

C2C: Emerging Energy Technologies Summit 2007

SCHEDULE OF EVENTS

Summit Mission

This year's Summit will take an unbiased look at how our nation makes the transition from dependency on carbon-based fuels to a sustainable, alternative fuels-based future. Experts from around the globe will come together over a two-day period to present possible alternative energy solutions, examine the trade-offs and barriers associated with bringing these solutions to market, and work to develop ways of overcoming these barriers.



The Summit, a sold-out event in its 2006 inaugural year, allows participants to join with financiers, business leaders, policy makers, scholars, and engineers to discuss the development and creation of profitable and practical alternative energy technology solutions that meet the nation's increasing energy demands.

Tentative Agenda for Conference - Corwin Pavilion

Dates- February 9-10, 2007

Friday (Feb. 9), 1:00-7:25 pm

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| 1:00-1:05 pm | Welcome: Gary Hansen , Associate Dean, Technology Management Program, UC Santa Barbara
Henry Yang , Chancellor, UC Santa Barbara. |
| 1:05-1:30 pm | Plenary: Paul Roberts , author of <i>The End of Oil</i> .
"Peak Oil: Depletion and Denial" |
| 1:30-4:00 pm | Session I. Carbon-based Fuels - Overview of the technical, socio-economic, environmental and political issues with our current use. |
| 1:30-1:55 pm | Severin Borenstein , Director of the University of California Energy Institute, Professor of Economics, UC Berkeley.
"No End to Fossil Fuels: Why Renewables Lose Without Policy Intervention" |
| 2:00-2:25 pm | Stephen J. Golden , Chief Technology Officer, Co-Founder of Catalytic Solutions Inc.
"Current and Extended Use of Oil and Gas - Technical and Environmental Aspects" |
| 2:30-2:55 pm | Joe Powell , Chief Scientist for Chemical Engineering at Shell Global Solutions US Inc, winner of the Arthur Dehon Little Award for Chemical Engineering |

- Innovation, the American Chemical Society Team Innovation Award, and an R&D 100 Award for innovation.
"Peak Oil: When, How, and What's Next?"
- 3:00-3:30 pm Plenary: **Amory Lovins**, author of *Winning the Oil Endgame*.
"Profitable Solutions to the Climate (and Oil and Proliferation) Problems"
- 3:30-3:45 pm Discussion: **Paul Roberts & Amory Lovins**
- 3:45-4:00 pm Break
- 4:00-7:00 pm** **Session II. Renewable Energy and the Hydrogen Economy** - What are the most likely technologies to succeed and why?
- 4:00-4:25 pm **Mark Jones**, Technical Leader at the Dow Chemical Company with broad leadership responsibilities across chemicals and Hydrocarbons R&D
"It's All About Energy"
- 4:30-4:55 pm **Alan Heeger**, UCSB Professor, Nobel laureate and researcher in the area of semiconducting and metallic polymers.
Low Cost "Plastic" Solar Cells: A Dream or Reality?
- 5:00-5:25 pm **Joan Ogden**, Professor of Environmental Science and Policy at the University of California, Davis and Co- Director of the Hydrogen Pathway Program at the campus' Institute of Transportation Studies.
"Prospects for Hydrogen in the Future Energy System"
- 5:30-5:50 pm Break
- 5:50-6:15 pm **Michal Moore**, Senior Fellow at the Institute for Sustainable Energy, Environment and Economy at the University of Calgary in Alberta, former Chief Economist at the National Renewable Laboratory in Golden, Colorado.
"Renewable Energy Resources and the Political Will"
- 6:20-6:45 pm **Bengt Kasemo**, Member of the Energy Committees of both the Royal Swedish Academy of Engineering Sciences (IVA) and the Royal Swedish Academy of Sciences (KVA), Chairman of Volvo's Research and Education Foundation that deals with future urban transport.
"Nanotechnology for sustainable energy and environment"
- 6:50-7:25 pm Panel Discussion:
Panel Moderator:
Walter Kohn, Nobel Laureate and UCSB's Emeriti Professor of Physics, appointed Member of the department of Energy.
Panelists:
C. Paul Davis, Senior Vice President, Chairman of Advisory Board, and Board Member of Titan Oil Recovery, Inc. a company that has developed a proprietary and patented oil recovery process called, "The Titan Process".
Hal Ia Flash, Director of Integrated Resource Planning and Policy, PG&E
Chuck McDermott, General Partner, RockPort Capital Partners, former Campaign Director and Chief of Staff to Congressman Joseph P. Kennedy II, Member, Board Member and President, CEO Coalition to Advance Sustainable Technologies
- 7:30-9:00 pm Reception at Faculty Club hosted by **Business First National Bank**

Saturday (Feb. 10) – 9:00 am - 5:30 pm

- 9:00 – 9:30 am Welcome: **Gary Hansen**, Associate Dean, Technology Management Program, UC Santa Barbara
Matthew Tirrell, Dean, College of Engineering, UC Santa Barbara.
- 9:30-12:10 pm** **Session III. Sustainable Development/Communities** – Roadmap for a more sustainable community model.
- 9:30-9:55 am **Bill Mitchell**, Alexander W. Dreyfoos Professor of Architecture and Media Arts and Sciences, Director, Massachusetts Institute of Technology Design Laboratory
"Energy-efficient Urban Personal Mobility"
- 10:00-10:25 am **Doug Newman**, Executive Director of the National Energy Center for Sustainable Communities.
"Integrating Renewable Energy & Energy-Efficient Technologies into Sustainable Community Development"
- 10:30-10:55 am **Larisa Dobriansky**, Senior Advisor to the law firm of Baker & Hostetler on environmental and energy matters relating to clean energy technology commercialization.
"Public Private Partnerships for Community Sustainability"
- 11:00-11:20 am Break
- 11:20-11:45 am **Ernst von Weizsacker**, Dean of UC Santa Barbara's Bren School, former President of the Wuppertal Institute and Chairman of the Bundestag's Environment Committee.
"Quadrupling Energy Productivity"
- 11:50-12:25 pm Panel Discussion:

Panel moderator:
David Rohy, Principal, Rohy Consulting Associates, former Vice Chairman, California Energy Commission.

Panelists:
Gary Barsley, Director of Commercial Projects for SolarWorld Industries.

Michal Moore, Senior Fellow at the Institute for Sustainable Energy, Environment and Economy at the University of Calgary in Alberta.

Byron Washom, Sr International Advisor to the US DOE and the World Bank for developing low carbon strategies in fuel cells, IGCC and carbon sequestration.
- 12:30-1:30 pm Lunch and networking
- 1:30-4:50 pm** **Session IV. Difficult Choices for our Energy Future**
- 1:30-2:40 pm **Nuclear Energy**
- 1:30-2:05 pm **Michael L. Corradini**, Chair of Engineering Physics and Wisconsin Distinguished Professor of Nuclear Engineering and Engineering Physics at the University of Wisconsin-Madison.
"Nuclear Power - Prospects in the 21st Century"
- 2:10-2:35 pm **Mujid Kazimi**, Professor of Nuclear and Mechanical Engineering at Massachusetts Institute of Technology and current and founding director in 2000 of the *Center for Advanced Nuclear Energy Systems*.
"Myths and Realities about Nuclear Power"
- 2:45-4:30 pm **Coal**
- 2:45-3:10 pm **Tim Appenzeller**, award-winning National Geographic journalist.
"Coal: the Future Looks Black"

- 3:15-3:40 pm **Sally Benson**, Program Leader of the Lawrence Berkeley National Laboratory's Carbon Sequestration Program, Earth Sciences Division.
"Can CO2 Capture and Storage in Deep Geological Formations Make Coal-Fired Electricity Generation Climate Friendly?"
- 3:45-4:00 pm Break
- 4:00-4:25 pm **Frank Alix**, CEO, Powerspan
"Emerging Options for Near Zero-Emissions Coal-fired Power Generation"
- 4:30-5:05 pm Panel Discussion:
- Panel Moderator -
Daniel Weiss, Managing Partner, Angeleno Group.
- Panelists -
Sanjoy Banerjee, UCSB Professor jointly appointed in Chemical Engineering and Mechanical & Environmental Engineering.
- Bill Freudenburg**, Dehlsen Professor of Environmental Studies at UCSB.
- Tim Appenzeller**, award-winning National Geographic journalist.
- 5:10-5:40 pm **Core Energy Efficiency Strategies from UC Santa Barbara's Research**
- Panel Moderator -
Tony Cheetham, Director for the International Center for Materials Research, UC Santa Barbara.
- Panelists -
Shuji Nakamura, UC Santa Barbara Professor and winner of Finland's 2006 Millennium Technology Prize for his continuing efforts to make cheaper and more efficient light sources.
- Matthew Tirrell**, Dean of Engineering at UC Santa Barbara and the Richard A. Ahl Professor in Chemical Engineering with a joint appointment in Materials.
- Ernst von Weizsacker**, Dean of UC Santa Barbara's Bren School, former President of the Wuppertal Institute and Chairman of the Bundestag's Environment Committee.

(2007 schedule last updated on February 2, 2007)