

Energy Efficiency Initiatives

Bruce Doueck, August 2011

ENERGY EFFICIENCY



Major Efficiency Initiatives

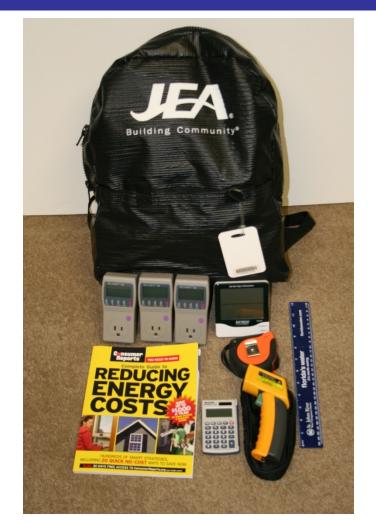
- ShopSmart & InvestSmart efficiency rebate programs
- Limited time low cost *efficiency evaluations* & *EE loans*
- Public Library Home Energy Evaluation kit
- Savings Without Sacrifice Train the Trainer
- Jacksonville Green Map
- Free education materials k-12 educators
- Partnerships: JU MSRI/MOSH/Tree Hill /USGBC
- Event calendar
 - Home Energy Makeover Expo & contest 9/1 to 10/2
 - Blower Door Parties
 - Contractor training



Some Partnerships

- Jacksonville Public library backpacks
- JU MSRI 'Partners in Conservation'
- Tree Hill Energy Detective [5th grade]
- School Board Green Champion partner
- COJ EECBG Grants, etc
- USGBC SRC, GTP, Green Map
- UNF Green Map, etc
- Green Team Project
- And the list goes on...





Home Energy Evaluation Kit -Library Backpack

Home Energy Audit Backpack List

4.

5.

1. Infrared thermometer - \$80.28 http://www.inspectortools.com/productp/fi2433868.htm



2. Kill-a watt meter - \$24.87ea (3ea = \$74.61)

http://www.homedepot.com/h_d1/N-5vc1vZ1xze/R-202196388/h_d2/ProductDisplay?langld=-1&storeid=10051&catalogid=10053



3. Hygro-thermometer - \$35.99

http://www.professionalequipment.com/extech-bigdigital-hygro-thermometer-445703/hygrometerspsychrometers/



Calculator - \$3.53

http://www.discountofficeitems.com/technology/office _machines-electronics/calculators/handheld_ calculators/sharp-digit-handheld_ calculator/p50079.html?kwid=9c677175f8524c7aaec5a 026110903d1&sku=SHREL243SB



Tape measure - \$10



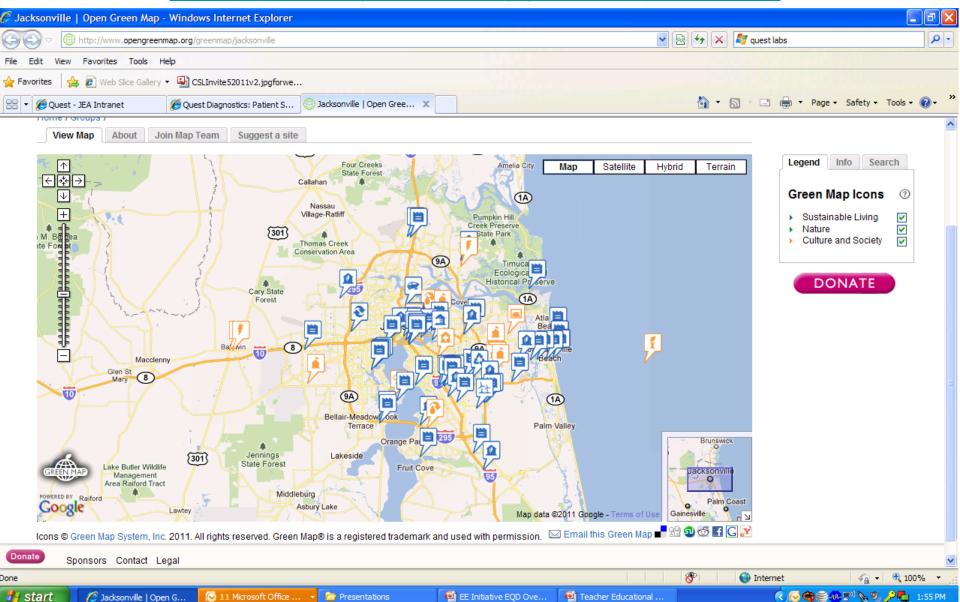
12" wood/plastic ruler - \$1
http://www.ecrater.com/product.php?pid=847660





Green Map for Jacksonville

http://www.opengreenmap.org/greenmap/jacksonville





Green Map

- Jacksonville Green Map highlights what we as a community are doing to achieve sustainability
- Created on the Open Green Map, is part of a global movement to connect communities with green living resources, nature, culture
- Recruiting Content Coordinators for areas of focus
- Study your neighborhood area of interest to
 - Nominate candidate entries
 - Document with address or geo-code
- www.GreenMap.org





Educator Resources

Falls

Energy & Water Conservation, Safety and Science Materials For Your Classroom—Elementary, Middle & High School Students

Energy For Today And Tomorrow Activity Book Grades: PK-3

Be Water Wise

Activity Book

Full color and easy to understand,

activity book teaches preschoolers

this teacher-endorsed, early-learning

and young readers about water and

#35730 IAA11, SCA11, SCR21, SCR113, SCF111, SCC211, SSR214

Aunt Sarah and the

This tale about three adorable kittens

#36416 LAA1.1, SCB2.1, SCD1.1.3, SCE1.1, SSB2.1.4, HEA1.1.4, HEB.1.1.2, HEC.1.1

The Treehouse Team

This 16-page booklet builds energy

efficiency awareness in young students

and challenges them to find ways they

might use energy more wisely and the

Saves the Forest

importance of doing so.

#36775 scn221

Grades: 2-4

and their Aunt Sarah introduces the

benefits of electricity and electrical

Amazing Power

Grades: K-2

fety basics.

Grades: K-2

Young children will enjoy learning about energy sources and wise energy use from a friendly dinosaur. #35450 SC2P10.1, SC2E72, SC3L172, SC3P10.1, SC3P102, SC3L02, SC3C32

Learning About Your Environment

Who Knew?®

Grades: 4-6

The Water Savers Issue

Puzzles, mazes, "Splash and Savet" board

game, and other interactive features teach

children how to be water-wise. Helps them

#35650 LAA121, LAA122, LAA132, LAA234, SCB121, SCD122, SCD221, HEA125

S 40 10

Aunt Sarah

and the

nazina Power

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Ground Water-**Protecting Our Supplies** Grados: 5-7

Teaches how to help protect our fragile groundwater supply. This color booklet press the sources of groundwater, the water cycle, and threats to groundwater. It offers tips to protect and conserve this precious resource and points out additional resources. A Channing Rete Company®, Inc. book #36810

Hands-on Energy Efficiency Grades: 5-7

This fascinatine book is brimmine with experiments and activities for the classroom that have real life applications for students and their families, including examining an energy oill and testing ways to conserve energy. #36915 LAA121 LAA122 LAA231 LAA231 LAA235 LAB231 LAB222 LAA231 LAA231 LAA235 LAB231 SCA121, SCA12, SCA232, SCA133, SCA232, SCA233, SCA23, SCA233, SCA23, SCA233, SCA23

Energy Efficiency World Grades: 5-7

An exciting book teaching energy-related science concepts such as renewable energy sources, energy transformations, reduction





On® Energy Careers Grados: 9-12 This interactive workbook begins with a

true/false quiz that helps students assess what they know about careers in energy, and goes on to show them the advantage of a career in the energy industry. Hands-1 00° on papes include a career worksheet. checklists that help students identify their AR. areas of interest, and fill-in pages that encourage them to think about their caree

goals. A Channing Bete Company®, Inc. book. #37085

Interactive Website & Programs

• Careers

Electrical Safety and You

This small-format booklet is loaded with color

photos that clearly illustrate hazards indoors

where electricity comes from, how it works,

steps to respond to electrical fires and shock,

and electrical safety rules and best practices.

#25010 UA 132, UA 231, UA 234, UA 235, UA 141, UA 143, UA 244, HEA 132, HEA 137, HEB 136, HEB 141, HEB 142, HEB 144, HEB 145

and outdoors around the home. It also explains

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JEA.

IEA

Green Team Project [GTP]

for High Schools

facilitation skills in high school students. Green Teams

High school Green Teams, facilitated by the Green Team Project, foster leadership, research and meeting

also help students learn how to achieve concrete

monetary and natural resource savings through easy

action steps taken at home and school that reduce

waste, energy, water, chemicals and transportation

Our goal is to make it fun and easy to save money

www.greenteamproject.org/Duval%20index2.htm

Duval Schools' Green Champions Program networks green-minded volunteers at each school to promote

sustainability—energy and water conservation and recycling. Objectives of the program are to reduce operating costs, conserve natural resources and

incorporate sustainability into the curriculum. Green

Champions coordinate earth-friendly activities around

Champion of the Year award. To get Involved, contact

their school and then comnete for the annual Green.

your school's Green Champion or Susan Carew at

by reducing one's impact on the environ

Green Champions Program

Duval Schools⁴

carews@duvalschools.org.

Grados: 6-Adult



Grades: 3-7 Our website educates students about energy and water and motivates them



JEA theater presentation for elementary schools. "ReDuce" is an alien from a faraway planet called "GoGreen". He has teCycle" and brother "ReUse". He has come to Earth in search of a better light (as well as other ways to save energy and water!). To schedule a show for your school, call Michelle Petty at 665-7697.



The lacksonville Green Map tells our good news story by highlighting what we as a community are doing to achieve environmental and human sustainability. Created on the Open Green Map platform, it is part of a locally-led global movement to connect ereen living resources, nature, culture and social sites. As seen at www.freenMap.org/youth, students can create their own campus and community Green Maps, too. Locally, Douglas Anderson and Sandalwood have initiated Green Map efforts. Visit Green Maps worldwide at www.GreenMap.org

Order online or view our website at www.iea.com/community/education/teacher/

Distributed over 98,000 energy & water brochures to over 400 schools...assisting the teaching of children to be safe and efficient while understanding the basic science of energy and water resources

School district Mailing address in: P0. boost City . State . Zip code Phone. . Email address How many educators are you ordering for?

Prod #	Book Title	# of Books
35450	Energy for Today & Tomorrow (grades Pk- 3)	
35730	Be Water Wise (grades K-2)	
36416	Aunt Sarah Amazing Power (grades K-3)	
36775	Treehouse Team SavesForest (grades 2-4)	
35650	Learning About Your Environment (grades 3-6)	
36995	Who Knew: Water Savers Issue (grades 4-6)	
37030	Your Renewable Energy World (grades 4-6)	
35810	Zap! Magazine (grades 4-6)	
36810	Ground WaterOur Supplies (grades 5-7)	
36915	Hands on Energy Efficiency (grades 5-7)	
36940	Energy Efficiency World (grades 5-7)	
36785	Energy Transformations (grades 8-9)	
37085	On Energy Careers NEW! (grades 9-12)	
25010	Electrical Safety and You (grades 6- adult)	
92180	Science Screen Report Elem/Middle DVD Set	
92185	Science Screen Report Middle/High DVD Set	



Science Screen Report for Kids Elementary and lower middle school #02180

Science Screen Report Upper middle and high school #92185

This fascinating series of educational DVD's (16 titles are produced each year) are designed to get the increasingly complex story of today's scientific and technological developments across to student: in a positive and objective manner. The series focuses on the most recent developments in science, technology, engineering, and the environment. A comprehensive teacher guide prepared by a mmittee of educators accompanies each issue. Additional Teacher Guides are available online at www.ssrvideo.com. Programs can be downloaded or streamed as long as they are not broadcast to the public, or outside the IEA service territory.



allenges of these renewable resources; build their energy vocabulary; and learn how to save energy at home. JR. #37030 SCALES, SCALES, SCALES, SCALES, SCAPIS, SCAPIS,

Zap! Play It Safe **Around Electricity**

Grades: 4-6 Kids learn about electrical safety through exciting stories, colorful graphics, real-life nials, and fun activities in a magazin style activity book. Discover how a circus keeps fans electrified but safe. Go undersea to hunt for sunken treasure using electricity safely under water protected by GFCIs. #35810 SCR122 SCR121 SCR122



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Energy

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New Educational Initiatives & Resources

GoGreen" for elementary schools

JEA theater presentation for elementary schools To schedule for your school, call Michelle Petty at 665 - 7697

Science Screen Report [SSR] for elementary and secondary schools A series of 16 educational DVD's that are produced each year to bring the story of today's scientific and technological developments to students in a positive and objective manner. <u>www.ssrvideo.com</u>

Green Map for high schools

The Jacksonville Green Map highlights what we are doing to achieve environmental and human sustainability. <u>www.GreenMap.org</u>

Green Team Project [GTP] for high schools

The Residential Program focuses on individual households with a goal of making it easy & fun for people to save money by reducing their impact on the environment http://www.greenteamproject.org/Duval%20index2.htm



Savings Without Sacrifice Train the Trainer

Trainers are provided

- PowerPoint
- PDF factsheets
- Visual aid kit
- Training updates
- Technical support
- Trained over 20 non-profit & govt. agencies
- Over 200 trainers trained



Host a Home Energy Party!

- Host a Home Energy Party & Receive a Free Home Energy Assessment
- Based on the Tupperware party of old, a Home Energy Party is fun way to learn about whole house solutions to saving energy, and improving indoor air quality and the durability of your home.
- Get a free home energy assessment (up to \$500 value) for hosting a Home Energy Party for a group of your friends and neighbors.
- For homeowners whose homes were built prior to 2000











ShopSmart with JEA

- Energy Efficient Products Program (EEP)
- Neighborhood Energy Efficiency Program (NEE)
- Home Energy Upgrades
- Solar Incentive Program
- Green Built Homes of Florida



Home Energy Upgrades

HVAC—(Heating, Ventilating and Air Conditioning)

- Total System Replacement
- Duct Repair
- Insulation—(including attic air sealing)
- Window Film







Business Energy Upgrades

Provides energy savings for commercial customers who purchase high efficiency equipment for:

- Lighting
- HVAC
- Building Envelope
- Refrigeration
- Food Service
- Water Heating



Custom Business Energy Upgrades—larger, more complex projects that are not covered under Business Energy Upgrades

Small Business Energy Upgrades—turnkey energy upgrades for smallest commercial customers

■ New Construction — 2012



ARRA Funded Energy Efficient Evaluations & Financial Assistance

Energy Efficiency Evaluations

JEA "buy down" the price of energy evaluations and provide a list of pre-approved energy professionals to perform the audit.

Financial Assistance

JEA is partnering with local lending institutions to offer our customers low interest financing on their home or business energy upgrades..



Energy Efficiency Evaluations

Residential

- Buy down of 25% up to \$150
- Remaining 75% rebated upon completion
- Projected savings must be > 15%
- Commercial
 - 50% of audit cost up to \$2,500 [paid post retrofit]
 - Must be at least 15% projected savings
- Auditor selected from approved list by customers



EE Financing

Residential

- Buy down cost of 6% interest up to \$5,000 cap
- Requires audit & quote
- 15% projected energy savings required
- Commercial
 - Buy down cost of 6% interest up to \$20,000 cap
 - Requires audit/custom project documentation
 - 15% projected energy savings required
 - Incentive paid to financial institutions on approved list



Home Energy Makeover Contest, September 1st to October 7th

Home & Patio, September 29th to October 2nd Theme: Home Energy Makeover





Contact Information

