Introduction to Use of Energy Corps Learning Modules and Knowledge-Based Questions

Welcome to the Community Sustainability unit! The following pages will provide you with a guide for educating a variety of age groups on the subject of Community Sustainability and outline the most important concepts to cover in any presentation related to a specific topic. It will also supply you with a set of questions appropriate for each age group that you must ask as part of any presentation/workshop/other questionnaire you conduct related to Community Sustainability. In addition to providing you with a starting point for your presentation, these questions provide change-in-knowledge data that fulfills your performance-measurement requirements. Finally, you will find some tips on how to work with different age groups. These are, however, just a starting point. Including this information into your presentation should be considered a minimum requirement. There are sources included to help you find images and other material. We hope this teaching module will help you give effective presentations throughout your term of service. This is a work in progress and your feedback will help us improve our efforts to deliver information and evaluate the effectiveness of that delivery.

By the end of your presentation, you should have touched on each of the concepts listed below. Student knowledge of each concept will be tested by the questions found in this unit. Each age bracket will contain at least one question relating to each concept. This list and the included questions represent what you must do at a minimum – feel free to go beyond what is listed here and explore concepts in greater depth or detail. These questions and concepts are deliberately broad to allow the Energy Corps member to tailor his or her presentation to a specific audience, region, or topic. Be creative! Contact your site supervisor or state coordinator with any questions.

Learning Objective

Part 1 – Teach students the critical connection between the growth of our communities and our relationship with the planet; outline the essential principles of community sustainability; and offer strategies for pursuing community sustainability in both rural and urban communities.

Core Concepts

The following are the key concepts that any presentation on Community Sustainability should include.

1. **Introduction to Community Sustainability (also known as smart growth)**
    a. **10 Principles of Smart Growth**
2. **Differences Between Urban and Rural Communities**

3. **Past Energy Corps Projects**

Explanation of Concepts

Introduction to Community Sustainability

Community sustainability is achieved by communities that commit to strategies and principles that maximize the assets they have, focus on people, conserve natural resources, and strive for a pleasant standard of living for all residents. According to the Smart Growth network (www.smartgrowth.org) there are 10 principles that undergird the best efforts to achieve community sustainability.

1. Mixed Land Use: Residential, commercial, and recreational spaces should all be in close proximity to each other. This increases community vitality and can help raise property values. With mixed land use people are active in their community, on the street, in public spaces, and visiting pedestrian-oriented retail locations. A mixed community makes more transportation options feasible – those who choose not to own a car can still have personal transportation (walking or biking) or can use mass transit. A mixed neighborhood may also have more appeal to potential residents for whom quality of life is important.

Figure 1 - Santana Row in San Jose, CA. This neighborhood was constructed on the site of an old shopping center, resulting in a compact, walkable, mixed-use neighborhood. (Courtesy, http://www.epa.gov/dced/mxd_tripgeneration.html)

2. Compact Design: Reducing the footprint of new construction preserves land and natural spaces and keeps new housing close to jobs. It also allows local governments and other companies to save money on water, sewer, electric, Internet, transportation, and other services.

3. Range of Housing: A mix of housing in different configurations and price points attracts diversity. It also encourages equitable distribution of households, rather than concentrating different strata of incomes in different areas. With a range of housing, communities can also gain population density and grow in population. Ultimately, a range of housing opens the community up to all, allowing all members of a community to find their place.

4. Walkable Areas: Communities seeking to achieve smart growth and greater sustainability should seek to enhance walkability. Walkability means goods and services are accessible by an easy, safe walk. Walkability reduces transport costs, thereby reducing the community's demands for nonrenewable energy. It also allows those without cars to get to work easily. It also enhances a community's social life by encouraging people to visit places in the community and benefits resident health. Residents who enjoy walking in their community will strongly resist

undesirable blights such as pollution, and thereby benefit everyone. Walkability feeds back to mixed land use and compact design – one enhances the other and vice versa.

5. Distinctive, attractive communities with a strong sense of place: Sustainable communities form a vision for their community, based on standards and values they agree upon. Beauty, distinctiveness, and choice are critical to achieving this. A sustainable community is a cohesive community with strong culture and values that preserves its assets, including historic or unique buildings. With strong guiding principles, a sustainable community can direct future development that fits within those principles, thereby ensuring long-term value from the development. Long-term viability and value is critical to sustainability because it means the energy and resources consumed in the development are not wasted and will amortize themselves over time.

Figure 2 - In Highlands' Garden Village in Denver, CO, the investment has been directed toward existing assets (such as the historic Elitch Theater shown here) to help create a more vibrant community that is rooted in its past. Renovating the theater (done correctly) is also a more sustainable option than tearing it down to build a new one. (Courtesy, http://www.epa.gov/dced/case/highland.htm)

6. Preserve open space, farmland, natural beauty, and critical environmental areas: These spaces include community spaces, food, habitats for plants and animals, recreational locations, critical environmental areas (wetlands, old growth forest), areas of natural beauty, and farmlands or other working lands. These areas all enhance quality of life and help local communities and economies grow. There is growing political will to save the "open spaces" that Americans treasure. In recent elections, voters have overwhelmingly approved ballot measures to fund open-space-protection efforts. Protection of open space provides many fiscal benefits, including increasing local property value (thereby increasing property tax bases), providing tourism dollars, and preventing local tax increases due to the savings from avoided construction of new infrastructure. Supplies of high

Figure 3 - The Batsto River is part of the Pinelands are of New Jersey. The Pinelands Nature Reserve covers 1 million acres, and of that 40,000 are permanently protected. Despite its proximity to the cities of Philadelphia and New York, rural, land-based industries such as farming and the cultivation of cranberries are still pursued in and around the pinelands area. (Courtesy, Wikipedia Commons) http://www.epa.gov/smartgrowth/pdf/2009_11_tisg.pdf; http://en.wikipedia.org/wiki/Pine_Barrens_%28New_Jersey%29#Status

quality open space also ensure that prime farm and ranch lands are available, prevent flood damage, and contribute to clean drinking water." (www.smartgrowth.org/principles/open_space.php)

7. Variety of transport options: This means that sustainable communities are not tied to the car. Cycling, walking, and all forms of mass transit should be available to supplement and/or replace the car. This removes barriers to those who cannot or choose not to own a car. For those who do retain vehicles, infrastructure for electric or alternative fuel vehicles is critical to reducing communities' dependence on fossil fuels. This infrastructure could include electric vehicle charging stations and fuelling stations for fuel cell, E-100 ethanol, and biodiesel. Cycling, for example, reduces gasoline use, benefits our health, and saves parking space.

Figure 4 - B-Cycle bike share station in San Antonio, TX. (Courtesy, Taylor Bye)

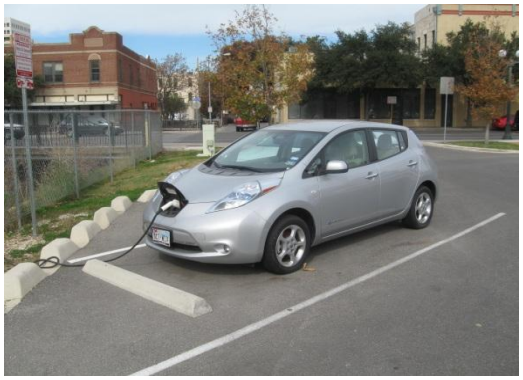


Figure 4 - A Nissan Leaf, part of San Antonio's Hertz 24/7 car share program. (Courtesy - Taylor Bye)

8. Predictable, fair, cost-effective development decisions: Governments at all levels have the ability to promote community sustainability by making development projects more affordable and attractive to private investors. For developers, putting time, money, and effort into getting approval for projects that enhance community sustainability can pay dividends if local regulators have a sensible, supportive system for approving projects and making changes to things like zoning or building codes. The local rules and regulations need to be comprehensible and accessible to citizens and developers.

9. Encourage community and stakeholder collaboration in development decisions: Much the same as #8, it is critical that communities have a process in which everyone can participate and help determine the direction of efforts to become more sustainable. "Citizen participation can be time-consuming, frustrating, and expensive. On the other hand, encouraging community and stakeholder collaboration can lead to creative, speedy resolution of…issues" (www.smartgrowth.org/principles/collab.php). Sustainability measures can be a great thing for a community, but if they are applied from the top down – or if community engagement in the process is discouraged – the results may not be favorable. Sustainability is crucial, but the process of becoming sustainable should involve everyone. Granted, there are examples of top-down community sustainability efforts that have succeeded, but there are plenty of other

examples where failure has been embarrassing and costly. One of the keys to avoiding this is good communication. Another is having an inclusionary process and fostering common understanding.

10. Strengthen and direct development toward existing communities: The best investments toward community sustainability occur when they are directed toward existing communities or in areas that already have infrastructure and resources that can be used. These places exist through the use of energy and natural resources – focusing future development on them ensures that those resources that are already baked into the community are not being wasted. Reducing development on the fringe of communities in favor of inner development preserves natural lands that cannot be replaced once they're gone. So-called "green field" development is attractive because it is easy and cheap, but there is a finite amount of land and resources on our planet. If we take the long view, maximizing those areas where money, time, and resources have already been invested in makes ecologic and economic sense.

Urban Community Characteristics versus Rural Community Characteristics

Community sustainability in urban areas is a complex and critical issue. To illustrate that, here is some history: Cities and suburbs are where most Americans live today – about 75 to 80% of them. Urbanization, the process of people moving from rural to urban areas, has been going on in the United States since the middle of the 19th Century. (Related to this is suburbanization, the movement to and expansion of suburbs on city fringes.) Urbanization is due in part to the American Industrial Revolution, which occurred at the same time. The Industrial Revolution is commonly accepted by scientists as the beginning of human-driven climate change, and, in the United States, the side-by-side development of urbanization and industry has contributed greatly to our energy and environmental woes. From toxic urban rivers and soot-caked industrial cities of decades past to devastation wrought by pesticides like DDT in suburban areas and now the dire threat that rising sea levels pose to our largest coastal metropolitan areas, urban/suburban spaces have always been hotspots in our relationship with our planet. (None of this is to claim that urban spaces are "worse" than rural areas, which will be addressed in the next section.) With this in mind, seeking community sustainability in cities requires that cities meet three requirements: cities must be sustainable, cities must be resilient, and cities must be livable. ("The Cities We Want: Resilient, Sustainable, and Livable" by David Maddox (2013) www.thenatureofcities.com). The 10 principles listed above can all play a role in achieving these requirements. According to Maddox (and many others), cities should be sustainable. They should be able to balance their intake of natural resources and "ecological footprint," and they should be able to support themselves without borrowing against their own future viability. As much of a city's support system as possible should come from within, or from adjacent areas, rather than from the resources of other areas, whose own residents will need those resources.

Community sustainability differs in rural and urban urban areas, mainly because the challenges faced by rural areas differ in some significant ways. As noted earlier, around 80% of the U.S. population lives in

urban/suburban areas. The remaining 20% or so lives in our nation's rural counties, which comprise most of our land (some 70%). In this situation, with a minority of the people living on a majority of the land, the priorities can shift compared to those found in a city or suburban development. Many rural communities are shrinking rather than growing as Urbanization continues and people move to cities and suburbs. Community sustainability implies that there is, in fact, a community that will continue to be viable in the long term. Rural areas that are losing population face a different set of challenges; rather than struggling to find a place for everyone, they struggle to find enough workers for industries such as farming or to maintain some semblance of a local economy. As people move away, local businesses follow them, repeating in a vicious cycle. Rather than being forced to be creative with land use, they find themselves with vacant lots and decaying historic structures. Other rural communities have the opposite problem – located on the edges of major metropolitan centers, they are being overwhelmed by urban sprawl. Whether the community is hemorrhaging population or being overrun by sprawl, they should focus on two things: preserving heritage/lifestyle and building from existing population/economic centers. Rural (and urban) communities should also maximize their sense of place and local connection to the land. Often located far from major job centers, some rural communities, particularly those with poor local economies/job markets, are filled with families who must commute to distant jobs by car, thus increasing pollution and land use for roadway development and reducing time spent with families and the local community. Time consuming trips to big chain stores have the same effect.

Energy Corps Sustainability Stories

Each of the following five excerpts is taken from "Service Impact Letter" by Katie Weaver, Energy Corps State Coordinator for Montana and Texas. (2013)

> "At the core of sustainable community planning is economic, environmental and social health. While many communities around the world have been implementing sustainability measures for decades, it can be difficult in smaller cities and in rural areas where human capacity is often a barrier. Placing Energy Corps members in these communities to work on sustainability planning has been a way to surmount this barrier, creating lasting impacts in communities across the country.
>
> In Montana, members have worked in various capacities on sustainability planning with cities, counties and non-profits. Andrew Valainais was a central player in the formulation of the Missoula Conservation and Climate Action Plan. This plan was passed unanimously by the City Council and targets carbon neutrality by 2025; an ambitious goal and bold commitment for Montana's second largest city." ("Impact Letter," 2013)

Community sustainability projects can range in scope from a single apartment building to an entire city. In this case the Energy Corps member participated in a large-scale project. Developing and following a plan is key to achieving community sustainability, and getting the community to buy in is critical. (See principles 8, 9, and 10.) Another example of a large-scale project is Lauren Casey's work in the Flathead Valley region of Montana.

> "Energy Corps member Lauren Casey worked with Citizens for a Better Flathead to develop *Re-powering the Flathead for a New Energy Economy*, a planning tool to help understand current and

future opportunities in energy use in order to take advantage of opportunities as they arise. Unlike many community energy plans that focus narrowly on local government operations, *Re-Powering the Flathead* explores opportunities for individuals and the private sector." ("Impact Letter," 2013)

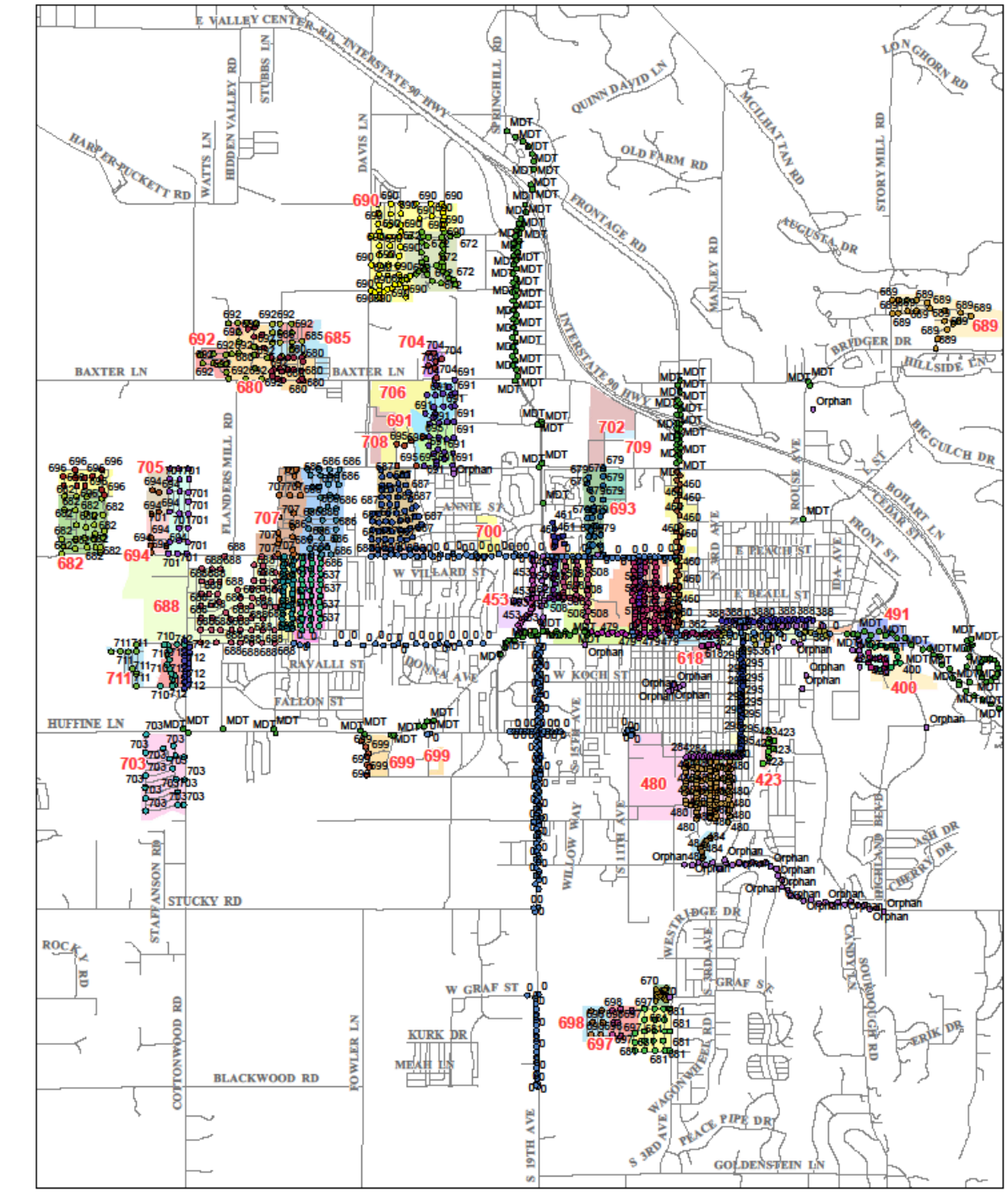
The Flathead project focuses on energy and on providing energy for the future. The Flathead area is near Glacier National Park and as such has a strong connection to the land. Maintaining their connection to the land and being stewards of the land is a key part of the program, as is ensuring that sources of energy that the community relies on are sourced and produced locally. There are several smart growth principles that apply here, including 6, 8, 9, and 10.
http://www.flatheadcitizens.org/repoweringtheflathead.htm

For an example of an Energy Corps member working with a city to reinvest in existing infrastructure, we turn to Emily Baker and her work in the City of Bozeman, Montana.

> "Emily Baker led a City of Bozeman effort to map the 1,647 streetlights throughout the city. Her findings were used to correct billing errors, earning the City a direct refund of about $5,000. Bozeman is also expecting to save another $13,000 a year going forward, a boon for its tax payers." ("Impact Letter," 2013)

Reinvestment, or continued investment and upgrades to existing infrastructure that keeps up with the needs of residents and saves money and energy are critical in maintaining resilient cities where future generations will still want to live. Lighting is a great example of creating appealing neighborhoods – it enhances safety and visual appeal. Safe and visually appealing neighborhoods will help cyclists and pedestrians. Money saved is money that can be invested elsewhere (principles 1, 4, 5). Below is a map created by Emily of the streetlights in Bozeman.

City Lighting Districts and Lights



0 0.5 1 2 Miles

Lighting Districts ###

Streetlights ###

Lighting districts are represented as colored rectangles, labeled in red. Streetlights are represented as dots, with the color corresponding to the lighting distirct, and labeled in black. Metered lights are given the SILD "0".

"In Pittsburgh, Pennsylvania, Energy Corps members at GTECH have been working on ReFuel pgh, a waste cooking oil collection program that aims to reduce air and water pollution and keep fuel investments within the region. Travis Meekem and Dan Certo have educated hundreds of community members and helped the program expand to 17 regular waste-veggie-oil donators. This program currently reduces greenhouses gas emissions by 30,000-40,000 pounds per year." ("Impact Letter," 2013)

One of the greatest challenges for cities is trying to find resources from within. Cities rely on other communities for their food, fuel, power, and other resources. Anything cities can do to find local sources of energy makes a big difference. In this case, Corps members Meekem and Certo have created a program that contributes to local energy needs. Smart Growth principle #7 references providing alternatives to petroleum-powered personal transport. This not only reduces greenhouse gas emissions, but it also gives people freedom to choose an alternative. Programs such as the ReFuel program may be viable in many other large cities due to high concentrations of restaurants and large populations.
http://gtechstrategies.org/39/refuelpgh

"In Arkansas, several members had great success in increasing recycling rates. Kendra Sager worked as the Sustainability Coordinator at T.G. Smith Elementary School. She successfully increased recycling rates and the school saw a reduction of outgoing trash of more than 50%. Dan Dean and Liz Hill were also able to make an impact in recycling rates in Fayetteville. The City's recycling participation rate is 56%, a rate they want to increase to 70% by 2015. One recycling route within the city was targeted for its low participation in the curbside recycling program. Dan and Liz conducted a door-to-door campaign to gauge support for recycling, participation rates and program satisfaction. The campaign resulted in 70% of people who didn't use curbside recycling receiving bins, signing pledges to begin recycling or both."("Impact Letter," 2013)

Recycling is a great example of community sustainability. Large quantities of waste, with fewer and fewer places to put it, is a fact of life for cities. Recycling makes use of this waste; indeed, if you think of waste as raw materials, a city that recycles everything it can is generating huge quantities of raw materials, all of which can be put back into the city as consumer goods. With local processing facilities and local manufacturing facilities (that hire locally) a city could reduce its use of virgin materials in dramatic fashion. An example would be a locally owned beverage compan, bottling its product using only recycled glass from cities and towns within 100 miles and only selling within that 100-mile radius. Maybe such a thing is feasible, maybe it isn't. If recycled materials are to be considered one of the key raw materials of the future, then educating people on recycling is a crucial first step.

For more Energy Corps stories, see www.energycorps.org. There you can follow the Energy Corps blog, where current and former corps members recount their own work helping their respective communities. Use these as inspiration, and don't forget to share your own projects and ideas.

For even more stories that illustrate each of the 10 smart growth principles, go online at http://www.epa.gov/dced/case.htm.

Relevant Definitions

Conservation Easement: A legal agreement between a landowner and a land trust or government agency that permanently limits uses of the land in order to protect its conservation values. It allows landowners to continue to own and use their land, and they can also sell it or pass it on to heirs. (https://www.landtrustalliance.org/conservation/landowners/conservation-easements)

Infrastructure: The basic facilities, services, and installations needed for the functioning of a community or society, such as transportation and communications systems, water and power lines, and public institutions, including schools, post offices, and prisons. (http://www.thefreedictionary.com/infrastructure)

Sustainability: 1) Able to be maintained at a certain rate or level. (especially development, exploitation, or agriculture) 2) Conserving an ecological balance by avoiding depletion of natural resources. (http://www.merriam-webster.com/dictionary/sustainable)

Some Pointers on Different Age Groups

Part of your job as an Energy Corps member is to be able to work with a variety of age groups. To that end, this unit provides you with questions deemed by NCAT to be appropriate for a given age group. Here are a few things to keep in mind.

- Some students, particularly younger students, will not have the same concept of "Energy" that we do. They may think of energy as the sugar rush they get from candy. They may not have even been taught what electricity is. This doesn't mean you can't present to them, but you must account for their level of learning.
- No matter what your students' age, you should try to assess the educational level of your audience, and don't assume they know what you know.
- If you can coordinate with a teacher in advance of a classroom visit, do so.
- Have fun and be creative, especially with younger groups. They don't have long attention spans, but they will get excited if something is fun and different.
- Community Sustainability may be a hard concept to teach younger students. It requires more complex thinking than they may be capable of. Try to focus on the things they can understand and actually take part in.

The Questions

We have provided you with the following questions, approximately five for each of three age groups. They can be found in the following pages.

Grades 3 – 5

1. Why is biking often a better way to travel short distances than a car? (Circle all that apply.)
    a. **Less use of gasoline**
    b. **Good for your health**
    c. **Saves parking space**
    d. You get to your destination quicker

2. Why is protecting natural spaces in cities important? (Circle all that apply.)
    a. **Natural spaces can provide food for people.**
    b. **Natural spaces provide habitat for other animals.**
    c. **Natural spaces help reduce greenhouse gasses.**
    d. Natural spaces reduce traffic.

3. Where do most people in our country live?
    a. **Urban areas**
    b. Rural areas

4. For the last question, have each student think of something they can help do to make their community more sustainable.

Grades 7 – 9

1. What are the three characteristics of the sustainable community? (Circle all that apply.)
    a. **Livability**
    b. High financial cost
    c. **Resiliency**
    d. **Sustainability**

2. True or False: Rural communities face a different set of challenges than urban communities.
    a. **True**
    b. False

3. Why is biking often a better way to travel short distances than a car? (Circle all that apply.)
    a. **Good for your health**
    b. **Less use of gasoline**
    c. **Saves parking space**
    d. You get to your destination quicker

4. Which of these is an example of a "green" space that can help cities be more sustainable? (Circle all that apply.)
    a. **City park**
    b. Abandoned apartment building
    c. **Rooftop garden**
    d. **River or lake within the city**

5. What are the traits of a "walkable community?" (Circle all that apply.)
    a. **Good sidewalks/walking paths**
    b. Lots of parking for cars

c. **Public gathering places**
d. **Stores within walking distance of homes and apartments**

6. For the last question, have each student think of something they can help do to make their community more sustainable.

High School – College/Adult

1. Which of these is an example of a community sustainability principle? (Circle all that apply.)
   a. **Mix land use**
   b. **Have a variety of transport options**
   c. Focus development on new communities
   d. Resist community input in order to streamline development process

2. Which of these is a benefit of preserving natural spaces in cities? (Circle all that apply.)
   a. **Dampen the effect of storms and flooding**
   b. **Provide gathering places**
   c. **Raise property values**
   d. Reduce traffic

3. Which of these is a benefit of building "up" rather than "out?" (Circle all that apply.)
   a. **Decrease car traffic**
   b. Lower population density
   c. **Preserve food and water supplies**
   d. Promote tourism

4. Which of these is a benefit of protecting a rural community's open spaces and working lands? (Circle all that apply.)
   a. **Continued source of income for those who work the land**
   b. **Economic benefits of agritourism and ecotourism**
   c. **Protection of water sources for nearby areas**
   d. **Reduced impact of greenhouse gases**

5. Which of these is a community sustainability principle that can be applied to BOTH rural and urban communities? (Circle all that apply.)
   a. **Preserve natural spaces**
   b. **Build compact neighborhoods**
   c. **Encourage stakeholder and community involvement in decision making**
   d. **Provide a range of transportation options**
   e. None of these

6. For the last question, have each student think of something that they can help do or that is being done to make their community more sustainable.

That ends the questions part of this unit. We encourage you add your own questions to these.

Sources To Get You Started

Except where noted, all questions were developed from information in these sources. Thanks to NCAT's Jeff Birkby for providing some of these sources.

ATTRA Local Food Publications - https://attra.ncat.org/attra-pub/local_food/

Robust local food systems are a critical component of all sustainable communities. For rural areas these food systems are particularly important because they may represent a large slice of the local economy.

Energy Corps - www.energycorps.org

The Energy Corps website houses the blog and the "Member Resources" section. The blog contains a wealth of other Energy Corps stories not contained in this module. Use these for inspiration. The Member Resources section contains Learning Modules much like this one on the subjects of "Home Energy Use," "Renewable Energy," "Food Systems and Energy," and "Recycling." These can provide specific information to support your community sustainability efforts and help you educate members of the community you serve.

Holistic Management International - http://holisticmanagement.org/

HMI focuses on sustainable farming and ranching, something that is critical for rural economies that want to maintain their connection to the land without destroying it in the process. Their slogan is "Working in Harmony with You and Mother Nature to Create a Sustainable Future." For those who want to "return to the land" and start their own farms, HMI has a series of Beginning Farmer Workshops which they have held in multiple states. It is geared toward commercial farmers and ranchers, not amateurs or hobbyists.

In Our Back Yard - http://ioby.org/

IOBY works to support crowd-funded, neighborhood-based sustainability initiatives.

National Resources Defense Council - http://www.nrdc.org/sustainable-communities/

The NRDC has a section of their website devoted to community sustainability. The rest of their site is also useful, and has a focus on resource conservation and sustainable urban development.

Partnership for Sustainable Communities - http://www.sustainablecommunities.gov

A joint partnership between HUD (see below) the EPA, and the U.S. Department of Transportation (USDOT), sustainablecommunities.gov contains a long list of case studies from across the country. Additional resources include grants and list of "Partnership Publications" that can be mined for more ideas or inspiration. On the top bar menu, click "Resources," and then use the links on the right side of the screen to go through different categories of resources.

There are five to 10, and sometimes more, distinct items within each of the 10 categories, so there are many choices.

Regional Rural Development Centers

North Central Regional Center for Rural Development - http://ncrcrd.org/
Northeast Regional Center for Rural Development - http://www.nercrd.psu.edu/
Southern Rural Development Center - http://srdc.msstate.edu/
Western Rural Development Center - http://extension.usu.edu/wrdc

Housed in major land grant universities, these regional development centers can be resources for grants, publications, and other tools and information. Their focus, as the name suggests, is on rural areas.

Smart Growth Online - www.smartgrowth.org

Smart Growth is a project of NCAT, funded by the EPA. It contains a wealth of information, resources, and examples of communities that grow in ways that are both sustainable and help bring about greater equality and prosperity for the people in those communities. See below for specific works of interest from the Smart Growth website and from the EPA.

Sustainable Communities Overview -
http://www.smartcommunities.ncat.org/overview/ovintro.shtml

This is Smart Growth - http://www.epa.gov/smartgrowth/pdf/2009_11_tisg.pdf

Putting Smart Growth to Work in Rural Communities -
http://www.epa.gov/smartgrowth/sg_rural.htm
Many rural communities and small towns are facing challenges, including rapid growth at metropolitan edges, declining rural populations, and loss of working lands. This report focuses on smart growth strategies that can help guide growth in rural areas while protecting natural and working lands and preserving the rural character of existing communities.

Key Tools/Resources for Smart Growth and Sustainable Communities (EPA)
http://www.epa.gov/smartgrowth/partnership/tools.html
This site focuses on environmental justice, green building, land reuse and revitalization, community planning, mass transit, walkability, and water issues.

Sustainability Deniers - How to Deal with them in Public Meetings - http://bettercities.net/news-opinion/blogs/nathan-norris/15778/playing-tea-party-planning-and-agenda-21

This is a good resource on how to deal with those who may believe anything to do with "sustainability" or "green" is a step toward "socialism" or is a United Nations plot. With luck, you will not encounter too many of these individuals in your time as an Energy Corps member, but if you do, knowing how to deal with them can make the difference between

The Nature of Cities - http://www.thenatureofcities.com/author/gdmaddox/

The Nature of Cities looks at cities as ecosystems. Rejecting the notion that we humans are somehow removed from or separate from nature, Maddox and other writers explore why an

understanding of the Urban Ecosystem is useful to help build cities that are “livable, sustainable, and resilient.”

U.S. Department of Housing and Urban Development - http://www.huduser.org/portal/sustainability/home.html

HUD has a wide range of resources spanning the entire country. Categories on their website include “Rural, Tribal, and Small Town,” “Green Building,” “Healthy Communities,” and “Housing and Transportation Choice.” These dovetail nicely with many of the 10 Principles outlined by SmartGrowth.

Feel free to find your own sources to supplement these! Have fun and good luck!