## **Sustainability Task Force**



A Committee of the Chico City Council Vice Mayor Schwab, Chair

Meeting of February 4, 2008 - 3:00 p.m. to 5:00 p.m.

Council Chamber Building, 421 Main Street, Conference Room No. 1

#### **AGENDA**

- Solar Proposal for City of Chico and Residents Staff from the City's Capital Project Services
   Department will provide a report on the Solar proposal Ray Testman provided to the Task Force at its last meeting.
- Green California Leadership Award Awards to state and local governments that provided a measurable benefit to the natural or human environment. Committee will discuss possible nominations for this year or next.
- 3. Committee Updates -
  - a. ICLEI audit
  - b. SCORE inventory
  - c. Sustainable Business Partnership Conference
  - d. Building Green Building Standards for Chico
  - e. Community Outreach Draft website pages
- 4. Informational Items
  - a. Sustainability Masquerade Ball February 9, 2008
  - b. Green California Summit and Exposition April 7-9, Sacramento
- 5. Next meeting date

February 18, 2008 is a holiday (3rd Monday), next regularly scheduled meeting - March 3, 2008

- 6. <u>Business from the Floor</u> Members of the public may address the Committee at this time on any matter not already listed on the agenda, with comments being limited to three minutes. The Committee cannot take any action at this meeting on requests made under this section of the agenda
- 7. Adjournment The meeting will adjourn no later than 5:00 p.m. The next meeting of the Sustainability Task Force is scheduled for March 3, 2008 unless cancelled. All meetings are held from 3:00 p.m. 5:00 p.m. in Conference Room No. 1.

Distribution available in the office of the City Clerk:

Prepared: 1/30/08 Chico City Clerk's Office

Posted: 1/31/08 411 Main Street, Chico, CA 95928

Prior to: 5:00 p..m. (530) 896-7250



Please contact the City Clerk at 896-7250 should you require an agenda in an alternative format or if you need to request a disability-related modification or accommodation in order to participate in a meeting. This request should be received at least three working days prior to the meeting in order to accommodate your request.

#### SOLAR PROPOSAL FOR CITY OF CHICO AND RESIDENTS

#### Imagine if:

1. The 50 to 100 acres owned by the City of Chico east of the power lines up by Mark 10 Yosemite Dr. adjacent to Hwy 32 in California Park is set aside for renewable energy. A move of the power lines are the power lines and the power lines are the power lines and the power lines are the power lines are the power lines and the power lines are the power lines up by Mark 10 Park 10

The figures below change with seasons and PG&E is rate schedules but give an indication

- a. The Park Commission agrees to set this land aside for solar panels.
- b. The Park Commission also uses the site for its own solar panels.
- c. This area is above the fog belt, has no obstructions and is close to the power lines. Most of Chico has so many trees it's difficult to find open areas for homeowners to install solar arrays.
- 2. PG&E agrees to forego the point of use rule for homeowners installing solar panels.
  - a. PG&E is mandated to get 20% of their future power from renewable sources.
  - b. PG&E agreed to buy power at a contracted rate from an Isreali company building a 6000 acre solar array in the Mohave desert.
  - c. Is the solar array sitting next to Hwy 70 supplying power to the County Courthouse complex going through one meter or multiple meters? The system seems too large for one meter point of use.
- 3. The City of Chico as a green source power broker for the proposed solar array.
- a. The City of Chico signs an agreement with PG&E to supply green power to city residences and businesses.
- 4. Chico residents purchase power in 1000 watt increments for their businesses or homes from the city's array.
  - a. Home and business owners with too many trees on their property can still take advantage of solar energy by purchasing it from the City's array.
- b. Example: If the City's array produces 100,000 watts, each 1000 watt increment bought would receive 1% of total output produced each month.
  - c. PG&E's rate system punishes large users by doubling and tripling its tiers the more power used. A homeowner with large power bills can reduce them significantly by merely offsetting the highest tiers. 1000 watts can provide this offset, making it financially advantageous. A homeowner buying power at .36 a kilowatt can easily understand buying the same kilowatts from the City for .15, contracted for several years.
- 5. Imagine a business entity financing the whole array by selling the power at a contracted price a few cents above cost, which is still significantly less than PG&E's rate.
  - a. There are businesses that already finance solar installations on people's homes by renting them to the homeowner for 25 years at a fixed rate. The fixed rate is below PG&E's highest rates, locked in for 25 years.
  - b. It's possible to go green and save money now.
  - c. I have panels I financed with a second mortgage. My mortgage payment is less than what I would pay PG&E for the same power. I save money now

and reduce my carbon footprint. When my panels are paid off, I'll save even more.

The figures below change with seasons and PG&E's rate schedules but give an indication of the way the price per kilowatt-hours increases after the baseline.

A house with gas heat is allotted by PG&E a baseline use of 12.5 kilowatt-hours per day at 12 cents per. That equals 375 kilowatt-hours per month.

If your use for the month is 1500 kilowatt-hours you would pay the following rates.

```
375 \text{ Kw} @ \$.11 = \$41.25
                             100% of baseline
122 Kw @ $.129 = $15.73
                             100% to 130% of baseline
253 Kw @ $.227 = $57.43
                             130% to 200% of baseline
375 \text{ Kw } @ \$.317 = \$118.87
                             200% to 300% of baseline
375 Kw @ $.364 = $136.50
                             300% and above baseline
```

Total cost: \$369.78

Cost of first three tiers:

first 750 kilowatt hours: \$114.41

Cost of last two tiers: last 750 kilowatt-hours: \$255.37

It's easy to see that the last two tiers rack up more cost than the first three. The aim of homeowners using solar power is to knock off the cost of power being charged at the highest rates (.31 and .36 rates). In the example above, that's 750 watts, half the total usage but roughly 70% of total charges. If you pay less, by buying solar, for those 750 watts, you save money, now. Plus, PG&E's rates will continue to go up as power gets more expensive to produce. If a homeowner can lock in a \$.15 rate for twenty-five years the savings easily pay for the amortized cost of the array. This is a way to produce and sell solar power where everyone wins now, and wins even more later when the array is paid off.

If the committee is not interested in pursuing information about a project like this, would it be interested in appointing Ray Testman to pursue and gather information?

Ray will be in Alabama until January 31st. You can reach him at 251-961-7824. After February 1st, he will be back in Chico at 342-0640.



## 2008 GREEN CALIFORNIA LEADERSHIP AWARDS

In cooperation with the Advisory Board for the Green California Summit, the Green California Leadership Awards have been established as a forum to recognize outstanding environmental achievements in government. This is an opportunity to highlight and celebrate successful state and local government projects implemented in California during 2007. All nominated projects must be publicly financed and executed, and must have provided a measurable benefit to the natural or human environment.

#### Project Awards will be given in each of the following categories:

- Climate Change (CC)
- Waste Management (WST)
- Energy Innovation (EI)
- Transportation (TR)
- Green Building (GB)
- Water Management (WTR)
- Purchasing (PU)
- Green Culture (GC)

#### **Entry instructions:**

Submission deadline is March 7, 2008.

- 1) Nominations MUST be made by public sector/government officials.
- 2) Entries must have responses for ALL questions on the entry form by the submission deadline, or the application will be considered incomplete. Incomplete entries cannot be forwarded to the review panel, and will not be retained.
- 3) Please write clear and concise answers, assuming that the reader is not familiar with your organization's roles, responsibilities or terminology. Always spell out the first use of all acronyms and abbreviations.
- 4) Submissions must be labeled using the following file naming convention: Category Code (Organization-Project Title).doc

File Naming Examples: CC (CALFIRE-Forest Sector Protocols).doc TR (CALTRANS-I 80 Cold Foam Recycling).pdf

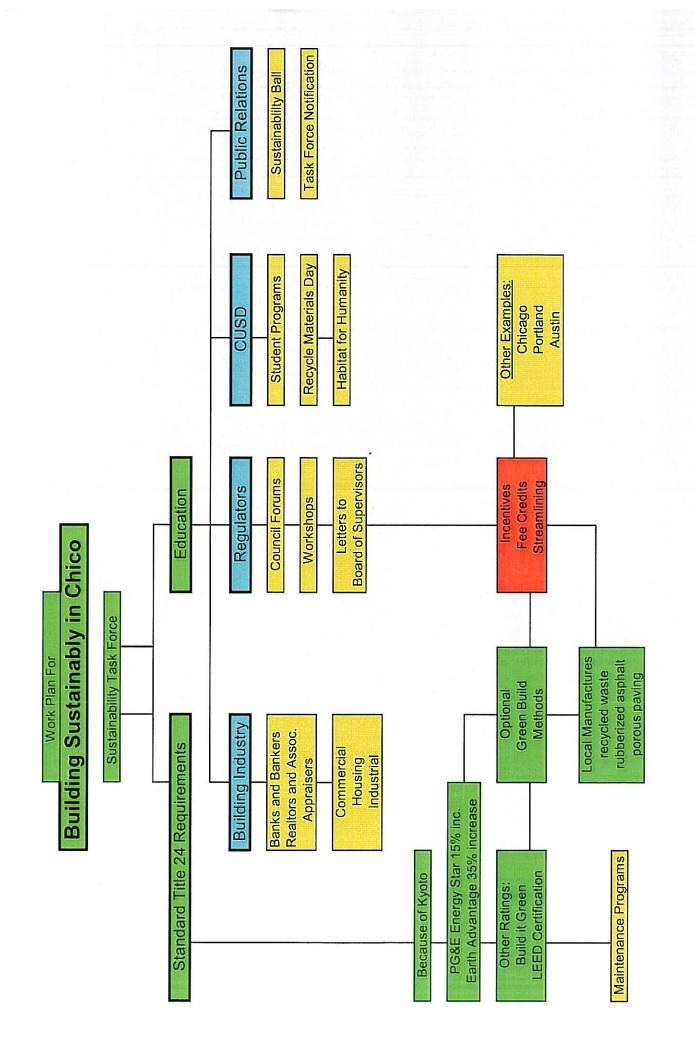
\*Note: entries must be submitted in either Word or PDF format.

<sup>\*</sup>Note: each category is given a code (in parenthesis above) for submission purposes.

## **AWARD QUESTIONNAIRE**

Please provide complete contact information, including name, phone number, email and physical address.

1. What is the name of the project that is being proposed for an award?
2. Which category best applies to this submission?
3. What problem was this project designed to address?
4. Please describe the elements of the project.
5. What aspects of the project are most innovative, or break new ground?
6. Did the project involve implementation of specific technology(ies)? If so, what?
7. Does this project forward specific goals of a state law, executive order, agency or department mandate, etc? If so, what?
8. Who benefits from this project?
9. What measurable results have been attained to date?
10. What results do you anticipate in the future?
11. What other government jurisdictions or departments have you worked with in a collaborative effort on your project and what positive result came about due to this working relationship?
12. Is there a URL linking to this project? If so, please provide it.
13. Are there other reasons that you feel this project is worth of recognition?



# 2<sup>nd</sup> Annual Sustainability Masquerade Ball!

\*Hosted by the non-profit Each One Teach One of Northern California\*



TICKETS: \$25

Reserve a whole table for 8 and receive two bottles of wine for free!

When: Saturday Feburary 9<sup>th</sup>, 6:00pm Where: Park Town Pavilion 2020 Park Avenue, Chico

Dinner and Dance!
Catered by David Guzzetti!
Great Silent Auction Items!
Organic Bar: Wine, beer, and booze!!!



Greening the Golden State—California at a Crossroads

REGISTRATION

April 7-9, 2008

Sacramento Convention Center - Sacramento, CA

Welcome Where and When Venue Register

#### TRAINING OPTIONS

## PRE-SUMMIT - MONDAY, APRIL 7, 2008

NOTE: All Conference Roles have the option of buying a pass to one of the Pre-Summit sessions. A Monday-Only, Full Day pass gives you access to one of these classes:

## Full Day Classes, 9 am to 4:00 pm

- LEED Project Management
- Environmental Management Systems: Fulfilling Your Green Mandates
- Environmentally Preferable Purchasing: How to Spec and Buy Green Products
- Planning & Developing a Green Community
- Retrocommissioning: Optimizing Building Performance
- Creating and Achieving Climate Change Commitments

#### Click here for detailed descriptions.

\*There will be no exhibit hall or keynote speeches on Monday, April 7.

## TUESDAY, APRIL 8, 2008

Registering for a Two-Day Pass or a One-Day Pass, Tuesday Only will give you access to all a these Concurrent Seminars and Half-Day Workshops:

#### **Concurrent Seminar**

Seminar Periods	Track 1 - Room 202	Track 2 - Room 203	Track 3 - Room 204
10:30 am - 11:45	Green Gold Rush: California's New Energy Economy	Fuel Cell 101	Using Your Dollars to Mak a Difference: Green Purchasing Strategies
1:00 pm - 2:15 3:15 pm - 4:30	incuit Commissioning.	California 2050: What Might it Look Like?	The Real Cost of Green Building
	The Future of Transportation		Walking the Talk: Creatin a Green Organization

Half-day Workshops, 1:00 PM to 4:30 PM

<sup>\*\*</sup>All of the Full Day Classes are being offered simultaneously, so you can only attend one.

- Green Fleets: Kicking Tires and Crunching Numbers
- Building Green From the Ground Up: Fundamentals of Integrated Design
- Downsizing Landfills: Waste Diversion and Source Reduction
- Nothing Speaks Louder Than Success: Measuring and Marketing Green Achievements
- GeoThermal Heating and Cooling: The Convenient Truth in Building a Sustainable California

Click here for detailed descriptions.

## WEDNESDAY, APRIL 9, 2008

Registering for a Two-Day Pass or a One-Day Pass, Tuesday Only will give you access to all these Concurrent Seminars and Half-Day Workshops:

#### **Concurrent Seminar**

Seminar Periods	Track 1 - Room 202	Track 2 - Room 203	Track 3 - Room 204
	Concepts, Technologies	Incentives, Rebates and	Renewable Energy Option Going for Net Zero – and Beyond!
1:00 pm - 2:15 3:15 pm - 4:30	Water Management and		Risk and Opportunities of Going Green
1	Conservation Green Facility Management	The Air in There: Building Materials and Environmental Health	Energy Savings Using Energy Star

## Half-day Workshops, 1:00 PM to 4:30 PM

- Mastering State Requirements for Green Leases
- Green Affordable Housing
- Greening Local Government Buildings: Success Stories
- The Energy Independence and Security Act: How the New Federal Legislation Will Impact California

Click here for detailed descriptions.

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## **Education Program**

April 7

## Pre-Summit Full Day Classes

#### **LEED Project Management**

LEED is quickly becoming the benchmark that is transforming the building industry. There are over 40,000 LEED Accredited Professionals, yet there continues to be a shortage of people with hands-on, project related experience. This course will give attendees the training they need to guide green building projects through the LEED Certification process.

#### **Environmental Management Systems: Fulfilling Your Green Mandates**

Public agencies are being asked to reduce green house gas emissions, increase water and energy efficiency, reduce waste – all on top of carrying out their agency missions. These "green mandates" do not have to be burdensome if they are handled in a systematic framework; the Environmental Management System (EMS) provides this framework. This workshop will review the EMS process and demonstrate the benefits of the EMS in public agencies.

#### **Environmentally Preferable Purchasing: How to Spec and Buy Green Products**

California government has traditionally been a leader in environmentally preferable purchasing (EPP), starting with "buy recycled" programs in the 1980s. Today, public agencies are looking to the next level with procurement programs that reduce waste, use less energy, are less toxic, and, most of all, save money!

This workshop will offer training on how to implement a comprehensive and cost-effective environmental purchasing program. There will be multiple case studies that demonstrate proven techniques for a more comprehensive "green" purchasing" program.

#### Planning & Developing a Green Community

Planning green cities and communities means taking a wide array of issues into consideration – from environmentally friendly landscaping to homes designed for maximum energy efficiency to mass transit systems.

Various trends are driving policy development at the local level: carbon-related regulatory pressures (e.g. AB 32), uninspiring economic forecasts, emerging building design and development practices (e.g. LEED, smart growth). California cities and counties are responding to these influences and integrating sustainability principles into General Plans.

#### Retro-commissioning: Optimizing Building Performance

Optimize your facilities and meet your business needs: reduce operating costs, increase tenant satisfaction, meet government mandates, increase energy efficiency and green your facility. Case studies and testimonials will reveal real-world benefits of high performance buildings. Best practices for planning and implementing retro-commissioning projects will also be covered.

#### **Creating and Achieving Climate Change Commitments**

Cities, counties and state agencies are committing to unprecedented climate change reductions. The challenge is backing up these targets with concrete and measurable results. Learn how you can

establish climate change commitments, and what you need to do to get there. Hear about the strategies that have already proven effective, and discover how you can apply them to your stated goals.

## April 8

#### Concurrent Seminars

#### Green Gold Rush: California's New Economy

California is entering a new frontier of opportunity as green technologies are developed and marketed here. Find out what's happening, where the hotbeds of green development are, and learn how you can capitalize on these emerging markets. The time to act is now!

#### Fuel Cell 101

Description coming soon...

#### Using Your Dollars to Make a Difference: Green Purchasing Strategies

Where's the "low hanging fruit" and informational resources that make purchasing green easy and economical? Learn from experts about the triple bottom line of social, environmental and economic responsibility. This session will teach you how to "green" your bid preferences and find the best green products and services. Compare costs and quality of green products, and learn how to use the landmark DGS Best Practices Manual.

## Retro-commissioning: Energy Efficiency in Existing Buildings: How to Make the Most with What You Have

Green buildings aren't only about new construction. Existing Buildings can be goldmines of energy savings. Learn how to make the most with what you have through innovative energy savings methods. Hear from experts who will show you how easy and cost effective greening an existing building can be.

#### California 2050: What Might it Look Like?

Envision California in 42 years, a place where economic growth actually heals and nurtures the environment. How might we build our cities? How can we address conservation, water issues, energy and food? Take a peek into the future and learn from futurists, planners and visionaries who are bringing this dream into reality. What we're doing now can set the stage for a brilliant 2050 of we avoid the pitfalls and make the right choices.

#### The Real Cost of Green Building

Does it cost more to build green? Get the facts, not the hype. Learn from cost-analysis professionals who have measured the premium for building green. Then find out how those costs can be offset over the lifetime of a building.

#### The Future of Transportation Infrastructure in California

Discover the future of California's transportation infrastructure. This session will define "green transportation" and explore a range of transportation and fueling options being tried now and coming online.

#### Climate Change: How State and Local Governments are Addressing the Challenge

"Think global, act local" is more than just a catch phrase. Learn about the far reaching implications of the Global Warming Solutions Act, AB32. State and local governments are coming up with innovative and courageous mandates, regulations, requirements and initiatives to curb greenhouse gas emissions. Find out what they are doing and how you can join their efforts or take advantage of what's already been set in place.

#### Walking the Talk: Creating a Green Organization

Whether you're a government agency or a commercial entity, learn how to motivate employees to embrace creating a green culture within your organization and in their lives. Discover new opportunities for mainstreaming "green," getting executive support and creating new positions. Learn about the many soft-benefits to going green, including increased employee health, retention and productivity.

## Half-Day Workshops - 1:00 PM to 4:30 PM

#### **Green Fleets: Kicking Tires and Crunching Numbers**

Need to green your fleet? Should you buy now or wait? Learn what the options are and what's coming online, including purchasing, fueling and maintenance for green fleets. This session will include a cost-comparison of alternative vehicles, information about fueling stations, and strategies for recycling hazardous materials. Also learn about important regulations, including EPACT and the CARB Public Fleet Rule.

#### Building Green From the Ground Up: Fundamentals of Integrated Design

From siting, design and landscaping; to paneling, furnishing and lighting, learn how to look at your building as a whole system. This session will include a "green check list" for new projects. Discover building information modeling as an important tool for optimizing performance. For architects, designers, builders and anyone embarking on a green building plan, this workshop will provide an indepth look at all aspects of building green.

#### **Downsizing Landfills: Waste Diversion and Source Reduction**

As recycling and manufacturing processes advance, and as cities run out of space, the era of the landfill may soon become obsolete. Learn about innovative waste management strategies that are shaping California's future. This session will bring you the latest information on recycling and waste diversion, source reduction and reuse procedures, and hazardous e-waste solutions.

#### Nothing Speaks Louder Than Success: Measuring and Marketing Green Achievements

Learn how to analyze and publicize your green achievements. Subjects will include how to measure and report energy savings, reduced emissions and all your other green initiatives. Public relations specialists will teach you how to successfully share this information with the media, your staff and clients or constituents.

**GeoThermal Heating and Cooling: The Convenient Truth in Building a Sustainable California**Description coming soon

## April 9

#### Concurrent Seminars

#### Green Building Basics: Concepts, Technologies and Regulations

Define the terms that are becoming ubiquitous in green building. Understand building certification standards such as LEED and others. Learn what are the latest green construction materials, how to work with subcontractors who may be new to green building. Find out about new regulations, building codes and the standards set by the Governor's landmark green building executive order, SR 20-04.

#### How Do I Pay for This? Incentives, Rebates and Funding Options

Find out how to get the funding you need to build green. Learn about rebates, incentives and programs available from the State of California, municipal and county government, utilities, special districts and public-private partnerships.

## Renewable Energy Options: Going for Net Zero and Beyond

From solar, wind and geothermal to alternative fuels and new grid technologies, find out how you can actually reverse your electric meter and put power back into the grid. This session will cover the many incentives and rebates now online or being planned, and creative new public/private partnerships that can bring renewable to your building with little or no initial investment.

## **Dealing with Drought: Water Management and Conservation**

Learn about California's looming water crisis and what can be done to meet the challenge of providing water to a growing population as areas of the state become dryer. How is climate change impacting the water supply, and what might the future look like? Will there be a need for mandatory rationing? Is reclaiming wastewater and creating gray-water systems the answer? This session will include information on potential policies and rate structure changes, new technologies in water conservation,

usage and recycling,

#### **Climate Change and Carbon Footprints**

What, exactly, is climate change, and how could it affect your life, the work you are doing and your workplace? Learn what you and your organization can realistically do to lessen its impact. This session will include information on carbon offsets and trading, the Climate Action Registry, and how to calculate greenhouse gasses over the lifetime of a building.

#### Risk and Opportunities of Going Green

Learn how building green can save a bundle. This session will address cost-analysis and return on investment. Special attention will be given to speculative real estate markets and risk management. Also learn about innovative options, such as "green" insurance.

#### **Green Facilities Management**

Whether its brand new or old, any building can be maintained in an energy efficient and environmentally healthy way. This session will address all things "green" at the operations level. Information will include green cleaning and onsite energy management.

#### The Air in There: Building Materials and Environmental Health

Indoor air quality can have a profound impact on human health and productivity, especially in sealed buildings that re-circulate air. Learn how everyday furnishings, carpets and paints can "off-gas" volatile organic compounds and other toxic substances. Discover why healthy buildings are healthy for people, and simple steps you can take to improving the IEQ (indoor environmental quality) in your workplace.

#### **Energy Savings Using Energy Star**

Learn how you can improve a building's energy performance with simple modifications. Discover the benefits of energy management using existing tools like the Energy Star Program and Environmental Management Systems.

## Half Day Workshops - 1:00 PM to 4:30 PM

#### Mastering State Requirements for Green Leases

The State of California leases 2,366 spaces totaling more than 20.7 million square feet and manages over 1800 of them. Strict energy standards apply to California leases. Learn how you can go green by working with the State of California. Run through a typical lease with government experts who have demonstrated success in the field of green building. Hear how you can piggy-back on this success.

#### **Green Affordable Housing**

Perhaps no other sector is more dedicated to green building than affordable housing. These projects provide a unique opportunity to address a range of important issues. Learn how green design, construction and maintenance can help the environment and the economy by empowering tenants. Hear from experts who have demonstrated success in this exciting field.

#### **Greening Local Government Buildings: Success Stories**

Almost 100 California cities are now involved in clean air and green building initiatives, and more are coming onboard all the time. Greening your city or community is not only affordable, it saves money. In this workshop local government experts will showcase their successes and relate the benefits and challenges of greening new construction and existing buildings.

#### The Energy Independence and Security Act: How the New Federal Legislation Will Impact California

Discover the implications for California of the new Energy Act and the lawsuit filed by California and 15 other states against the EPA for not allowing them to implement tailpipe emission standards than the act calls for. Hear from policy experts who will break down the Energy Act's provisions and explore the consequences. Find out how your profession or industry may be affected by the highly charged and transitory regulatory landscape.

Click here for detailed descriptions.



Greening the Golden State—California at a Crossroads

REGISTRATION

April 7-9, 2008

Sacramento Convention Center - Sacramento, CA

Where and When Venue Register

## **Packages and Prices**

REGISTRATION SELECTION	EARLY BIRD PRICE	REGULAR PRICE
Conference Role	Before March 1, 2008	After March 1, 2008
Government/Edu/Non-Profit		
Exposition Hall and Keynotes	FREE	FREE
One Day Pass, Tuesday Only	\$110.00	\$135.00
One Day Pass, Wednesday Only	\$110.00	\$135.00
Two Day Pass	\$195.00	\$240.00
Full Day Class, Monday Only	\$165.00	\$195.00
Commercial/Industry/Private		the second secon
Exposition Hall and Keynotes	FREE	FREE
One Day Pass, Tuesday Only	\$135.00	\$170.00
One Day Pass, Wednesday Only	\$135.00	\$170.00
Two Day Pass	\$240.00	\$295.00
Full Day Class, Monday Only	\$165.00	\$195.00

#### **Exposition Hall and Keynotes**

This pass will give you free access to the exhibit hall and keynote speeches on Tuesday & Wednesday.

#### One Day Pass, Tuesday Only

This pass will give you access to all Concurrent Seminars and Half-Day Workshops being held on Tuesday, April 8. Free admission to the exhibit halls and keynote speeches is also included.

#### One Day Pass, Wednesday Only

■ This pass will give you access to all Concurrent Seminars and Half-Day Workshops being held on Wednesday, April 9. Free admission to the exhibit halls and keynote speeches is also included

#### Two Day Pass

This pass will give you access to all Concurrent Seminars and Half-Day Workshops being held on Tuesday & Wednesday, April 8 & 9. Free admission to the exhibit halls and keynote speeches is also included

## Important Note: Pre-Summit, Full Day Classes, Monday Only

(Any conference role you choose when registering will be given the option to buy a pass to a Pre-Summit Class)

- This pass will give you access to one of the Pre-Summit Classes being held on Monday April 7.
  - \*There will be no exhibit hall or keynote speeches on Monday, April 7.
  - \*\*All of the Full Day Classes are being offered simultaneously, so you can only attend one.

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