting green growth by encouraging businesses and industries to adopt sustainable environmental practices to ensure economic growth in the future.

- 1) Working in teams of four or more, research a local industry or business. Depending on the size of the class and the number of available industries/businesses in the community, some teams may focus on the same industry or business to come up with their own green solutions or innovations. Or, the entire class may decide to select one industry/business. Team/Class members may conduct interviews (taking notes or making audio or video recordings) with businesses and with citizens or environmental groups who are engaged (in positive or negative ways) with that industry. You may also research the industry using Internet and print sources.
- 2) Refer to the APEC website ([www.apec.org](http://www.apec.org)) and click on the “Topics” tab. Write down the topics that may benefit or are otherwise related to the industry or business you chose.
- 3) Based on your research in the first two steps, write questions for use in interviews or to guide your project. You may form your own questions and approaches, but below are a sampling of questions to guide your interviews and research:
  - What is this industry or business’s role in the community and its economic impact?
  - What connections does it have to communities in other countries (depending upon them to provide materials or workers, sending products to consumers, for instance)?
  - What is this industry or business’s effect on the local environment?
  - What is its effect on the environment in more distant localities?
  - What kinds of practices or technologies is the industry or business implementing to be more sustainable environmentally?
  - What challenges does it face in implementing these or other practices?
  - How might transnational organization such as APEC help the interests of this business or industry in ways a national government could not?

As your final product, create a proposal for meeting a specific challenge in making your chosen industry or business more sustainable, or green, as well as economically viable. Your proposal must include:

- Explanation of what the industry or business does
- How it is important locally and is connected globally
- What it is doing (if anything) to adopt practices that are environmentally sustainable
- A challenge it faces
- Your proposed “green” idea or solution

You may submit your project in any of the following formats:

- A written essay
- An audio or video news report with audio or videotaped interviews
- A videotaped skit
- An original music video
- A storybook (multimedia or print) for children using pictures or photos.

Your team/class submission will be posted on the Going Green section of the East-West Center’s APEC online classroom exchange webpage, where you and other high school students from different countries can view, comment upon, and discuss one another’s submissions.