

JUNIOR GET MOVING! JOURNEY (INVESTIGATE) - MEETING 2

Journey Award Purpose: When girls have earned this award, they'll know about efficient use of energy in their meeting places and communities.

Activity Plan Length: 1.5 hours

Time	Activity	Materials Needed
10 minutes	Getting Started <ul style="list-style-type: none"> Girls recite the Girl Scout Promise + Law. 	<input type="checkbox"/> (Optional) Girl Scout Promise and Law poster
10 minutes	Review Energy Pledges and Energy Innovators <ul style="list-style-type: none"> Girls review their energy pledges and brainstorm people who could be considered energy innovators. 	<input type="checkbox"/> Writing utensils <input type="checkbox"/> Paper
15 minutes	Building Biography <ul style="list-style-type: none"> Girls investigate how energy is used in their meeting room. 	<input type="checkbox"/> Sticky notes <input type="checkbox"/> Writing utensils
10 minutes	Meet an Energy Innovator <ul style="list-style-type: none"> Girls learn about energy innovators. 	<input type="checkbox"/> Innovator profiles <input type="checkbox"/> Large paper <input type="checkbox"/> Markers
20 minutes	Becoming Building Detectives <ul style="list-style-type: none"> Girls explore how to measure energy consumption in different buildings and how to increase energy efficiency. 	<input type="checkbox"/> Books, magazines, or catalogs with energy efficient appliances, waste reduction ideas, green buildings, or energy saving tips <input type="checkbox"/> Paper <input type="checkbox"/> Drawing utensils <input type="checkbox"/> Whiteboard or large paper <input type="checkbox"/> Marker <input type="checkbox"/> Copies of energy audit questions
15 minutes	How Much Water? <ul style="list-style-type: none"> Girls enjoy a healthy snack, discuss how much energy it takes to grow food, and get started on their Take Action project. 	<input type="checkbox"/> Healthy snack <input type="checkbox"/> "How Much Water Does It Take to Grow One Pound of Protein" matching game (one per group of 3-4 girls) <input type="checkbox"/> Paper <input type="checkbox"/> Writing utensils
10 minutes	Wrapping Up	<input type="checkbox"/> (Optional) Make New Friends song lyrics poster



Getting Started

Time: 10 minute

Materials Needed: (Optional) Girl Scout Promise and Law poster

Welcome everyone to the meeting, recite the Girl Scout Promise and Law.

Activity #1: Review Energy Pledges and Energy Innovators

Time: 10 minutes

Journey Connection: Award connects to multiple sessions

Materials Needed: Writing utensils; paper

1. Remind the girls about the energy saving pledges they took home to their families in the first activity plan. Have them turn to a neighbor and share one way their families succeeded in being more energy efficient.
2. Now, have them think about the people that they found who worked with energy issues. Each girl will draw a portrait of one of their “energy innovators” in their energy-related role. They might have a uniform or protective clothing, be holding tools that help them with their task, or just be surrounded by the benefits of their work with energy.
3. Girls who were not at the last meeting and didn’t interview anyone can think of a job or role that works with energy and draw a picture of how they think this person is an energy innovator.

Activity #2: Meet an Energy Innovator

Time: 10 minutes

Journey Connection: Session 2 – Pledging to Save Energy

Materials Needed: Innovator profiles; large paper; markers

Prep Needed:

- Look through the profiles of energy innovators so you are familiar with the stories. They are available at the end of this activity plan, or in the Get Moving! girl books (pages 24, 34, 40, 41, 42-43, 50, 67, 83, 84).
 - Make copies of the innovator profiles, or tell girls to bring their Journey books to the meeting.
1. Divide the girls into small teams and give them each an innovator profile. Teams can read one profile and discuss their highlights or other ideas they think of after reading it.
 2. Have the girls take turns sharing one thing from their innovator’s profile or project description that they thought sounded fun, surprising, or inspiring.
 3. If they are getting stuck, ask them to share one thing they liked about what they’ve already done on the Get Moving! Journey. Record responses on the big paper, or have the girls add their responses themselves.

Activity #3: Building Biography

Time: 15 minutes

Journey Connection: Session 5 — The Energy Audit

Materials Needed: Sticky notes; writing utensils

Prep Needed:

- **Well in advance:** Connect with someone at the building where you hold your meetings. If you cannot find someone to talk to your group, you can consider moving your meeting time or finding a building where you can find a personal connection with the building manager.



- Find out what things the building manager can tell you about the building, and help guide your girls' questions that direction. Topics may include: main energy use (type of heating and cooling systems, major appliances, peak use times in building, biggest single energy drain); ways the physical building limits energy use (type and amount of insulation, types of lighting, timers, window shades and draft blockers, low flow or dual-flush toilets); and systems people use to be better energy managers (water conservation plans, recycling, computer use policy).
1. Introduce the guest speaker to the girls and let them know that s/he will be sharing this building's energy story. Girls will find out how and where energy gets used in the building, and how both physical things in the building and people's actions make it work.
 2. Hand out a few sticky notes and a writing utensil to each girl.
 3. The speaker should begin with what she wants to share about the building.
 4. If girls think of questions, they should write them down on sticky notes right away, while the questions are still fresh in their minds.
 5. Allow time for questions after the speaker is done sharing the building's energy story. There may not be time for all questions; anything that isn't asked will be collected up on the wall, and you can return to them later if time allows.

NOTE: Alternative to this activity:

1. If you are unable to connect with a building manager, the link below shows a classroom that demonstrates both efficient and non-efficient energy use. You can print out the mural poster and activities directly from the site: www.energyquest.ca.gov/teachers_resources/documents/POSTER.PDF.

Activity #4: Becoming Building Detectives

Time: 20 minutes

Journey Connection: Session 5 – The Energy Audit

Materials Needed: Books, magazines, or catalogs with energy efficient appliances; waste reduction ideas, green buildings, or energy saving tips; paper; drawing utensils; whiteboard or large paper; markers; copies of energy audit questions

Prep Needed:

- Print copies of the energy audit questions (at the end of the activity plan).
 - Look for magazines with pictures of houses, home improvement projects, or articles on energy efficiency. Bring them with you to the meeting. Print out a copy of the Easy Energy Action Plan from the Department of Energy at <http://gsrv.gs/1PkTNHi>.
1. Hand out the sheets of paper and drawing utensils, and distribute reference materials between tables.
 2. Now that girls know some of the ways buildings use energy and what people do to use it wisely, how can they use what they know? The building manager knows their building well, but what should girls look for in other buildings and how?
 3. Brainstorm on the large paper or whiteboard some things that girls should find out if they were to investigate a building. They might want to find out what appliances or lights stay on and drain electricity, or what windows or doors have drafts, or how much water is used by certain jobs or appliances. Give the girls a few minutes to generate a significant list.
 4. Some of the questions create other questions. For example, girls might want to know how much it costs to heat a building in the winter, but that number doesn't really mean much unless it's compared to the average cost of heating that type of building in winter. If there are questions like this on the girls' list, put a star by them so girls know it's only part of the picture.
 5. Now that girls have their questions, their job is to find answers. They might need to set up experiments or interview someone like the building manager. They might have to write a survey to ask a lot of people or invent a tool that measures something.



6. Each girl should choose a question (or invent a new one) and on her paper, she should design a way of testing for the answer to that question. It might be a comparison chart of room temperatures at different times, a tissue paper ribbon to detect drafts, a grid for setting out measuring cans to see if the lawn is getting the right amount of water or a plan for measuring how much non-recycled packaging enters the building.
7. Have the girls share their testing device or plan with the other girls at their tables.
8. Let the investigation begin! Each girl will take the test she designed and do some detective work on her own building. It will probably be her home, but if the family may have a connection at another building that they would like to use (for example, if someone's workplace or church has been involved in energy saving plans). Girls should plan to use their testing devices, if practical, or ask for help in finding the answers. Send home copies of the example Home Energy Audit questions.

RESOURCE SUGGESTIONS:

- *The Earth Book* by Todd Parr
- *Miss Fox's Class Goes Green* by Eileen Spinelli and Anne Kennedy
- *Winston of Churchill: One Bear's Battle* by Jean Okimoto and Jeremiah Trammell
- *Home Energy* magazine, also online www.homeenergy.org
- Home improvement project guides from home improvement stores
- Webpages:
 - Kids Saving Energy: <http://www.eia.gov/kids/>
 - TVA Kids: <http://gsrv.gs/1Na9sdt>
 - Energy games and parent guide: www.energyhog.org

Activity #5: How Much Water?

Time: 15 minutes

Journey Connection: Session 7 – Gearing Up to Go

Materials Needed: Healthy snack; paper; writing utensils; “How Much Water Does It Take to Grow One Pound of Protein” matching game (one per group of 3-4 girls)

Prep Needed:

- Print and cut out “How Much Water Does It Take to Grow One Pound of Protein” matching game.
1. Pass out snack to girls.
 2. Discuss with the girls how they’ve been learning all about how to be more energy efficient. Ask them if they’re aware of how much energy it takes to grow and produce the food they eat every day.
 3. Divide the girls into groups of three to four and hand each group the matching game. Give the girls a few minutes to play the game, then review the answers with them.
 4. Help the girls start thinking about their Take Action project, which they’ll carry out during the next meeting. Discuss with them:
 - Did the amount of water needed to grow one pound of animal protein (beef, pork, and chicken) surprise them?
 - Can they think of some ways to make more energy-efficient food choices?
 - How can they get other people on board to make those choices too?
 - Are there any places they can partner with to make their project more impactful (for example, a local business, a community center, their school)?
 5. Girls can write down their ideas and brainstorming down on paper to keep for the next meeting.

Wrapping Up

Time: 10 minutes



Materials Needed: (Optional) Make New Friends song lyrics poster

Close the meeting by singing Make New Friends and doing a friendship circle.

More to Explore

- Field Trip Ideas:
 - Visit a store that sells home appliances. Compare stickers on energy use for one type of appliance, such as refrigerators. What was the range of answers? Which was the most efficient? What does that efficiency cost up front—that is, even though it saves money in the long run, how much more does the efficient appliance cost to buy?
 - Go to a grocery store or other large retail store and compare packaging on similar items. Where could a shopper make a big difference in reducing packaging waste?
 - Visit a regional recycling center or community compost facility.

- Speaker Ideas:
 - Invite family members to your meeting to do the activities with you.
 - Have a gardener come to a meeting to talk about what plants need to grow, what plants are best for our area and how gardens and green space are healthy for people.



Home Energy Audit

You and your family may not have answers to all of these questions; find out as much as you can, or put in your best guesstimate.

Building History

Year built:

Number of people typically using space each day:

Square footage of space you use that is heated/cooled:

If part of larger building, total square footage:

Is the building air-conditioned?

If only part, how much square footage?

What type of heating /cooling systems do you have?

What type of fuels?

What updates did you make or do you know of that would have made the building more energy efficient?

What do you think has been the biggest single energy user in your building over the past year?



Energy Bills

Fill in the following information. Then, go to the Energy Star website (www.energystar.gov/) under "Home Improvement," and choose "Assess Your Home" to enter your information and compare your energy use to similar homes in your region. Direct link: <http://gsrv.gs/1HGwK3h>

ZIP code:

Number of people at home:

Square footage:

Types of energy used

Check if used	total units annually	total cost annually
<input type="checkbox"/> electricity	_____ kilowatt hours	\$ _____
<input type="checkbox"/> natural gas	_____ therms or CCF	\$ _____
<input type="checkbox"/> fuel oil	_____ gallons	\$ _____
<input type="checkbox"/> wood	_____ cords	\$ _____
<input type="checkbox"/> kerosene	_____ gallons	\$ _____
<input type="checkbox"/> propane	_____ gallons	\$ _____
<input type="checkbox"/> coal	_____ pounds	\$ _____
<input type="checkbox"/> other		\$ _____

Energy Details

Are there any timers or programmable thermostats to control energy use?

Do you lower the temperature at certain times of day, or when you leave the house?

Are any lights on motion sensors?

Does your building have elevators, or does your home have any stair lifts or similar equipment?

What kind of hot water heater do you have? What is the temperature?

What energy source is used for cooking?

Looking from the outside, what percentage of wall space is covered by windows?



What else do you know about your windows (overall U-value, tinting/shading coefficient, glazing, weather stripping, storm window use, etc.)?

How are the walls constructed (overall R-value)?

How is the roof constructed (overall R-value)?

Do any of your appliances have Energy Star ratings?

How much energy does your freezer or refrigerator use, on average (find your model and estimate at <http://gsrv.gs/1N3pvKT>)?

Is your refrigerator/freezer side-by-side or top-bottom? Does it have a water or ice dispenser in the outer door?



Building Energy Audit

Enter the following data on Trane's website (energy.trane.com) to compare the building's energy use with similar facilities in our region. Answer as completely as you can.

Building History

Year built:

Location (city, state, ZIP):

Type (commercial, school, government, etc):

Number of people typically using space each day:

Numbers of hours each week building is used:

Months per year building is used:

Square footage of space you use that is heated/cooled:

If part of larger building, total square footage:

Is the building air-conditioned? If only part, how much square footage?

What type of heating /cooling systems do you have? What type of fuels?

What updates did you make or do you know of that would have made the building more energy efficient?

Besides electricity, what fuel(s) are used to heat/cool the building?



Types of energy used

Check if used	total units annually	total cost annually
<input type="checkbox"/> electricity	_____ kilowatt hours	\$ _____
<input type="checkbox"/> natural gas	_____ therms or CCF	\$ _____
<input type="checkbox"/> fuel oil	_____ gallons	\$ _____
<input type="checkbox"/> wood	_____ cords	\$ _____
<input type="checkbox"/> kerosene	_____ gallons	\$ _____
<input type="checkbox"/> propane	_____ gallons	\$ _____
<input type="checkbox"/> coal	_____ pounds	\$ _____
<input type="checkbox"/> other		\$ _____

Energy Details

Does the building have an automation system?

How much do you lower the temperature at night or off-peak times?

Do you have any indoor day lighting sensors and/or occupancy controls?

Does your building have elevators or escalators? How many?

What kind of hot water heater do you have? What is the temperature?

What energy source is used for commercial cooking?

Looking from the outside, what percentage of wall space is covered by windows?

What else do you know about your windows (overall U-value, tinting/shading coefficient, glazing, weather stripping, storm window use, etc.)?

How were the walls constructed (overall R-value)?

How was the roof constructed (overall R-value)?

What is the efficiency of the heating system?



How much of the building is mechanically cooled?

How efficient is the cooling system?

If the building has a chiller plant, what type of chillers are used?



Innovator Profiles

Jenni Larmore

Innovation: Paw Power Dog Park

Jenni Larmore's town needed a place where dog owners could exercise their pets and socialize, so she created one. Paw Power Dog Park, in Clermont, Florida, spreads over four acres and is shaded by 100-year-old oak trees. The park's five sections accommodate dogs of all sizes and activity levels. Each area has an agility course and stations for drinking, waste, and washing.

To get started, Jenni surveyed pet shop owners, veterinarians, and dog owners about their needs and desires. She then presented a proposal to the Lake County Parks and Trails Department that included the concept, location, blueprints, projected costs, and a project work plan. "I am super convincing when I really believe in something and can convey that to people when I speak to them," Jenni says.

And so, the work began. Jenni enlisted members of the Girl Scouts of Citrus Council and recruited other volunteers through community bulletins. A perimeter fence was installed, the land was cleared of vines and debris, and brick pavers were laid to level the ground. Discarded fire hydrants and tires got new life in the park. A fund-raising dog wash paid for the agility equipment.

Dozens of volunteers spent more than 136 hours over 13.5 months to make Paw Power a reality. Even young Girl Scouts helped by spray-painting the decals that mark the park's various sections. Jenni began her project in fall of 2005 as an eleventh grader. It earned her a Girl Scout Gold Award and a 2008 National Young Woman of Distinction honor. Since then, she has spent many more "rewarding hours" working there.

What is innovative about Jenni's idea? What positive risks did she take?

Abbe Hamilton

Innovation: Saying No To Styrofoam

"If I go out to a restaurant and I'm thinking about takeout, I'll ask what kind of container they use," says Abbe Hamilton. "I'm not willing to contribute to the Styrofoam problem anymore." Commonly used for fast food and takeout, Styrofoam has been known to litter beaches, parks, and waterways around the world.

At South Hadley High School in Massachusetts, Abbe joined with students, staff, and the Department of Environmental Protection to replace Styrofoam with compostable paper products. When Abbe started, her high school of 750 students produced 135 pounds of garbage and 20 pounds of recyclables each day. That added up to 85 percent garbage, 15 percent recyclables, and no compost. To cover the cost of compostable plates and cups, Abbe applied for and received a state grant. Now plates and cups are mixed with food waste and transported to a farm to be combined with manure and eventually sold as fertilizer.

After one year, her school's six bags of daily trash were reduced to two bags, and the daily garbage pickup was cut to once a week. Total garbage was reduced by 66 percent! The cafeteria waste is now 40 percent recycling, 35 percent compost, and just 25 percent garbage. Abbe's project earned her a Girl Scout Gold Award and the honor of being a 2008 National Young Woman of Distinction.

What values are Abbe living? (Think about all the lines of the Girl Scout Law!) How does her project create lasting changes on Earth?



Akua Lezli Hope

Innovation: Paper from Nature

Did you know that paper can be made from weeds, sunflowers, cattails, carrot tops, and the little brown stems on banana peels? Akua Lezli Hope, an artist and writer in upstate New York, makes paper out of all of these and more.

Akua grew up in Harlem in New York City, where she was a Girl Scout. “We were poor, but I always had crayon and paper and tools. And I was always told, ‘You can do anything you want to.’” Akua was always very creative, playing the bassoon and cello, singing in choruses, and writing poems and stories, which used lots of paper. “And then I fell in love with the paper itself,” she says.

At first, Akua used shredded paper to make papier-mâché for sculpting. But then she focused on making paper and started experimenting. After all, most paper comes from trees, so why not use plants, especially those that might otherwise go to waste, to make beautiful, handmade paper? “Wild growing things make fantastic paper,” she says. “Cattail heads make dark brown paper that looks like leather. Silkweed paper is glossy and golden and strong. The outer skin of the milkweed makes a great resilient paper.”

For Akua, paper is the most satisfying expression of her creativity. “Paper appeals to so many senses,” she explains. “It appeals visually and to the sense of touch and the sense of smell. And when you’ve made a good piece, it’s crisp and you can hear it. You feel it and you can use it.”

How could you use items you have around your home to create something new?

Cindy Endahl

Innovation: Recycle Cindy Bags and Purses

It would probably be best if the world just stopped making plastic bags. Until then, Recycle Cindy, a.k.a. Cindy Endahl, is turning them into hard-wearing fashion purses and chic messenger bags.

How does she manage that? With imagination, a crochet hook, and a ball of yarn – make that “plarn,” yarn made from one-inch strips of ordinary plastic shopping bags that are knotted together. Cindy uses 12 to 15 bags to make a mini shoulder bag and 45 to 50 to create a large tote. It takes her one to five hours to complete a project, depending on how large and complicated it is.

Cindy is a deputy clerk in Newport, Washington. One day she spotted a woman with an unusual crocheted bag on her arm and learned that it was made from plastic shopping bags. An avid crocheter since she taught herself a few basic stitches as a girl, Cindy set out to make one of her own.

She not only mastered the techniques and made herself a cute bag, but she created new styles of handbags and dreamed up other plarn items, like baby bibs, coasters, and water bottle holders. She started posting the patterns for her creations on myrecycledbags.com in 2006.

What’s innovative about what Cindy does? How does her work inspire other people?



Nancy Judd

Innovation: Recycle Runway

Imagine one-of-a-kind fashions made from 75 percent trash. That's right, trash! Soda cans, plastic grocery bags, old phone books, junk mail, even rusty nails and salvaged car parts are transformed into elegant gowns, cocktail dresses, and other garments. One evening gown, made from 12,000 pieces of crushed recycled glass and leftover upholstery material, is glittery enough for the Oscars. A backless cocktail dress has shimmering fringe made from aluminum cans. The dress itself was a shower curtain! Like real high-fashion gowns, these are hand-sewn and take up to 400 hours to make.

The designer behind this Recycle Runway collection is Nancy Judd. She came up with the idea for a "Trash Fashion" contest while working as an administrator in recycling for the city of Santa Fe, New Mexico, in 2000. "In fashion, there is huge waste when you consider how frequently clothes are discarded," Nancy says. "I'm striving to change the way people think about the environment through changing the way they think about waste." Her garments have been commissioned by major corporations and the entire collection has traveled the country as an educational art exhibit.

Nancy learned to sew as a child. As a college student, she noticed that a garbage receptacle near a soda machine was filled with aluminum cans. She got permission to put a recycling bin nearby, which led to an independent study in recycling methods.

One project Nancy is most excited about is her Eco-Youth dress: a Scarlett O'Hara-style ball gown decorated with hundreds of strips of recycled office paper. One each strip of paper, Students have written a specific commitment to preserve the environment by recycling. "Making art is one of the most spiritual experiences I have in my life," Nancy says. "I have a great sense of something larger than myself when I am in the creative process. It's one of the best feelings ever."

How does Nancy educate and inspire other people? What can you learn from her? Why is it important to educate and inspire other people to care about Earth?

Mireya Mayor

Innovation: turning dance skills to wildlife biology

Remember the shiny-eyed, long-tailed "party animals" from the movie *Madagascar*? Those were lemurs. Mireya Mayor studies lemurs in the wild and has a lot in common with them. Lemurs rely on their agility to leap acrobatically through the rainforest canopy. As a primatologist working in the rainforest, Mireya draws on her experience as a ballet dancer and a cheerleader for the Miami Dolphins.

"Having danced in ballet for so many years actually helped me get around the rainforest," she says. "You need a lot of balance and flexibility, and you need to be very quick on your feet."

In college, Mireya took an anthropology course. Right away, her curiosity was piqued. In 1996, she went to Guyana in South America to study primates. Mireya, who had never been camping, found herself clambering through jungles, trying to avoid "snakes and tarantulas that would somehow appear on my backpack!" A year later, in Madagascar, Mireya and a colleague discovered the world's smallest primate, the pygmy mouse lemur. It weighs less than an ounce. Mireya's efforts led Madagascar to triple its protected regions and establish a \$50 million conservation fund.

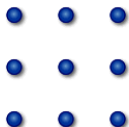
How has something you have learned prepared you for something else entirely? What do you want to learn to help prepare you for life?



Sarah Susanka

Innovation: Making houses “Not So Big”

Sarah Susanka is an architect and a writer. She loves solving problems. When she was a 10-year-old growing up in England, her teacher gave the class a puzzle to solve: Without taking your pencil off the paper, and using only four straight lines, connect the dots shown (three rows of three evenly spaced dots). Sarah spent hours working on the problem. She knew there had to be an answer, yet she couldn't find it. Can you?



One night, Sarah awoke with the answer clear in mind. “What I discovered was that, if I stayed within the box created by the dots, I couldn't solve the problem,” she says. “Once I broke the confines of the outline, the problem solved itself.”

Her “thinking outside the box” led her to found the Not So Big movement, which has been embraced worldwide for its philosophy of building better, not bigger, houses. Sarah's home in Raleigh North Carolina, built in 1977, is an example of what she calls “tightening up energy-efficiency.” She made the house less leaky by replacing the insulation and installing an energy-efficient heating and cooling system. Such simple changes, along with energy efficient lights, are a “big part” of saving energy today, Sarah says.

Have you ever thought “outside the box” to solve a problem? How can you use your creativity to be more energy efficient?

Denise Gray

Innovation: engineering parts for electric cars

Imagine a car that will be able to travel 40 miles gas-free and emissions-free. That's what Denise Gray is working on. Denise, an electrical engineer, is in charge of the battery that will power the Volt, a new electric car from General Motors. It can be recharged by plugging it in to any electrical outlet.

If the trip is longer than 40 miles, Denise explains, “a small internal combustion engine will get you to your location so you don't have to worry about running out of power.” The engine won't power the wheels, though, as it does in a traditional car. It will power a generator that recharges the batteries.

“I've always been fascinated with advanced technology and doing things differently,” Denise says, “whether making transmissions or improving fuel efficiency or using a battery as an energy source.” Denise's interest was sparked while growing up in Detroit. “When I was in middle school, I had a teacher who told me I was really good in math and science and told me to go into engineering,” she says.

Electrical engineering captured her imagination. And it's not just the science that delights Denise. “It's the battery as a microcosm of all the different engineering disciplines – so you meet people with different skills coming together for a common cause.

What is innovative about Denise's project? What would your dream car be able to do, and how could you make it more energy efficient?



Robin Chase

Innovation: Making each car count

Robin Chase was at a café with a German friend in 1999 when she learned that in some German cities, people could rent a car for just a few hours. Robin realized that car sharing was a way to reduce pollution and also save money while enjoying the convenience of a car when it was needed.

It was exactly what Robin needed, too. She grew up in Swaziland in Africa, where she was a Girl Guide, and was living in Cambridge, Massachusetts, with three children and her husband, who took the family car to work each day. “I wanted a car every once in a while, but I did not want to own one,” Robin says. “The light bulb went off in my head.”

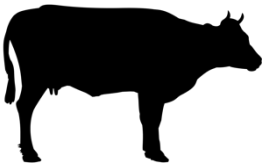

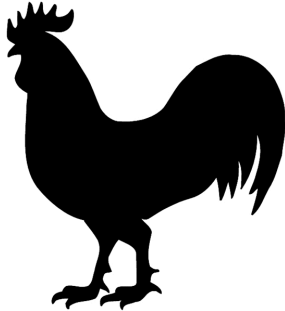


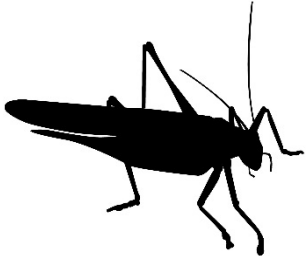
Most people drive their cars for only two of the 24 hours in a day, she explains. That’s not using resources very wisely. Zipcar, the company Robin and her friend started, is now the largest car-sharing company in the world. “Zipcar is all about making efficient use of a car and conserving resources.” Since the Zipcars are shared, each one can stand in for more than 15 cars that might normally be out on the road.

Robin’ also launched GoLoco, an online ridesharing community. Robin believes it’s important for the environment “to get more people into the cars that are already on the roads.”

What is innovative about Robin’s project? How will her project create lasting impact?



How Much Water Does It Take to Grow One Pound of Protein?

<p>2500 gallons</p>	<p>800 gallons</p>	<p>567 gallons</p>
<p>368 gallons</p>	<p>216 gallons</p>	<p>1 gallon</p>
		
		

Answers: Beef: 2500, Pork: 800, Chicken: 567, Eggs: 368, Vegetables: 216, Crickets: 1

