New Mexico Solar Energy Association

SunPaper

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The SFCC Solar Club and the NM Solar Energy Association invite you to

Solar Fiesta! April 27-28, 2013

The fun way to plan a "greener" lifestyle or career

Welcome to the New and Improved 2013 Solar Fiesta!

www.NMSolarFiesta.org

Gary Vaughn P.E., NMSEA President

So what's new? That's the most common question that people ask about Solar Fiesta year after year. We Americans have a serious addiction to newness. So what's new about the 2013 Solar Fiesta? Lots!

A new Season, for one thing. April 27-28. Earth Day week. Spring. We've been talking about this for years, so now we've done it.

A new Location. How about "The City Different" - Santa Fe? Solar Fiesta was ALWAYS in Albuquerque, but not this year.

A new Collaboration. NMSEA is working closely with Santa Fe Community College (SFCC), especially its Solar Club, to hold the 2013 Solar Fiesta at their new Trades and Advanced Technology Center.

New Entry and Workshop Prices. FREE!

NM's new Community College Centers of Excellence. There are four: Biofuels, Wind, Solar (PV and Solar Thermal), and Green Build and Energy Efficiency. You'll be able to "experience" all of them.

New Tours/Demos. The Trades and Advanced Technology Center is full of working examples of the latest Renewable Energy Systems. Vats of bubbling algae? Ethanol (moonshine) production? Infra-red energy-audit cameras? Evacuated-tube thermal collectors? A unique solar thermal "adsorptive" cooling system? Yes!

New NMSEA Videos. We'll screen the entire 13-part Renewable New Mexico TV series each day. Fascinating professionally-produced interviews with some renewable energy pioneers, gurus, inventors, entrepreneurs, business professionals, and educators.

A 2012 Award-Winning Documentary. You'll get to see *Chasing Ice*, a 75-minute long video tour of the Arctic filmed by a veteran National Geographic photographer. Stunning footage demonstrating what's really happening way up north.

New Workshops and Presentations. Yes, you'll recognize some favorites, but there are quite a few new offerings. How about "Energy Myths, Schemes and Scams," "Energy Efficiency in Japan," "RE and Efficiency at NM's Electrical Co-ops," "The Los Alamos Smart-Grid Project," Ed Mazria's Architecture 2030, and "Global Warming - the Moral and Ethical Issues."

New Networking Opportunities. The "Sunset Social" on Saturday evening will give you the opportunity to rub shoulders with these interesting people: an ASES passive solar pioneer or two, solar gurus and entrepreneurs, SFCC students and instructors, and your new Public Regulatory Commission Commissioner, Valerie Espinoza.

So come on up, down, or over to the 2013 Solar Fiesta. We've got something new for everyone, including you! ☼

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New Mexico Solar Energy Association

NMSEA Board of Directors

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Santa Fe:	Monte Ogdahl
Silver City:	Lynda Aiman-Smith, Sarah Jane Gendron
Taos:	Scott Evans, Larry Mapes

NMSEA Office Staff: Ragan Matteson

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The SunPaper

Editor: Ron Herman, rhermansolar@aol.com

Send all letters, comments, and articles to the Editor, or to the NMSEA office. Preference is given to articles on solar energy topics (PV, passive, technology, performance histories, incentives, cost benefits, etc.), but we will also consider other renewable energy subjects as space allows.

Advertising Rates

All advertising is in black and white, and photos and graphics must have a resolution of at least 250 dpi in JPEG, TIF, or PDF format. Text-only ads may be provided in MS Word format. Ad copy must be e-mailed by June 15 for the July/August issue. Circulation is typically 400 copies. Size requirements and prices for individual ads are as follows:

		July/August
Full Page:	9½" H X 7" W	$122.00
Half Page:	4¼" H X 7" W	$66.00
Quarter Page:	4¼" H X 3½" W	$36.00
Biz Card:	2" H X 3½" W	$20.00

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Chapter Vice-president:
Larry Mapes

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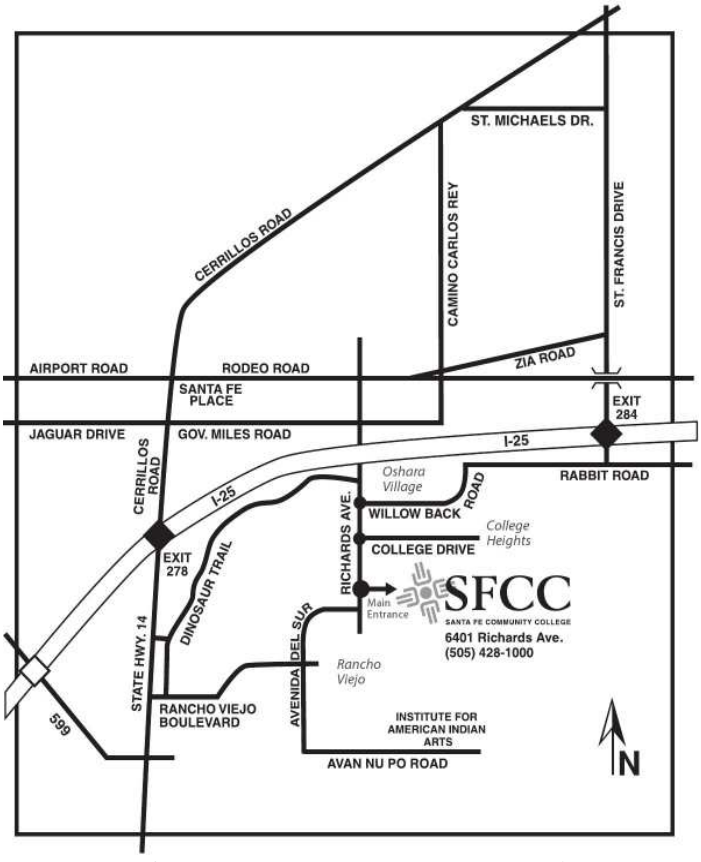
GREEN FIRE TIMES
News & Views from the Sustainable Southwest

Hutton Broadcasting LLC

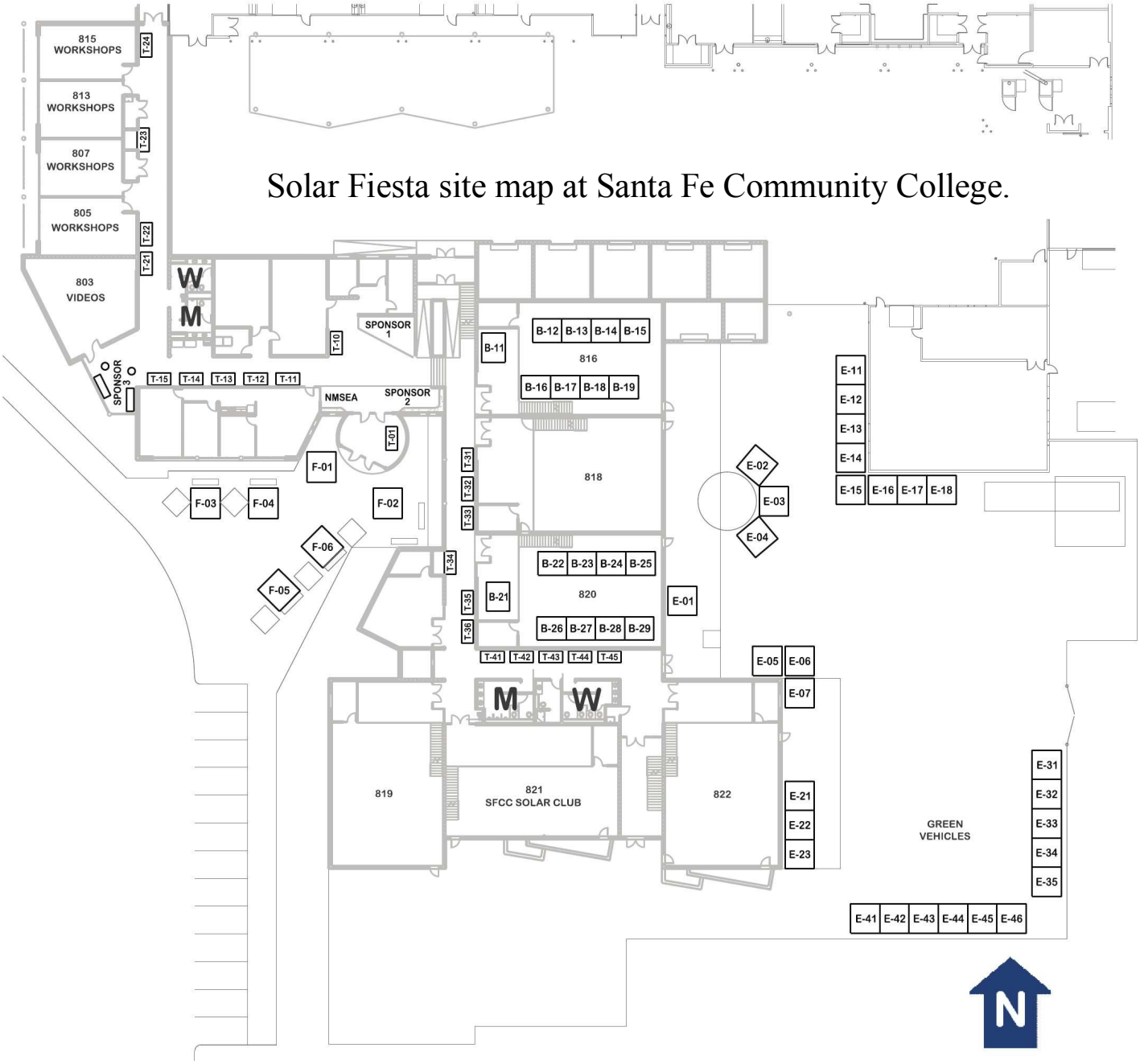
SFCC Solar Club Sunset Social

Saturday, April 27, 5:00 to 7:00PM
Trades and Technology Center

Join the SFCC Solar Club, faculty and staff, NMSEA members and exhibitors and speakers for an informal fundraiser for the SFCC Scholarship Fund. Contributions encouraged, but optional. Light refreshments, beer, wine available. Special guests PRC Commissioner Valerie Espinoza, Mark Chalom (Passive Solar Pioneer) Randy Grissom (Dean, SFCC). Also, a well-known "name" here in NM, whose identity we agreed to keep under wraps until the event!



Road map to Santa Fe Community College, south of I-25.



Solar Fiesta site map at Santa Fe Community College.

Welcome! From Randy Grissom, Dean of Economic and Workforce Development, Director of the Sustainable Technologies Center, Santa Fe Community College

The Santa Fe Community College School of Trades and Advanced Technologies, in conjunction with its Solar Club and NMSEA, is pleased to welcome you to the 2013 Solar Fiesta. We are extremely proud of the progress we've made here at SFCC in driving our state's green economy forward through implementation of project-based training programs in solar, biofuels and green building, and other important areas of study. The programs incorporate both theoretical and practical elements. Courses are available to students from throughout the state. Tuition and fees vary by residency and financial assistance may be available. We present these classes in a building that demonstrates many technologies at the forefront of energy efficiency and renewable energy. As Nancy Sutley, chair of the White House Council on Environmental Quality, said on touring our facilities, "I can see the jobs of the future being born right here!" Make yourself at home in our beautiful and practical buildings, ask questions and snoop around. You are a part of the community, and this is your community's college. And come back to see us! ☼

Exibitor	Location	Contact Information
310 Solar	E-2	www.310solar.com
350.org	T-36	www.350.org
Adobe in Action	E-22	www.adobeinaction.org
Affordable Solar	F-03, Sponsor 1	www.affordable-solar.com
Anaya Amsoil	B-21	www.rmganaya.com
AWINDOWAY	B-11	www.awindoway.com
BAC Enterprises, Inc	B-26	www.bacenterprises.com
Big Sky Learning	TBA	www.bigskylearning.com
CFV Solar Test Lab & Fraunhofer CSE	E-31	www.cfvsolar.com
Citizen Climate Lobby	T-11	www.citizensclimatelobby.org
Climate Change Leadership	B-23	www.takeresponsibility.us
CNM	ClassRm 821	www.cnm.edu
Consolidated Solar Technologies	F-02, Sponsor 3	www.gocstsolar.com
Current-C Energy Systems, Inc	T-12	www.currentc.com
Dahl of Santa Fe	T-31	www.dahlplumbing.com
Direct Power & Water	T-01	www.dpwsolarelectric.com
Earth Adobes	E-21	www.newmexicoearth.com
Enchanted Solar	B-22	www.enchantedsolar.com
Environment New Mexico	T-33	www.environmentnewmexico.org
Extreme Green	E-3	www.extremegreen.com
Green Fire Times	T-10	www.greenfiretimes.com
New Energy Economy	T-23	www.newenergyeconomy.org
New Mexico Green Chamber	B-29B	www.nmgreenchamber.com
New Water Innovations	B-16	www.newwaterinnovations.com
NM Energy Conservation Mgmt. Div.	B-27	www.emnrd.state.nm.us
NM Interfaith Power & Light	T-34	www.nm-ipl.org
NMSEA Santa Fe Chapter	E-32	solpwr@plateautel.net
Northern NM Electric Vehicle Association	TBA	greenwheels@newmexico.com
Otra Vuelta Tire Recycling	E-18	575-588-7531
Peace & Justice Center	T-35	www.abqpeaceandjustice.org
PNM	B-25	www.pnmresources.com
Positive Energy Solar	Sponsor 2	www.positiveenergysolar.com
PPC Solar (Paradise Power Co)	E-5, E-6	DPWsolarelectric.com
QSV Electro Mechanical	B-17	505-660-9047
Rebuild New Mexico	T-24	www.rebuildnewmexico.org
Renewable Taos	T-32	www.renewabletaos.org
Sacred Power	T-14, T-13	www.sacredpowercorp.com
Santa Fe County	T-21	www.santafecountynm.gov
Select Solar	F-06	www.selectsolarpower.com
Sierra Club Northern NM	B-28	www.nmsierraclub.org
Sol Luna Solar	E-15, E-16	www.SolLunaSolar.com
Southwest Ceramic Lighting	B-13	www.southwestceramiclighting.com
SW Green Bld Cntr & Solamente Clay Walls	E-4	www.swgreenbuildingcenter.com
Touch of Oranges	B-24	505-239-4682
US Green Building Council	B-29A	www.usgbcnm.org
Zero Energy Homes	T-15	www.newvillage.com

Please Thank Our 2013 Solar Fiesta Sponsors

Title Sponsor: Affordable Solar Workshop Sponsor: Positive Energy Solar

Supporting Sponsor: Consolidated Solar Technologies (CST)

Team Player: DPW Solar Electric, Select Solar Power Participating: Array Technologies, Sacred Power Corporation

Media: The Green Fire Times, Hutton Broadcasting, Power Ford, Beaver Toyota

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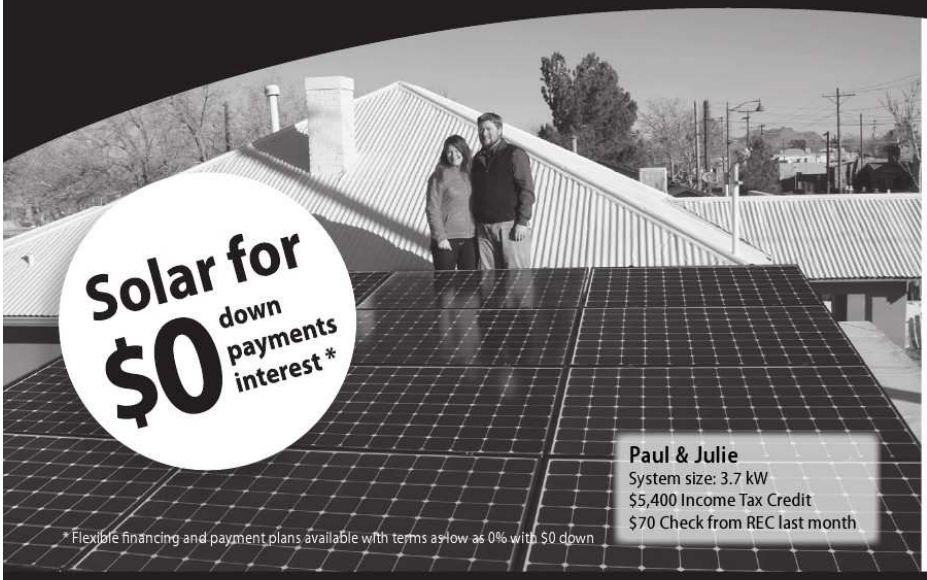
We saved $5,400 on our taxes!



Come see us at the

¡Solar Fiesta!

April 27-28 at the **Santa Fe Community College**

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FREE workshops

Workshops sponsored by Positive Energy Solar

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2013 Solar Fiesta Workshop Schedule

Saturday April 27

Workshops sponsored by Positive Energy Solar

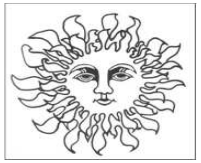
Location >> / Time	Room 807 "Renewable New Mexico" Series	Theater 803 Workshops	Room 805 Workshops	Room 813 Sponsor Talks	NM Community College Center of Excellence Tours	NM Community College Center of Excellence Tours
10:00	**Sunshine, Adobe & Green Chile** Mark Chalom / Amy Bunting					
10:30	**Passive Solar Innovation** Steve & Holly Baer, Zomeworks	**What's REnew in Santa Fe?**	**Driving the Clean Energy Transition**		**BIO-FUELS** Algae, Bio-diesel Ethanol, Bio-mass Lab 819	**SOLAR** Photovoltaics Solar Thermal Lab 821
11:00	**Building w Sunshine in Mind**	Nick Schiavo - City of Santa Fe	2012 ASES Conf Video			
11:15	Mark Chalom, Arch/Prof Lloyd Goding	Craig O'Hare - Santa Fe County	Steven Chu - Sec. of Energy			
11:30	**Solar Entrepreneurs to Educators**					
11:45	Chuck Marken / Monte Ogdahl	**Greening New Mexico**	**Global Warming :**	**Solar Financing in 2013**	**GREEN-BUILD**	**WIND**
12:00	**Walking Their Talk**	Glen Schiffbauer, ED, Santa Fe	**the Moral & Ethical Issues**	Rebecca Langton	**&**	**POWER**
	Wayne Evelo Jr / Rolf Nitsche	Green Chamber of Commerce	Joan Brown, DOM	Affordable Solar	**ENERGY EFFICIENCY**	
12:30	**Energy Education in the Schools**	Mike Halcom, USGBC-NM	Interfaith Power & Light		Lab 822	Room 817
12:45	Ron Rioux, APS / Lisa Silva					
1:00	**Home Sweet Experiment**	**RE & Energy Efficiency**	**Energy Efficiency in Japan**	**CST/HD Partnership**	**SOLAR**	**BIO-FUELS**
	Prof Paul Lusk / Don Miller	**at NM's Electrical Co-ops**		T. J. Hauser	Photovoltaics	Algae, Bio-diesel
1:30	**Growing an RE Business - Bootstrapping**	Luis Reyes, CEO	Nao & Randy Sadewic	CST	Solar Thermal	Ethanol, Biomass
1:45	Windy Dankoff / Allan Sindelar	Kit Carson Electric			Lab 821	Lab 819
2:00	**Growing an RE Business - Strategy**					
2:15	Odes Armijo-Castor / David Hughes	**Community Solar in NM**	**Energy Myths, Schemes**	**Sacred Sunshine**	**WIND**	**GREEN-BUILD**
2:30	**Growing an RE Business - Attitude**	Pam Gilchrist & Dan Baker -	**& Scams**	Odes Armijo-Caster	**POWER**	**&**
	Kevin Basselleck / Ragan Matteson	Sand River Co-housing	Allan Sindelar - Pos Energy	Sacred Power		**ENERGY EFFICIENCY**
3:00	**Growing an RE Business - Calor!**	Mary Emery - Renewable Taos	Dave Thomas - NMSR		Room 817	Lab 822
3:15	Bristol Stickney / Larry Mapes					
3:30	**Santa Fe - the City Solar**	**New Mexico Solar Pioneers**	**Energy Efficiency**			
	Nick Schiavo / Karen Paramanandan	-Exclusive 2012 Videos-	**On a Budget**			
4:00	**RE Education - the Next Generation**	Doug Balcomb, 1st Dir. of NREL				
4:15	Prof Olga Lavrova / Diane Burke, CNM	Ed Mazria - Architecture 2030	Gary Vaughn - NMSEA			
5:00-7:00	Sunset Social - Trades & Technology Center					

2013 Solar Fiesta Workshop Schedule

Sunday April 28

Workshops sponsored by Positive Energy Solar

Location >>	ClassRoom 807	Theater 803	ClassRoom 805	ClassRoom 813	NM Community College	NM Community College
	Renewable New Mexico Series	Workshops	Workshops	Sponsor Talks	Center of Excellence	Center of Excellence
Time					Tours	Tours
10:00	**Sunshine, Adobe & Green Chile**	**Screening of "CHASING ICE"**				
	Mark Chalom / Amy Bunting	An award-winning documentary				
10:30	**Passive Solar Innovation**	about the Changing Arctic	**State of the Art:**		**BIO-FUELS**	**SOLAR**
	Steve & Holly Baer, Zomeworks	75 min	**The Los Alamos Smart Grid Project**		Algae, Bio-diesel	Photovoltaics
11:00	**Building w Sunshine in Mind**				Ethanol, Bio-mass	Solar Thermal
11:15	Mark Chalom, Arch / Prof Lloyd Goding		John Arrowsmith, Los Alamos Co		Lab 819	Lab 821
11:30	**Solar Entrepreneurs to Educators**					
11:45	Chuck Marken / Monte Ogdahl	**The Architecture 2030 "Palette"**	**State of the Art:**	**Solar Financing in 2013**	**GREEN-BUILD**	**WIND**
12:00	**Walking Their Talk**	Ed Mazria's latest Innovation	**Off-Grid PhotoVoltaic Systems**	Rebecca Langton	**&**	**POWER**
	Wayne Evelo Jr / Rolf Nitsche	to Reverse Climate Change	Al Sindelar, Chief Technical Officer,	Affordable Solar	**ENERGY EFFICIENCY**	
12:30	**Energy Education in the Schools**	Francesca Desmarais - Arch 2030	Positive Energy Solar		Lab 822	Room 817
12:45	Ron Rioux, APS / Lisa Silva					
1:00	**Home Sweet Experiment**	**ADIOS COAL!**	**State of the Art: New Mexico's**	**Debunking Solar Myths**	**SOLAR**	**BIO-FUELS**
	Prof Paul Lusk / Don Miller	Mariel Nanasi, New Energy Economy	**Passive Solar Architecture**	Taylor Selby	Photovoltaics	Algae, Bio-diesel
1:30	**Growing an RE Business - Bootstrapping**	Steven Rudnick, PhD - Citizens	Mark Chalom, Architect &	Positive Energy Solar	Solar Thermal	Ethanol, Biomass
2:15	Windy Dankoff / Allan Sindelar	Climate Lobby	ASES Passive Solar Pioneer		Lab 821	Lab 819
2:00	**Growing an RE Business - Strategy**					
2:15	Odes Armijo-Castor / David Hughes	**Making a Difference -**	**State of the Art:**	**PV: Practical to Invisible**	**WIND**	**GREEN-BUILD**
2:30	**Growing an RE Business - Attitude**	**Your Actions Count**	**Active Solar Heating - What's New?**	Daniel Jencka	**POWER**	**&**
	Kevin Basselleck / Ragan Matteson	Jason Marks, ex-PRC Commissioner		DPW		**ENERGY EFFICIENCY**
3:00	**Growing an RE Business - Calor!**	Randy Sadewic - Positive Energy	Bristol Stickney, SolarLogic		Room 817	Lab 822
	Bristol Stickney / Larry Mapes					
3:30	**Santa Fe - the City Solar**	**New Mexico Adobe Masters**	**State of the Art: Alternative Cool**			
	Nick Schiavo / Karen Paramanandan	"Adobe Mystique" film + Q&A	Gary Vaughn, NMSEA			
4:00	**RE Education - the Next Generation**	Quentin Wilson - Adobe in Action	Xubi Wilson, SFCC			
4:15	Prof Olga Lavrova / Diane Burke, CNM	Mark Chalom, Architect	Bristol Stickney, SolarLogic			



WORKSHOPS by TRACK

Also, see www.NMSolarFiesta.org
Workshops sponsored by Positive Energy Solar

TRACK 1 - RENEWABLE ENERGY IN NEW MEXICO

What's REnew in Santa Fe?
Saturday April 27 10:30am - 11:30am Theater 803
Nick Schiavo, PE Energy Specialist, City of Santa Fe
Craig O'Hare Energy Specialist, County of Santa Fe
Learn about the City of Santa Fe's ambitious renewable and energy efficiency projects, and what programs and incentives are available for home and business owners in Santa Fe County.

Greening New Mexico
Saturday April 27 11:45am - 12:45pm Theater 803
Glen Schiffbauer is the Executive Director of the Santa Fe Green Chamber of Commerce. **Mike Halcom** is the Treasurer of USGBC-NM.
It's not just about Green Chile! The NM Green Chamber of Commerce and the US Green Building Council-NM (LEED and HERS Standards) are moving NM in a Green Direction. Find out what they're up to.

Renewable Energy and Energy Efficiency at NM's Electric Co-ops
Saturday April 27 1:00pm - 2:00pm Theater 803
Luis Reyes, CEO, Kit Carson Electric
NM's Electric Co-ops do things differently than investor-owned utilities. A few are offering their customers options that the BIG BOYS prefer to ignore. Kit Carson Electric is the most "RE-friendly" electric co-op in NM.

Growing a Renewable Business in NM
Saturday April 27 1:30pm - 3:30pm Rm 807
Sunday April 28 1:30pm - 3:30pm Rm 807
"Renewable New Mexico" Video Series
Windy Dankoff, **Allan Sindelar**, **Odes Armijo-Castor**, **David Hughes**, **Kevin Basselleck**, **Ragan Matteson**, **Bristol Stickney** and **Larry Mapes** tell their fascinating stories.

Community Solar in New Mexico
Saturday April 27 2:15pm - 3:15pm Theater 803
Pamela Gilchrist and **Dan Baker** have been involved with Santa Fe's Sand River Co-Housing group (formerly ElderGrace). **Mary Emery** is a member of Renewable Taos. She organized an installation at a Taos school.
Community Solar or "Solar Gardens" programs allow homeowners to own a share in a local PV system. Hear how these groups made it happen. How do we do more of this in New Mexico?

New Mexico Solar Pioneers
Saturday April 27 3:30pm - 4:45pm Theater 803
Exclusive 2012 Videos you'll only see here!
Doug Balcomb is the "father" of the Energy-10 software that revolutionized active and passive solar architecture. A past President of NMSEA, he was also the first Director of the U.S. National Energy Lab (NREL).
Ed Mazria is an internationally recognized architect, author, researcher and educator. He's the founder and CEO of Architecture 2030, which is based in Santa Fe.

Meet your New PRC Commissioner
Saturday April 27 5:00pm - 7:00pm
SFCC SUNSET SOCIAL Trades and Tech Center
PRC Commissioner Valerie Espinoza was elected to the PRC last November. She represents District 3 which includes Taos, Espanola, Los Alamos, Santa Fe and Bernalillo. The NM Public Regulatory Commission is responsible for regulating NM's Electric Utilities. The PRC plays a major role in Renewable Energy policy in NM. How often do you get to chat with a PRC Commissioner?

TRACK 2 - ENERGY, $$$ AND YOU

Driving the Clean Energy Transition
Saturday April 27 10:30 - 11:30 Rm 805
2012 ASES Conference Video
Steven Chu, U.S. Secretary of Energy, is a distinguished scientist and Nobel-laureate. He has devoted his recent career to the search for new solutions to our energy and climate challenges. In this talk he discusses climate change, the cost of RE, federal research projects, and even "Solyndra."

Energy Efficiency in Japan
Saturday April 27 1:00pm - 2:00pm Rm 805
Nao Sadewic was born and raised in Japan. **Randy Sadewic** worked in Japan for a Fortune 500 Company.
The Japanese, on average, use less than half of the energy per person that Americans use. What "Energy Smart" things are they doing that we aren't (yet)?

Energy Myths, Schemes and Scams
Saturday April 27 2:15pm - 3:15pm Rm 805
Allan Sindelar, Founder and Chief Technical Officer for Positive Energy Solar. **Dave Thomas**, founder of New Mexicans for Science and Reason.
Join us for a frank discussion about energy-related "breakthroughs" that are just too good to be true. Some reality checks before you sign your checks. Bring lots of questions!

Energy Efficiency on a Budget
Saturday April 27 3:30pm - 4:30 pm Rm 805
Gary Vaughn, PE NMSEA President
It's not just about pricey passive solar adobes and solar panels. Explore the long list of "affordable" energy efficiency upgrades (including some you haven't heard

of) that have worked for this old house (and that "pay back" FAST).

TRACK 3 - STATE OF THE RENEWABLE ART

The Los Alamos Smart-Grid Project
Sunday April 28 10:30am - 11:30am Rm 805
John Arrowsmith, County of Los Alamos
Learn about the most sophisticated Smart-Grid project in the U.S. - a collaborative effort involving Las Alamos County, NEDO of Japan, LANL, and the Army Corp of Engineers. State-of-the-art stuff! Don't miss this!

Off-Grid Photovoltaic Systems
Sunday April 28 11:45am-12:45am Rm 805
Allan Sindelar, founder Positive Energy Solar.
If electrical energy independence intrigues you, learn what it takes from an off-grid expert who has walked his talk for decades. Off-grid is the future!

New Mexico's Passive Solar Architecture
Sunday April 28 1:00pm - 2:00pm Rm 805
Mark Chalom, Architect and ASES Solar Pioneer
Passive solar architecture is NM's gift to the world! Take a virtual tour of an award-winning passive solar home designed by one of NM's best known solar architects - someone who fights Global Warming by tossing Adobes!

Active Solar Heating - What's New?
Sunday April 28 2:15pm - 3:15pm Rm 805
Bristol Stickney, partner SolarLogic
Learn about the latest fusion of solar hot water and the Internet. If you like sunshine, plumbing and laptops this case study of a NM solar heated home that uses a state-of-the-art solar-thermal system is for you!

Alternative Summertime Cooling
Sunday April 28 3:30pm - 4:30pm Rm 805
Gary Vaughn, NMSEA
Bristol Stickney, partner SolarLogic
Xubi Wilson, Instructor SFCC
You have more options for summertime cooling than you realize. Learn about night-sky radiant cooling, solar thermal powered "adsorptive" cooling, and ultra-high-efficiency duct-less mini-split heat pumps.

TRACK 4 - CLIMATE CHANGE AND YOU

"CHASING ICE" - an Award-Winning Film
Sunday April 28 10:15am - 11:30am Theater 803
Watch a spectacular documentary on the fast-changing Arctic by a National Geographic photographer. Time-lapse images you'll never forget! Chasing Ice has won more than 23 awards, including at the Sundance Film Festival. See what's really happening in places that are remote, extremely dangerous and stunningly beautiful.

Global Warming - the Moral and Ethical Issues
Saturday April 27 11:45am - 12:45am Rm 805
Joan Brown DOM, is the Founder and Director of Interfaith Power and Light.
It's not just about barrels of oil, kilo-Watt-hours and $$$. Join us as we explore the moral, ethical and yes, spiritual questions inter-twined with Global Warming.

The Architecture 2030 "Palette"
Sunday April 28 11:45am - 12:45pm Theater 803
Francesca Desmarais, Director of the Architecture 2030 Palette Project.
Learn all about Santa Fean Ed Mazria's latest innovation. The "Palette" is an intelligent on-line reference and how-to guide for changing the way we design energy efficient buildings and **reversing** climate change.

ADIOS COAL!
Sunday April 28 1:00pm - 2:00 pm Theater 803
Mariel Nanasi, Exec. Dir. New Energy Economy
Steven Rudnick, PhD. , Citizens Climate Lobby
Coal is the dirtiest of all fossil fuels, and a major source of pollution and the greenhouse gas emissions that are driving global warming. Let's burn it in NM no mas!

Making a Difference - Your Actions Count!
Sunday April 28 2:15pm - 3:15pm Theater 803
Jason Marks, former PRC Commissioner
Randy Sadewic, Positive Energy
Join us as we examine what each of us can do to RE-direct our state and our country. Energy-related politics and legislation matter, as do individual energy choices.

New Mexico's Adobe Masters
Sunday April 28 3:30pm - 4:30pm Theater 803
Quentin Wilson, NM's "Adobe-Wan Kanobi"
Mark Chalom, Architect and ASES Solar Pioneer
A screening of the 2011 video documentary "**Adobe Mystique**" featuring Quentin Wilson, Mark Chalom and other NM adoberos. Q&A + adobe block autographing.

TRACK 5 - SPONSOR TALKS

Solar Financing in 2013
Saturday April 27 11:45am - 12:30pm Rm 813
Rebecca Langton, Affordable Solar

The CST / Home Depot Partnership
Saturday April 27 1:00pm - 1:45pm Rm 813
T.J. Hauser, CST

Sacred Solar
Saturday April 27 2:15pm - 3:00pm Rm 813
Odes Armijo-Caster, Sacred Power Corporation

(Continued on page 13)

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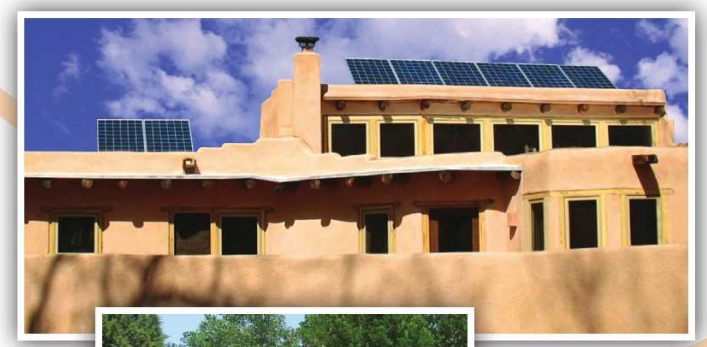

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Solar Financing in 2013
Sunday April 28 11:45am - 12:30pm Rm 813
Rebecca Langton, Affordable Solar

Debunking Solar Myths
Sunday April 28 1:00pm - 1:45pm Rm 813
Taylor Selby, Positive Energy Solar

PV: Practical to Invisible
Sunday April 28 2:15pm - 3:00pm Rm 813
Daniel Jencka, DPW

New Mexico Community College CENTERS OF EXCELLENCE TOURS

BIO-FUELS
Saturday April 27 10:30am - 11:30am Lab 819
Saturday April 27 1:00pm - 2:00pm Lab 819
Sunday April 28 10:30am - 11:30am Lab 819
Sunday April 28 1:00pm - 2:00pm Lab 819
Meet the enthusiastic students and instructors who are involved in this program. You'll see how they're growing tanks of algae, and learn why algae could be a big cash crop in New Mexico. They'll show you the in's and out's of making biodiesel from used cooking oil. You'll learn the latest applications for biomass (wood and agricultural crops and waste). And best of all, you'll see how SFCC students are brewing ethanol (moonshine, but it's legal!).

GREEN-BUILD and ENERGY EFFICIENCY
Saturday April 27 11:45am - 12:45pm Lab 822
Saturday April 27 2:15pm - 3:15pm Lab 822
Sunday April 28 11:45am - 12:45pm Lab 822
Sunday April 28 2:15pm - 3:15pm Lab 822
Meet the enthusiastic "green" students and "green" instructors. You'll learn about the latest insulation materials and installation techniques. They'll show you how building air leakage is measured. See what an infra-red camera can reveal about where a house is "bleeding" heat. You'll see how energy efficiency can save $$ and the environment.

SOLAR (Photovoltaics and Solar Thermal)
Saturday April 27 10:30am - 11:30am Lab 821
Saturday April 27 1:00pm - 2:00pm Lab 821
Sunday April 28 10:30am - 11:30am Lab 821
Sunday April 28 1:00pm - 2:00pm Lab 821
Meet solar-powered students and instructors from CNM and SFCC. You'll learn about the different types of PV panels as well as inverters and related equipment.
They'll show you working examples of both passive and active solar thermal systems. You'll be able to see different types of thermal storage systems. Don't miss SFCC's "state of the art" solar-powered "adsorptive" cooling system.

WIND
Saturday April 27 11:45am - 12:45pm Rm 817
Saturday April 27 2:15pm - 3:15pm Rm 817
Sunday April 28 11:45am - 12:45pm Rm 817
Sunday April 28 2:15pm - 3:15pm Rm 817
Join a "virtual" tour of Mesalands Community College Wind Training Center. See if you've got the "right stuff" to climb a 400 foot wind turbine. You'll learn about what's going on (and what's going around) inside a wind turbine. You'll begin to understand why wind power is "sweeping" the country. ☼

ABQ Chapter Meetings

Be a part of the change toward a more sustainable future and join us at our monthly Albuquerque Chapter meetings. There will be NO MEETING in April because of the Solar Fiesta, but meetings are normally held on the fourth Tuesday of each month from 6-8 PM at the REI store, 1550 Mercantile Ave NE, 87107. Watch for e-mail Blasts or call the office for information on the topic for the May 28 meeting.

NMSEA Board Meeting May 7

The next meeting of the NMSEA Board of Directors will be on Tuesday evening, May 7, in the conference room at the office at 1009 Bradbury Dr. SE, Albuquerque, 87106, starting at 5:30 with a potluck dinner. Members welcome. Call 505-246-0400 by May 3, if you have an item for the agenda.

Energy Investments

Closing share prices compared to the DOW index:

4/12/13	2/22/13	4/27/12
First Solar (FSLR):		
$37.11	$33.81	$35.58
Market Vectors, Solar Energy ETF (KWT):		
$39.11	$44.42	$4.45
(reverse split July 1, 1sh/15sh)		
Dow Jones Industrial Average ($INDU)		
14,865	14,001	12,983
Crude Oil//barrel (NYMEX futures)		
$91.29	$93.13	$104.93
Natural Gas/mmBtu		
$4.22	$3.29	$2.19
Gasoline/gal		
$2.80	$3.08	$3.21

NG and gasoline are national averages.
Selected prices provided for relative information, only; NMSEA does not recommend specific investments. All investments involve risk; invest cautiously.

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Join the New Mexico Solar Energy Association!

Be a part of a creative, innovative organization dedicated to bringing renewable energy and sustainable building to New Mexico!

Keep informed of what's happening through our bi-monthly newsletter, the SunPaper! Actively support education for kids and adults and learn of workshops and classes where you can learn about photovoltaics, hot water, green building, solar rights and all the wide range of sustainable living and building practices.

Name: _____

Company or Affiliation: _____

Address: _____

City, State, ZIP Code: _____

Phones: _____ _____(W)

Email: _____

Any special solar interests?_____

_____

How did you hear about us? _____

☐ Yes, I would like to volunteer on occasion!

NMSEA Membership Dues

☐ Individual and Family, 1 year	$30
☐ Business, 1 year	$75
☐ Individual Lifetime	$250
☐ Business Lifetime	$400
☐ Teacher/Student/Senior (62 & up) w/copy of ID (circle one)	$10

NMSEA Chapter Options

All NMSEA members are invited to participate in our local chapters around the state. When you register, you will be placed in the chapter nearest to you geographically, or you may contact the office to change your chapter, if you desire. (Note: members are not limited to the chapter in their area and are welcome to visit other chapter events.)

Check if you would like to be affiliated with and/or donate an additional amount to any of the following chapters or to the main office general fund:

Affiliation	Donation
☐ Alamogordo Chapter	$ _____
☐ Albuquerque Chapter	$ _____
☐ Las Cruces Chapter	$ _____
☐ Las Vegas, Sustainable Las Vegas	$ _____
☐ Los Alamos Chapter (LASE)	$ _____
☐ Santa Fe Chapter	$ _____
☐ Taos Chapter	$ _____
☐ Silver City Chapter	$ _____
☐ Main Office / General Fund	$ _____

ASES Membership

NMSEA is a chapter of the American Solar Energy Society, and we encourage our members to join ASES as well. ASES members receive SOLAR TODAY magazine, Solar Action Network (SAN) alerts, the Sunbeam e-newsletter, discounts on publications, and more! Five percent of your ASES dues are dedicated to special outreach programs including ASES Legacy Schools, library gift subscriptions and the purchase of Green Tags.

For more information and for ASES business membership categories, please visit **www.ases.org**.

Check category if you want to renew/subscribe to ASES with your NMSEA membership. Fill in total below:

☐ Professional	$89	☐ Supporting	$125
☐ Senior Professional (proof required)	$45	☐ Contributing	$250
☐ Basic	$39	☐ Lifetime	$1200
☐ Student (proof required)	$35	☐ SOLAR TODAY Subscriber only	$29

ASES Options

☐ Do not rent my name

☐ I do not wish to receive Solar Action Network Alerts

☐ I do not wish to receive the Sunbeam on-line newsletter

☐ I do not wish to be listed in the on-line Membership Directory

NMSEA Dues $_____ + ASES dues $_____ + Donation $_____ = Total $_____

Payment options: ☐ Check or money order enclosed ☐ Visa ☐ MasterCard

Credit Card # _____ _____ Exp. Date: _____ Signature _____

Credit Card Billing Address (if different from above) _____

Mail this form with payment to: NMSEA, 1009 Bradbury Dr. SE #35, Albuquerque, NM 87106.
For more information, please call 505-246-0400 or 888-886-6765 or visit www.nmsea.org.

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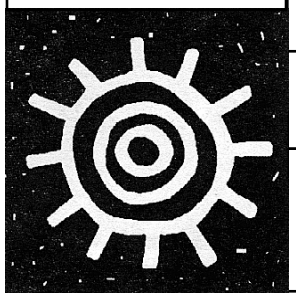

Mission Statement

We promote clean, renewable energy and sustainability in New Mexico through education, empowerment, collaboration and advocacy.

Please consider investing your time and/or money
toward solar energy education through NMSEA.

Vision Statement

We envision a thriving, bio-diverse earth, with civilization powered by clean, renewable and sustainable energy from the sun.

Coming Events

April 27, 28	**NMSEA Solar Fiesta, Santa Fe Community College Campus** **See inside, and go to www.NMSolarFiesta.org for additional up-to-date information.**
May 7	**Board of Directors Meeting**, Tuesday, NMSEA office, 1009 Bradbury Dr. SE, Albuquerque, 87106. Meeting at 5:30PM, starting with potluck dinner. Members welcome.
May 28	**Albuquerque Chapter Meeting** at REI, 1550 Mercantile NE, 6:00 to 8:00 p.m.
June 22, 23	**Adobe and Compressed Earth Block Hands-on Class**, Bosque, NM. See www.adobebuilder.com.