



Smithsonian

**SCIENCE**  
*for Global Goals*

# ENERGY!

Part 7: Taking Action



SUSTAINABLE DEVELOPMENT **GOALS**

developed by



Smithsonian  
*Science Education Center*

in collaboration with

**iap** SCIENCE  
HEALTH  
POLICY  
the interacademy partnership

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Smithsonian Science Education Center greatly appreciates the efforts of all the individuals listed below in the development of *Energy! How can we ensure sustainable energy for all?* Part 7. Each contributed his or her expertise to ensure this project is of the highest quality. For a full list of acknowledgments, please refer to the acknowledgments section at the beginning of this guide.

Smithsonian Science Education Center Module Development Staff

Executive Director - Dr. Carol O'Donnell

Division Director for Curriculum, Digital Media, and  
Communications - Dr. Brian Mandell

Science Curriculum Developer - Logan Schmidt

The contributions of the Smithsonian Science Education Center staff, Project advisors, research mentors, and technical reviewers are found in the acknowledgments section.

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Guide developer - Logan Schmidt



## PART 7: TAKING ACTION

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### **Find out More!**

For additional resources and activities, please visit the *Energy!* StoryMap at <http://bit.ly/3Kx41Jy>.



## Planner

<b>Activity</b>	<b>Description</b>	<b><u>Materials and Technology</u></b>	<b><u>Additional Materials</u></b>	<b><u>Approximate Timing</u></b>	<b><u>Page Number</u></b>
<b>Task 1: How will I help create a sustainable energy future?</b>					
<b>Discover</b>	Use your <i>Futures Mood Board</i> to decide what future you want to take action to support.	<ul style="list-style-type: none"> <li>• Paper</li> <li>• Pens or pencils</li> </ul>	<i>Futures Mood Board</i>	20 minutes	203
<b>Understand</b>	Come to consensus and plan your action.	<ul style="list-style-type: none"> <li>• Paper</li> <li>• Pens or pencils</li> </ul>	<i>Identity Map</i>	45 minutes	206
<b>Act</b>	Implement your action plan and reflect on your action.		<i>Action Plan</i> <i>Futures Mood Board</i>	15 minutes + action time	208



## Task 1: How will I help create a sustainable energy future?

As **action researchers** you now have a lot of information. You discovered what is important to you and your team. You understand more about the science of **sustainable energy**. You understand the values of people in your **community**. Now you will put those ideas together. In this part you will decide how your team will act to create the future you want. Then you will put those plans into action.

In this task you will **discover** more about your and your community's **hopes** for the future. Then you will **understand** more about your role in working toward those goals. Finally, you will **act** on your ideas and work toward a sustainable and positive future.



**Discover:** *How do I want my community to use sustainable energy in the future?*

Before you decide what you want to do, you need to think about what you want to accomplish. Many different futures are possible. Which one do you want to work toward?

1. Take out your Futures Mood Board.
2. With your team, think about everything you have learned in this guide. Is there anything you would like to add to your Futures Mood Board? If so, add it now.
3. By yourself, examine the Futures Mood Board. Pick one part of the future that relates to sustainable energy that you would like to work toward. It could be a **concern** you have about the future that you want to avoid, or it could be a hope about the future that you want to encourage.
4. Share your ideas with your team.
5. Take out and examine your Energy Source Cards. In Part 1 you arranged these cards in the order in which you think they would be most helpful for your community. Create a new order based on what you have learned during this guide.
6. Discuss with your team:
  - a. What, if anything, has changed about your card order?
  - b. What do you want to remember as you are thinking about actions you want to take for a sustainable future?



7. As a team, come to **consensus** on one part of the future you want to take action on. A consensus is a balanced decision that works for everyone in the group. There are many ways to come to consensus. Here are some ideas. You can choose whatever works best for your team.
- List the good things and bad things about taking action for each future. Discuss as a team.
  - Try to find the same values. Are there some ideas about the future that are similar? Try to combine them.
  - Build a sense of the group opinion. Are there some ideas about the future that many people would be interested in working toward?
  - Find a slow consensus. Find a partner and as a pair find consensus on which future idea is most important. Then in a group of two pairs (four team members) you can build consensus among the four of you. Then in a group of four pairs (eight team members) you can discuss further to build consensus. Keep adding groups together until you have found a team consensus.
  - Consider your **impact**. Think about who would benefit from your team working toward a specific idea about the future. Which group are you most interested in helping?
8. Once you have chosen a future you want to work toward, you need to think of an action to take that might help create that future. Get out a piece of paper and write or draw any actions you can think of. If you are having trouble thinking of actions you can take, here are some ideas you may want to consider.
- Personal choices: Could you make energy conservation a part of your life, or a part of your household? Could you make choices in the way you move around your community that reduce the amount or change the kind of energy you use? Could you choose a career that helps increase the use or knowledge of low-carbon energy sources?
  - Educate others: Other people you know may not know much about sustainable energy. Could you choose a group and help them learn more?
  - Communicate with your community: Could you help your community understand sustainable energy or a concern you have by designing posters, composing songs, recording podcasts, making public service announcements, setting up a social media campaign, or using other ways to communicate?



- d. Government change: What does your local or national government do now to encourage people to use sustainable energy? What are the laws, policies, or **incentives** that help people choose, use, or pay for low-carbon energy? Try to change the rules your local or national government has about sustainable energy. For example, you could write letters to officials or speak at local government meetings to share the actions you think are necessary to create the future you want.
  - e. Global change: Remember that access to energy is a problem around the world. You have investigated the people in your community who have a hard time getting reliable, safe, and affordable access to energy. Could you do the same research about places outside your community? Could you pair with a community somewhere else in the globe and exchange ideas about how to increase the use of sustainable energy?
  - f. Come up with your own ideas!
9. Read this quote from Dr. Hal Wallace, curator of the electricity collections at the National Museum of American History in the Smithsonian Institution. Hal's job is to do research that helps educate people about the past and future of energy and electricity. There are many types of useful actions to take. Hal is suggesting one kind. Do you think that action might be one you and your team wants to take?



### *At the Smithsonian*

“How can you be an **advocate** in your community? Find out who is in charge of your local power and start attending those meetings. Ask questions. Push them to adopt sustainable sources of energy. Ask them to improve the electrical grid. Instead of being a passive member of the community, become an active one.”





## **Understand:** *What will my role be?*

Now it is time to plan your action. As you have learned, variations among people's **perspectives** and abilities can make the whole team stronger. Think about what role you will take to help with the team action.

1. Take out your *Identity Map* from Part 1 and examine it closely. Make a note of things about your **identity** that might help you decide how you would like to act. For example:
  - a. Are you part of any groups that you could communicate with?
  - b. Do you have any special talents, such as art or music, that might be useful to capture people's attention?
  - c. Are you interested in science and engineering or other ways to try to find solutions?
  - d. Do you have good planning or organizational skills?
  - e. Are there other things about your identity that might help you work toward the future you want?
2. Gather with your team. Write "Team Strengths" on a sheet of paper or on the board.
3. Write down all the ideas each person had about things from their identity that might help you all act.

### **Emotional Safety Tip**

Everyone has strengths and weaknesses. As a team member, sharing your unique strengths is important, even if it feels uncomfortable. It is important to respect your own strengths and to respect what others identify as their strengths.

4. Break into four groups and assign each group one perspective: **social**, **environmental**, **economic**, and **ethical**.
5. As a group, consider each potential action from the Discover activity from your assigned perspective.





- a. Think about how this action might help from your assigned perspective.
  - b. Think about how this action might hurt from your assigned perspective.
6. As a team, discuss the different perspectives on the actions you thought of in the Discover activity. Remove any actions that would not be helpful or that you cannot do.
  7. Share your ideas and listen to others. Come to a consensus about which action you will take, using your *Team Strengths* list to help you decide the best action for your team. You can use some of the consensus-building ideas from the Discover activity, if you want.
  8. Discuss with your team any other actions you took while using this guide. Is there anything you learned that you need to remember when you are taking this action?
  9. Think quietly to yourself about the steps that could be part of planning the action your team picked.
  10. Write, draw, or use another way to record your ideas on small pieces of paper. Each piece of paper should have one step of the action you have chosen.
  11. Have each team member share their steps by placing their pieces of paper on a table or by using a digital tool to **collaborate**.
  12. Read through the steps from your teammates.
    - a. Did you notice any steps that were similar to yours?
    - b. Do you think your team is missing any steps?
  13. Start to organize your team's steps. You can move the pieces of paper around as you do this. Thinking about your team's steps will help you decide how you will take action.
    - a. Group any similar steps together.
    - b. Remove any steps you don't think are needed to help your team take action.
    - c. Think about how each team member will help. Put their names with the steps they would like to help with.
    - d. Think about what steps might be missing. Add those steps.
  14. Put the steps in order. For example, what do you think the team needs to do first? Place that piece of paper before all the others.



15. Title a sheet of paper “Action Plan” and record the following:
  - a. The steps your team would like to take
  - b. The order of those steps
  - c. Who will help with each step (it might be more than one person)
  - d. When and where you will take these steps
  - e. Partners or other people you will involve
  - f. How you will communicate your action plan to the community
16. Think about what you will do if your plan doesn't work, or you run into another problem. For example, what will you do if an adult in your community says you need permission to do something in your plan? Record these ideas as part of your action plan.
17. Remember to create an **inclusive** action plan. Being inclusive means everyone on your team can participate in some way. You may need to make changes to the plan so that everyone feels safe, comfortable, and able to help. Those changes are okay! They are part of being a good teammate.



**Act:** *How will I put my ideas into action?*

The time has come to act! You can use everything you have learned to take action to help create the future you want.

1. With your teammates, implement your Action Plan. This may take some time. There is no need to worry; take the time you need. When you are finished, come back and complete this activity.
2. Think quietly about the action you took. Consider:
  - a. What went well?
  - b. What do you think could have gone better?
  - c. How would you change your action if you had to do it again?
3. Discuss with your team:
  - a. What makes you proud of yourselves as a team?
  - b. What do you think you have learned for next time?



4. Examine your *Futures Mood Board*. How are you feeling about the future now?
5. Think quietly to yourself about what you plan to do to create the changes you want to see in the future.

## Congratulations!

### You finished the *Energy!* Community Research Guide!

All of us should be trying to do what we can to change ourselves and our world for the better. Maybe you took a big action. Maybe you took a small action. Maybe it had a big impact. Maybe it had a small impact. The most important thing is that you did something. When you take action to make your community better, you create the world you want to live in. You and your team are changing the world, one step at a time!

#### *Find out More!*

For additional resources and activities, please visit the *Energy!* StoryMap at <http://bit.ly/3Kx41Jy>.



## Glossary

This glossary can help you understand words you may not know. You can add drawings, your own definitions, or anything else that will help. Add other words to the glossary if you would like.

**Action researcher:** A person who works with their community to discover, understand, and act on local and global problems they learn about

**Advocate:** A person who recommends or supports a particular cause or idea

**Collaborate:** To work together on an activity or toward a goal

**Community:** A group of people who share something in common, such as a space or an identity

**Concern:** Something that causes anxiousness, worry, or fear

**Consensus:** A balanced decision that works for everyone in the group

**Economic:** About money, income, and the use of wealth

**Energy:** Anything that gives the ability to do work

**Environmental:** About the natural world

**Ethical:** Something that is fair

**Hope:** Something that is desired, wished for, or wanted



**Identity:** The characteristics that make you you

**Impact:** The effect one thing has on another

**Incentive:** Something that encourages people to participate

**Inclusive:** Making sure no one is left out

**Perspectives:** The different ways we think about the world around us

**Social:** Relating to the interaction of people in a community

**Sustainable:** An approach that balances different perspectives and can keep working for a long time



## Meet Logan Schmidt, Your Energy Guide Developer

Meet Logan Schmidt. Logan (*LOH-gan*) was the main person writing this guide. She talked with lots of researchers to get information. However, like anyone, she has her own perspective. You have learned it is important to consider the perspectives of your teammates and research mentors. Perspectives affect what we think and how we think. It is also important to think about the perspective of the writer. This can help you understand why the guide was written the way it was. Considering the source of information is always a good idea. To help you, Logan filled out an identity map, just like you did in Part 1.

### Logan's Identity Map

Uses she/her pronouns

Loves science and talking to other people about science

40 years old

From the United States

Has degrees in biology and education

Has lived in the Falkland Islands

Cisgender

Enjoys needlepoint

Favorite food is mozzarella sticks

Likes to play volleyball and soccer

Mother of one daughter and one son

Has lived in Greece

Likes to fly fish

Volunteers to help military veterans

Has an older sister and two nephews

"My mom is my hero. She inspired me to work in education."



Before you finish the guide, think quietly to yourself about Logan's identity map.

- What questions do you have about the way the guide was written?
- What perspectives does Logan have that might have made her write the guide the way it is?
- Are there things you would include that were not included?

Do you want to tell Logan what you would change about the guide? Email her at [scienceeducation@si.edu](mailto:scienceeducation@si.edu). She'd love to hear from you!





**SCIENCE**  
*for Global Goals*

Parents, Caregivers, and Educators  
Action Plans can be shared with us by using hashtag #SSfGG!

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Smithsonian Science for Global Goals (SSfGG) is a freely available curriculum developed by the Smithsonian Science Education Center in collaboration with the InterAcademy Partnership. It uses the United Nations Sustainable Development Goals (SDGs) as a framework to focus on sustainable actions that are student-defined and implemented.

Attempting to empower the next generation of decision-makers capable of making the right choices about the complex socio-scientific issues facing human society, SSfGG blends together previous practices in Inquiry-Based Science Education, Social Studies Education, Global Citizenship Education, Social Emotional Learning, and Education for Sustainable Development.

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