



Activity #1 THE GREEN WAVE & MY COMMUNITY

BACKGROUND

A growing concern about global warming and human impact on the environment has led to a dramatic increase in services, products, and technologies that are considered “environmentally sustainable” or “green.” Together, these new services, products, and technologies are creating a huge market, and consequently, a new sector of our economy. This blossoming “green economy” (which includes things like hybrid cars, wind turbines, green buildings, and solar panels) is impacting communities across the US.

ACTIVITY OVERVIEW

In this activity, students discuss the meaning of “green,” learn about the green economy, and then break up into sector groups to investigate to what degree the green economy is (or isn’t) impacting their community.

LEARNING OUTCOMES

- * Students explore the definition of “green”
- * Students identify sectors of the “green economy”
- * Students determine where the green economy is/isn’t present in their own community

KEY CONCEPTS

- * Green Economy
- * Green Business
- * Green Wave
- * Global Warming

TIME

3 class periods

MATERIALS

- * Butcher paper/markers or chalkboard/chalk
- * EXPERT GROUP INSTRUCTIONS
- * COMMUNITY ASSESSMENT GRID
- * Butcher paper or large drawing of the ASSESSMENT GRID (for day 3)
- * GREEN ECONOMY OVERVIEW HANDOUT

EXTENSIONS

- 1 Students are split up into groups and told that they have been hired to start a new green business in their community. They must determine what product to offer, how to make sure that their business is green, etc. Their goal is to win “start-up” funds from the local city government. The activity culminates with group presentations to the city’s “review board,” which may be the teacher or a group of teachers/colleagues. (Note: The review board should determine assessment criteria.)
- 2 Students design a poll to assess public knowledge about global warming and/or the green economy. They may choose to interview business owners, community leaders, citizens (family, fellow students, and friends), public officials, non-profit organizations, etc. Results from the poll are tabulated and students write final reports (and/or make presentations) interpreting their class findings.

- 3 Students conduct a media search to find articles in the national media that relate to the growing “green economy.” They may also look at recently published newspapers or newsletters in their neighborhood. Can they find traces of the green wave in their local media?

RELATED WEB RESOURCES

www.greenbiz.com	www.stopglobalwarming.org	www.ilsr.org/index.html
www.coopamerica.org	http://livingeconomies.org/	www.climatecrisis.net
		www.lohas.com

PROCESS

Day One

- 1 Open a class conversation about **sustainability** and the word “green.” (15)
 - * Who has heard/seen the word “green” lately?
 - * Where did you hear/see it? (Poster, billboard, advertisement, magazine, newspaper, business, conversation, etc.)
 - * What does “green” mean to you?

Lead a large group brainstorm on this question and record student answers on butcher paper or chalkboard. Check for understanding and offer a final definition of “green” that synthesizes appropriate student answers. (See GLOSSARY for definition if needed.)
 - * What are some examples of: green products, green technology, green businesses? (Record answers.)
- 2 Have students read the GREEN ECONOMY OVERVIEW HANDOUT (10)
- 3 Back in the large group, discuss student reactions to the handout. Review student answers to the last question from the original class brainstorm. Are there obvious items missing from the class brainstorm? Do the class ideas fit into LOHAS market sectors? Get student opinions on whether or not they think the green economy has a presence in their community. (10)

- 4 Break students up into small groups (4-7 students per group). Introduce the class goal: to assess the presence of the Green Economy in their neighborhood. Present the large COMMUNITY ASSESSMENT GRID and post visibly. Distribute group instructions and COMMUNITY ASSESSMENT GRID handout. Have students read their group instructions and determine their research schedule. (How will they use their time the following class period? What should they do for homework tonight?) (10)

Day Two

Students conduct research (online, in community, etc.) according to the plan they created during Step 4 of Day One.

Day Three

- 1 Each group reports back answers to their research questions and then fills in their section of the large COMMUNITY ASSESSMENT GRID. (30)
- 2 Discuss group findings as visualized by the COMMUNITY ASSESSMENT GRID. What did we find out about our community? Is our town/city participating in the green economy? Why/why not? What does that mean? (10)
- 3 Discuss next steps. Are there actions we can take to bring green opportunities to our neighborhoods? What can we do to support the health of our community, family, and environment? (5)

Activity #1: A GREEN ECONOMY OVERVIEW

A growing concern about global warming and human impact on the environment has led to a dramatic increase in services, products, and technologies that are considered “environmentally sustainable” or “green.” Together, these new services, products, and technologies are creating a huge new market, and consequently, a new sector of our economy. This blossoming “green economy” (which includes things like hybrid cars, wind turbines, green buildings, and solar panels) is exploding into a billion-dollar sector – with more growth predicted.

WHAT IS SUSTAINABILITY ANYWAY?

Sustainability is the ability to provide for the needs of the world’s current population without damaging the ability of future generations to provide for themselves. When a process is sustainable, it can be carried out over and over without negative environmental effects or impossibly high costs to anyone involved. (Definition from sustainabletable.org)

In the area of clean technology alone, investors poured \$520 million into research and development for things like alternative fuels, solar power and hybrid vehicles in 2004. Driven by fears of global warming and rising oil costs, these investments made clean technology the sixth-largest investment category in the United States.

By 2009, that figure could climb to \$3.4 billion. Internet billionaires Bill Gates, John Doerr and Steve Case are jumping on the bandwagon. Says Doerr: “Greentech could be the largest opportunity of the 21st century.” And the “greentech” numbers don’t even include the exploding business in green construction, energy-conserving retrofits and other eco-friendly businesses.

“According to The LOHAS Journal, which tracks green economic trends, about 30 percent of U.S. adults — more than 63 million consumers — now purchase goods and services with a nod toward the products’ health, environmental, social justice and sustainability value. The marketplace, worth \$227 billion a year, is expanding at a healthy pace and is projected to reach \$1 trillion annually by 2020.

‘In just the last year, we have seen a 20 percent increase in people who are buying compact fluorescent lightbulbs and energy-efficient windows, a 20 percent increase in people who are purchasing organic foods and an over 18 percent increase in the number of people putting money into socially responsible investment projects,’ says Denise Hamler, Co-op America’s director of business networks.

Co-op America, the nation’s oldest and largest business association of socially and environmentally responsible companies, started in 1982 with three members and two businesses. Today, it tallies over 70,000 individuals and more than 2,500 businesses among its ranks. Green business is quickly becoming big business.” *

LIFESTYLES OF HEALTH AND SUSTAINABILITY (LOHAS) MARKET SECTORS** (WWW.LOHAS.COM)

Sustainable Economy US Market = \$76.47 billion	<ul style="list-style-type: none"> * Green building and industrial goods * Renewable energy * Resource-efficient products * Socially responsible investing * Alternative transportation * Environmental management
Healthy Lifestyles US Market = \$30 billion	<ul style="list-style-type: none"> * Natural, organics; nutritional products * Food and beverage * Dietary supplements * Personal care
Ecological Lifestyles US Market = \$81.19 billion	<ul style="list-style-type: none"> * Ecological home and office products * Organic / recycled fiber products * Environmentally friendly appliances * Eco-tourism and travel

* Excerpt from “The Green Economy is Today’s Hot Business Trend” by Joseph Connelly, Special to SF Gate, October 27, 2004.

** The Alternative Healthcare and Personal Development LOHAS market sectors are excluded from this chart.

Is the Green Economy present in our Community?

IN YOUR COMMUNITY, ARE THERE:		NONE	A FEW	A FAIR AMOUNT	MANY
FOOD GROUP	Grocery stores that carry organic food				
	Grocery stores that carry fresh fruits and vegetables				
	Farmer's markets				
	Community Gardens				
	Restaurants that offer organic food				
	City run food-scrap recycling programs/ city provided compost bins				
ENERGY GROUP	Community Supported Agriculture (CSA's) or organic home delivery programs?				
	Homes with solar panels or wind turbines				
	Businesses with solar panels or wind turbines				
	Alternative energy companies (solar panel companies, etc.)				
	Alternative energy producers (i.e. wind farms, etc.)				
	Buildings that are considered "green buildings"				
	Green power options through your utility company				
TRANSPOR- TATION GROUP	Places that sell energy saving appliances/devices				
	Schools that are part of "Green Schools"				
	Residents who drive alternative fuel vehicles				
	City buses or city vehicles that run on alternative fuels				
	Alternative energy fueling stations				
	Reliable, accessible public transit systems				
BUSINESS & INDUSTRY GROUP	Pro-bicycle attributes (i.e. dedicated bicycle lanes, racks, etc.)				
	Public or private car sharing programs				
	Streets designed for pedestrians (walking paths, sidewalks, trails)				
	Recognized green businesses				
	Businesses that utilize "green" practices				
POLICY GROUP	Any "green industries"				
	Business owners interested in becoming a green business				
	Educational opportunities for business owners interested in becoming a green business				
	City policies that recruit green industry/ encourage green business development				
	City policies that reduce energy consumption and/or increase use of renewable energy sources				
	City supported local food initiatives				
	City incentives for green buildings				
City supported green retrofitting of buildings					
Non-profit or community organizations involved in creating a local, green economy					
Offices of sustainability or sustainable development					

Group #1 • BUSINESS AND INDUSTRY

OVERVIEW

Your class goal is to investigate your local green economy. Does it exist? If so, where? Is it strong, just starting, growing? There are five major areas you must assess to know what's up with your local green economy. These areas are: FOOD, ENERGY, TRANSPORTATION, GREEN BUSINESS/INDUSTRY, and CITY POLICY.

TEAM TASK

You are the BUSINESS AND INDUSTRY group. You must assess the presence of Green Business and Industry in your community.

INSTRUCTIONS

- * Use the research questions below to guide your investigation.
- * Utilize different research techniques (i.e.: online research, interviews, publications from community-based organizations, etc.)
- * Fill out the BUSINESS AND INDUSTRY section of your class Assessment Grid
- * Prepare your presentation (make sure to include the answers to your research questions!)

RESEARCH QUESTIONS

What is a green business? What are the characteristics of a green business?

What is a green industry?

Are there any businesses or industries that are considered “green” in your community?

What do business owners know/think about being green?

ONLINE RESOURCES

www.greenbiz.com

www.coopamerica.org

www.ballenetwork.org/

Group #2 • TRANSPORTATION

OVERVIEW

Your class goal is to investigate your local green economy. Does it exist? If so, where? Is it strong, just starting, growing? There are five major areas you must assess to know what's up with your local green economy. These areas are: FOOD, ENERGY, TRANSPORTATION, GREEN BUSINESS/INDUSTRY, and CITY POLICY.

TEAM TASK

You are the TRANSPORTATION group. You must assess the presence of alternative fuels and environmentally friendly transportation in your community.

INSTRUCTIONS

- * Use the research questions below to guide your investigation.
- * Utilize different research techniques (i.e.: online research, interviews, publications from community-based organizations, etc.)
- * Fill out the TRANSPORTATION section of your class Assessment Grid
- * Prepare your presentation (make sure to include the answers to your research questions!)

RESEARCH QUESTIONS

What are alternative fuel vehicles?

How prevalent are they on our streets?

Does the city have public transit systems?

How supportive is your community for bicyclists?

Are there public or private car sharing programs in your community?

ONLINE RESOURCES

www.eere.energy.gov/afdc/

www.fueleconomy.gov/

www.nesea.org/transportation/

Group #3 • FOOD

OVERVIEW

Your class goal is to investigate your local green economy. Does it exist? If so, where? Is it strong, just starting, growing? There are five major areas you must assess to know what's up with your local green economy. These areas are: FOOD, ENERGY, TRANSPORTATION, GREEN BUSINESS/INDUSTRY, and CITY POLICY.

TEAM TASK

You are the FOOD group. You must assess the presence of Sustainable Food and Agriculture in your community.

INSTRUCTIONS

- * Use the research questions below to guide your investigation.
- * Utilize different research techniques (i.e.: online research, interviews, publications from community-based organizations, etc.)
- * Fill out the FOOD section of your class Assessment Grid
- * Prepare your presentation (make sure to include the answers to your research questions!)

RESEARCH QUESTIONS

Where do most people get their food in your community?
Are there local/organic foods offered in your grocery stores?
Are there community gardens and/or farmer's markets?
What are CSA's? Are there any in your neighborhood?
What about home delivery programs for healthy food?
Does the city sponsor a food scrap recycling/composting program?

ONLINE RESOURCES

www.ciwmb.ca.gov/FoodWaste/Compost/
www.greenpeople.org/
www.eatwellguide.org/
www.westsideorganics.com

Group #4 • ENERGY

OVERVIEW

Your class goal is to investigate your local green economy. Does it exist? If so, where? Is it strong, just starting, growing? There are five major areas you must assess to know what's up with your local green economy. These areas are: FOOD, ENERGY, TRANSPORTATION, GREEN BUSINESS/INDUSTRY, and CITY POLICY.

TEAM TASK

You are the ENERGY group. You must assess the presence of alternative energy in your community.

INSTRUCTIONS

- * Use the research questions below to guide your investigation.
- * Utilize different research techniques (i.e.: online research, interviews, publications from community-based organizations, etc.)
- * Fill out the ENERGY section of your class Assessment Grid
- * Prepare your presentation (make sure to include the answers to your research questions!)

RESEARCH QUESTIONS

- * Are there homes or businesses that have solar panels or wind turbines?
- * What is green power? Are there any green power companies or green power producers in your community? Does our local utility company offer any green power programs? (Like green pricing options?)
- * What is a green building?
- * Is your school part of the Alliance to Save Energy's Green Schools program? Are there any schools in your community that are?
- * What are energy saving appliances/devices? What is Energy Star? Is there a place to buy Energy Star products? What about compact fluorescent light bulbs?

ONLINE RESOURCES

www.epa.gov/greenpower/locator/index.htm

www.eere.energy.gov/greenpower

www.green-e.org

www.energystar.gov

www.usgbc.org/

www.ase.org/greenschools

www.ucsusa.org/clean_energy/

Group #5 • POLICY

OVERVIEW

Your class goal is to investigate your local green economy. Does it exist? If so, where? Is it strong, just starting, growing? There are five major areas you must assess to know what's up with your local green economy. These areas are: FOOD, ENERGY, TRANSPORTATION, GREEN BUSINESS/INDUSTRY, and CITY POLICY.

TEAM TASK

You are the CITY POLICY group. You must assess the presence of policy that supports creating a local, green economy.

INSTRUCTIONS

- * Use the research questions below to guide your investigation.
- * Utilize different research techniques (i.e.: online research, interviews, publications from community-based organizations, etc.)
- * Fill out the POLICY section of your class Assessment Grid
- * Prepare your presentation (make sure to include the answers to your research questions!)

RESEARCH QUESTIONS

- * Has your city council adopted any pro-green initiatives or policies? (Like green industry recruitment strategies, green business development, local food initiatives, green building incentives, green retrofitting initiatives, etc.)
- * Has your city or community made a commitment to reducing energy consumption and/or increasing use of renewable energy sources?
- * Are there local non-profit or community organizations involved in creating a local, green economy?
- * Is there an Office of Sustainability (or related office) in your city government?

RESOURCES

www.apolloalliance.org
www.sustainablecity.org
www.portlandonline.com/osd/
www.sustainlane.com/article/895
www.seattle.gov/environment