

DISCUSSION GUIDE

A user-friendly tool for anyone interested in improving our urban and suburban environment

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for students and teachers,		
grades 4 through 12,		
families, homeowners,		
and community groups.		
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GOINGGREEN – Every Home an Eco-Home

Available on DVD from

Green Planet Films P.O. Box 282 Corte Madera, CA 94976 415-383-0484 www.greenplanetfilms.org

Library Video Company P.O. Box 580 Wynnewood, PA 19096 800-843-3620 www.libraryvideo.com

The AV Cafe' 6201 S. 58th St., Suite A Lincoln, NE 68516 402-486-1686 www.theavcafe.com

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For more information, links and resources, please visit us on the web at www.goinggreenproductions.com

THANK YOU

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DISCUSSION GUIDE

GoingGreen – Every Home an Eco-Home

Film title: GoingGreen

<u>Subtitle</u>: Every Home an Eco-Home™

Audience:

Students grades 4 through 12; teachers; homeowners; community groups; and the general public -- *anyone* with an interest in improving our immediate urban and/or suburban environment.

Educational designation: Grades 4 through 12

<u>Standards:</u> Correlates to California State Content Standards in Ecology and Life Sciences, grades 4 through 12; portions of Mathematics, grades 4 through 12; and portions of History-Social Sciences, grades 9 through 12.

Introduction

In Going Green – Every Home an Eco-Home viewers accompany Julia Russell, Founder of Eco-Home™ Network, and a group of middle school children on a tour of the award-winning Eco-Home™ environmental demonstration site in Los Angeles. The tour includes Eco-Home itself and its front and back yard, all of which have been redesigned and retrofitted using materials, systems and technologies that minimize the use of natural resources (energy & water), employ alternative energy sources (solar hot water panels and electricity generating photovoltaic cells), and maximize environmental and personal health and productivity (organic vegetable garden and orchard).

Through man-in-the-street interviews on environmental questions, *GoingGreen* mixes a big dose of humor that engages the audience throughout the program and highlights the program's practical approach to everyday ways to conserve the Earth's resources and live in more eco-friendly ways. The program is filled with informative and practical how-to solutions.

Purpose

The purpose of *GoingGreen – Every Home an Eco-Home* is to reach a maximum audience with the message that a lifestyle designed to protect and maintain the health and well-being of Earth's life support systems is equally beneficial to our personal health and well-being — and that it is doable, fun and creative. *GoingGreen* aims at inspiring individuals to take steps that will help them to live in more earth-friendly and sustainable ways.

Program Segments	run time	total time
* Introduction	00:00- 01:59	(2 minutes)
 Eco-Friendly Landscaping 	02:00- 06:13	(4:13 mins)
 Energy Conservation 	06:14- 09:08	(2:54 mins)
 Household Hazardous Waste 	09:09-10:40	(1:31 mins)
✤ Water Conservation	10:41- 13:50	(3:09 mins)
 Composting and Organic Gardening 	13:51-20:43	(6:52 mins)
✤ Wrap-Up & Credits	20:44-24:21	(3:37 mins)

Vocabulary

Alternative Energy Sources Wind, hydropower, geothermal, and tidal energy.

Biodegradable Able to be decomposed by natural processes producing no toxic byproduct; decomposition brought about by living organisms

Compact Fluorescent Light Bulb (CFL) – CFLs are an efficient source of "long wave" (ultraviolet) light; they are dozens of times more efficient than incandescent bulbs. They use 75 percent less energy than regular bulbs and last up to 3,000 hours.

Compost – A nutrient-rich dark brown or black crumbly and complex mixture that results from the natural decomposition of plants and animal matter that is used to fertilize and condition soil and plants.

Conservation – Conserving the Earth itself by protecting its capacity for self-renewal.

Earth-friendly (eco-friendly) – Practices, policies and products that are compatible with and protective of Earth's ecosystems and resources.

Exotic plants ("exotics") – Plants not native to a given region; a plant that does not grow naturally and has been imported from its region of origin; generally, though not always, exotics need human cultivation to survive.

Fossil Fuel – Fuel, such as coal, oil, or natural gas, that is formed in the earth from plant or animal remains. Petroleum is manufactured from fossil fuel.

Graywater – Household wastewater (generally from sinks, showers and washing machines) that is collected and used for landscape irrigation. (In the State of California it is not legal to use graywater on vegetables, but it may be used to irrigate ornamental plants, and fruit and nut trees.)

Irrigation – The watering of plants and landscape. Methods of irrigation include watering cans, sprinklers, drip emitter systems and soaker hoses.

Micro-organism – An organism too small to be viewed with the naked eye, as bacteria and some fungi and algae.

Natural Environment – All of existence that is not human built.

Natural Resources Forests, Fish, Topsoil, Pastureland, Plants, Animals, Soil, Minerals, Energy Sources (fossil fuels), Air, Water.

Native plants – Plants and other species that are indigenous to a specific region/climate and which grow, evolve and thrive there, generally without the need for human cultivation. Not imported from another climate/region.

Organic – Organic food products (plant and animal) are produced with the use of feed or fertilizer of plant or animal origin, and <u>without</u> the use of chemically formulated fertilizers, growth stimulants, antibiotics or pesticides that can have negative effects on soil, plants, humans and wildlife.

Petroleum (gasoline) – Manufactured from crude oil; it is used make a variety of products, such as plastics.

Photovoltaic cell – Device made of semiconductor materials that produce a voltage when exposed to light. Used widely to generate electricity from sunlight.

Rs of Eco-Friendly living –Recycle, Reuse, Renew, Rethink.

Soaker hose – Hoses with many tiny holes that ooze water into the soil giving the roots of plants slow, deep watering. Usually buried under a few inches of soil, soaker hoses keep topsoil dry, which helps discourage snails and slugs.

SunPipe – A simple, non-electrical cylinder installed into the ceiling that brings natural daylight into building interiors.

Sustainability – Meeting the needs of the present in ways that do not diminish the resources and opportunities of future generations to meet their needs. For individuals, this means living in ways that conserve and preserve the natural resources of the Earth for future generations.

Xeriscape – Water-conserving landscape of drought-tolerant plants that utilizes a water-conserving irrigation system. (In *GoingGreen* this means plants native to California and plants native to Mediterranean or other California-like climates around the globe.)

Discussion Preparation & Questions

(To facilitate observation, comprehension and communication)

- 1. Review vocabulary.
- 2. Use the following statements and questions to generate discussion:
 - a. How do you feel about the natural environment? (This includes the tree in their front or backyard or on their street.)
 - b. How does the natural environment affect your life?
 - c. What things can affect the environment?
 - d. What do individuals and their families do that affects the environment?
 - e. What can just one person do to benefit and help protect the environment?
 - f. What effect does the health of the natural environment have on our personal health?
 - g. Name some impacts our modern urban lifestyle has on the environment? Benefits? Negative effects?
 - h. Name some planetary ecosystems that sustain life on Earth.
 - i. Can you relate to how your individual choices and actions impact the environment? In positive/negative ways.
 - j. Assess the impact of viewer lifestyles on the environment.

Watch the Video

Review the questions above again after viewing the video to highlight new insights and information gained.

Suggested questions to discuss after viewing the video:

1. Is Eco-Home located in a city, suburb, town or a rural area? A city (Los Angeles, CA)

2. Why is this significant?

Our typical modern urban lifestyle is over-consumptive, polluting and ignores the negative environmental impacts it creates. Most of the environmental problems we face today (except those caused by the military) can be attributed to our urban lifestyle. The location of Eco-Home in a city demonstrates sustainable living — an alternative modern urban

lifestyle that protects planetary life support systems — starting in our own homes and backyards.

- 3. How does Eco-Home generate the electricity it uses? Photovoltaic panels (solar power)
- 4. What are some of the ways Julia Russell conserves energy at Eco-Home?
 - ✤ Compact fluorescent light bulbs
 - ✤ Ceiling, floor and wall insulation
 - SunPipe (solar tube in kitchen)
 - ✤ Energy-efficient appliances (refrigerator, clothes washer, etc.)

5. How is water conserved at Eco-Home?

- ✤ Low-water use toilets & shower heads
- ✤ Graywater system
- ✤ Drip irrigation and soaker hose irrigation
- Drought-tolerant landscaping (xeriscape)

6. Where in the house does Julia start her recycling and composting?

- In the recycling bins in her kitchen. What does she put in them?
- Cans, bottles & other recyclables collected by the City of Los Angeles

7. What items does Julia never put into recycling bins or the regular trash?

Household batteries Paint Shoe polish Hair permanents & treatments Household cleaning products that contain ammonia Nail polish Medications CDs Electronics Computers & computer components And more ...

8. Why shouldn't these items be put in the regular trash?

They leak dangerous chemicals into surface and ground water systems (aquifers) which can get into the public drinking supply.

9. What is the proper way to dispose of Household Hazardous Waste?

Local City and/or County hazardous waste programs. Create an on-site demonstration hazardous waste roundup & disposal plan.

10. Why is the food at Eco-Home grown organically? What does organic mean?

lt's healthier.

It tastes better.

Organic cultivation doesn't contaminate food, air or water with the petroleum-based fertilizers, pesticides or herbicides used in standard vegetable and gardening.

There is no risk of people, pets or wildlife getting sick from the toxic chemicals used on foods that are not organically grown.

It reduces reliance on petroleum because no petroleum-based fertilizers, pesticides or herbicides are used in organically grown food.

Compost, created from a mixture of kitchen scraps and green (garden) waste, is used to fertilize and nourish the soil and the plants.

Organic agriculture preserves and improves soil fertility and eliminates topsoil loss that occurs with standard gardening.

11. Describe Eco-Home's backyard composting system.

12. Why does Julia compost her food and garden waste?

As a means of transforming organic waste into food for new life and to reduce her personal waste stream.

13. How does Julia use her compost?

The compost is added to the soil in Eco-Home's vegetable garden beds to provide new "food" and nutrients that nourish the soil and produce healthy, safe food.

14. What kind of food is grown at Eco-Home?

Vegetables and fruit trees

Name some of them Apples Apricots Beans Broccoli Figs Lettuce Nectarines Peaches Peppers Plums Tomatoes

15. Why does Julia use her bike and public transportation instead of a car?

✤ To reduce her personal use of fossil fuel.

- Reduce air pollution that would be produced by driving an automobile.
- ✤ It provides exercise and it's fun.

ADDITIONAL ACTIVITIES

<u>Water</u>

- * Research source(s) of the water used by:
 - Your household, school or workplace
 - Your city, county, state or region
- ✤ How water gets from the source to the user
- Create a map showing that processes are required before it's drinkable or safe to irrigate food plants
- Find out how much potable (drinkable) fresh water there is in the world.
- Find out why it is necessary to conserve water in your community and around the world.
- Construct a small water filtration system using aquatic plants that "eat" harmful elements such as metals, mercury and unhealthy bacteria found in polluted water.
- Monitor household, classroom or workplace use: Determine how and what percentage of water is used for gardening (15%?), toilets (25%?), drinking (3%?) etc.
- * Outline ways to reduce water use.
- Design a rainwater catchment for your household, school or workplace site:
 - What materials are needed
 - Where to install
 - How much can be harvested in an average year
 - How this can reduce imported water use for irrigation per year
- Research the amount of energy used to transport water to cities, farms, schools and businesses.
- Research impact of exportation of water on the ecosystems and economies of source regions

<u>Compost</u>

- Compost food waste from kitchens, school lunches and picnics, mixed with some dry leaves
- Create "mini gardens" using window boxes: fill with compost and plant vegetable and flower seeds.

Gasoline (Petroleum)

- Monitor the number of miles each viewer travels by car.
 Calculate gallons of gasoline used per week, month, semester.
- Calculate number of pounds of air pollution this generates per week, month. <See CleanCarsForKids.org>
- Explore how individuals can reduce their use of petroleum by changing their transportation habits and modes of transportation and using personal automobiles less.

Electricity

- Research how and where electricity used in the classroom or at home is generated.
- * What kind of environmental pollution does it create?
- * How much environmental pollution does it create?
- * How does this pollution affect the health of the environment?
- ✤ How does it affect our health?
- ✤ Audit classroom, home or workplace electricity use
 - How electricity is used in the classroom or home
 - Number of watts per day
 - Calculate cost
 - How electricity use can be reduced
 - Calculate resulting cost savings and reduction in air pollution
- How can you conserve energy at home?
 - Calculate resulting cost savings and reduction in air pollution

General Questions

- ★ Other things individuals can do to help the environment.
- * Things you are doing now to help the environment

RESOURCES

ENVIRONMENTAL ORGANIZATIONS

American Oceans Campaign. www.oceana.org American Solar Energy Society (ASES), www.ases.org Audubon Society, www.audubon.org Bolsa Chica Wetlands, www.bolsachica.org California Integrated Waste Management Board (CIWMB), www.ciwmb.ca.gov Californians Against Waste (CAW), www.cawrecycles.org Clean Air Coalition, www.coalitionforcleanair.org Earth Island Institute, www.earthisland.org Eco-Home™ Network, www.ecohome.org Ecology Center of Southern California, www.ecoprojects.org Friends of Los Angeles River, www.folar.org Heal the Bay, www.healthebay.org Irvine Company, www.irvinecompany.com (sustainable communities) Jiminy Cricket's Environmentality Challenge, www.jcekids.com Los Angeles Eco-Village, crsp@igc.org Mono Lake Committee, www.monolake.org Natural Resources Defense Council (NRDC), www.nrdc.org Rocky Mountain Institute (RMI), www.rmi.org Simple Living, www.simpleliving.net Theodore Payne Foundation, www.theodorepayne.org (native plants) Think Earth, www.thinkearth.org TreePeople, www.treepeople.org World Watch Institute, www.worldwatch.org

MUNICIPAL, STATE AND FEDERAL GOVERNMENT AGENCIES

California Association of Resource Conservation Districts (CARCD) California Energy Commission (CEC) EPA – Environmental Protection Agency Los Angeles Department of Public Works Los Angeles Department of Water and Power (LADWP) Sanitation Districts of Los Angeles County Southern California Metropolitan Water District (MWD) Southern California Edison South Coast Air Quality Management Division (SCAQMD) The Gas Company

BOOKS

An Inconvenient Truth, by Al Gore; published by Rodale Books, 2006; *Builder's Greywater Guide*, by Art Ludwig, 1995;

Cadillac Desert: The American West and Its Disappearing Water, by Marc Reisner; Viking, 1986

Earth-Friendly Inns, by Dennis Dahlin, published by Chelsea Green, 2000 *Eco-Renovation: The Ecological Home Improvement Guide,* by Edward Hartland, 1994

Ecovillage Living, by Hildur Jackson; published by Chelsea Green *Edens Lost and Found: How Ordinary Citizen are Restoring Our Great American*

Cities, by Harry Wiland and Dale Bell; published by Chelsea Green *Going Solar*, by Tomm Stanley, published by Chelsea Green *Natural Home Heating*, by Greg Pahl, published by Chelsea Green *The Natural House*, by Daniel D. Chiras, published by Chelsea Green *The New Ecological Home*, by Daniel D. Chiras, published by Chelsea Green *The New Independent Home*, by Michael Potts; published by Chelsea Green *Plan B*, by Lester Brown, Founder of World Watch Institute, 2005; *Practical Photovoltaic*, by Richard J. Komp; published by Chelsea Green

A Primer on Sustainable Building, by Barrett and Browning, Rocky Mountain Institute, 1999;

The Solar Electric House, by Steven J. Strong; published by Chelsea Green *State of the World,* an annual report published by World Watch Institute. *Sustainable Cities: Concepts and Strategies for Eco-City Development*,

published by Eco-Home[™] Network, 4344 Russell Avenue, LA CA 90027;

MAGAZINES

Utne Reader, Natural Home and Garden, Real Simple, Earth Island Journal, Amicus Journal, Home Energy, Environmental Building News, E – The Environmental Magazine, Organic Gardening Magazine, Plenty, Whole Life Times, Mother Earth News, Solar Today, Organic Style, Ecological Home Ideas

FILMS

Affluenza, a one-hour documentary that explores the high social and environmental costs of materialism and over-consumption; production of KCTS/Seattle and Oregon Public Broadcasting

An Inconvenient Truth, presented by Paramount Classics & Participant Productions; produced by Laurie David; 2006

Building with Awareness – The Construction of a Hybrid Home Produced by Ted Owens of Syncronos Design, 2005;

http://www.buildingwithawareness.com

Cadillac Desert, A film by Marc Reisner – based on the book of the same name *Dude, Where's My River?* Teenagers and teachers embark on an expedition to follow the Hetch Hetchy water system from its source at the headwaters in Yosemite National Park to its culmination in San Francisco Bay.

Synergia Learning Ventures Production, 2004

The Last Stand: Heroes At Ballona Wetlands, an updated short dealing with the preservation and development controversy in Southern California; highlights from the earlier full-length version are included. 2004, Produced by Sheila A. Laffey; www.ballona.com

Edens Lost and Found, chronicles the revitalization of America's urban landscapes and communities; PBS

The End of Suburbia, explores the American Way of Life and its prospects as the planet approaches a critical era and global demand for fossil fuels begins to outstrip supply. Produced by Barry Silverthorn, 2004;

http://www.endofsuburbia.com

Fed Up! An overview of our current food production system from the Green Revolution to the Biotech Revolution, 2002; www.wholesomegoodness.org *French Fries To Go* documents the origins of Telluride's Biodiesel project, which resulted in the launching of the first city bus in the nation to run on 100% pure Biodiesel. Produced by Howard Donner, 2003; http://www.grassolean.com/*The Future of Food*, an in-depth investigation into the disturbing truth behind the unlabeled, patented, genetically engineered foods that have quietly filled U.S. grocery store shelves for the past decade. Deborah Koons Garcia – Director, Writer, Producer

In the Presence of Nature - A journey through the beautiful parks and preserves of North America. Produced by Steve Michelson, 2003;

www.lobitoscreekranch.com

Knowing and Growing: Good for Babies – Good for the Planet

As our children learn from nature, the hope exists that they also form a positive connection with the environment. Produced by: Knowing and Growing LTD; www.knowingandgrowing.com

No Room To Move explores the effect of urban sprawl on sensitive wildlife in Florida. Produced, Photographed, and Edited by Chris O'Brien and Tom Tripp, 2002; www.noroomtomove.com;

Oil on Ice - WebDVD with Grassroots Action Toolkit.

A comprehensive documentary connecting the fate of the Arctic National Wildlife Refuge to decisions America makes about energy policy, transportation choices. A Dale Djerassi/Bo Boudart Production in association with Lobitos Creek Ranch, 2004; www.oilonice.org

Point Of Return - Northern California Recycling Association's first release of Point of Return, an engaging and informative video about the choices our communities are making about how and where real recycling is going to happen. Produced by Northern California Recycling Association, wcrarecycles.org, 2004,

Power Shift: Energy + Sustainability - Thought-provoking discussion tool about energy, sustainability, and technology that examines vital energy issues and suggests ways that students can create a sustainable future. Narrated by Cameron Diaz. www.greenplanetfilms.org

Richard Davis: Caretaker at The Park – A short documentary about the working life of Richard Davis, gardener/caretaker at a local city park in Los Angeles, California whose work makes a positive impact on the neighborhood. Produced by Tony Okun; 2005; www.ohshowproductions.com

Tales of the San Joaquin: A River Journey follows the San Joaquin River from its source in the Sierra Nevada Mountains south of Yosemite to its eventual merging with San Francisco Bay. Once the birthplace of hundreds of thousands of salmon, the river now runs completely dry not just once, but in two separate sections of the original river channel. Produced by Judy Irving and Christopher Beaver; available thru www.greenplanetfilms.org

The Park, documents a neighborhood city park and how its existence affects the people who visit the park, the employees who work there, and what it means to the people and its surrounding community. Produced and directed by Tony Okun; 2004; www.ohshowproductions.com

Water Down the Drain, (An Interactive CD-Rom) Learn the story of water pollution from Alex, a six-foot hip-hopping frog, that introduces the causes of non-point runoff pollution in urban settings. Six modules introduce a watershed landscape perspective and provide information about the impacts of impervious surfaces and pollution problems and solutions common to residential lots. Produced by Hamline University Center for Global Environmental Education; 2004; www.Cgee.hamline.edu

NOTES AND SUGGESTIONS