Woods/Precourt Annual Affiliates Meeting

Stanford Initiative on the Environment & Sustainability
September 12, 2008
Stanford University
Working for a Sustainable Future

We find ourselves at a critical time in Earth’s history. The health of our oceans, forests, and freshwater resources has declined precipitously. Human activities threaten the atmosphere and climate. Soaring energy use threatens to accelerate climate change and disrupt economies. And nearly a billion people go to sleep hungry many nights.

Providing food, energy, water, and other essentials for this and future generations is a huge challenge in itself. But doing so also exacts an enormous cost on the life-support systems of the planet.

Energy and environmental scholars at Stanford are asking the key question: Can we adequately meet human needs while keeping the world habitable? Stanford believes the answer is yes, and we have put forth a vision for a sustainable world in which:

- Energy is readily available and consumed cleanly, wisely, and efficiently. Society invests in renewable energy technologies to supplement, and eventually replace, some traditional fossil fuel resources. Global warming slows as greenhouse emissions fall. Local air quality and human health improve as fossil fuel consumption drops.

- Everyone has access to safe drinking water and basic sanitation. Communities use inexpensive systems to filter water and treat waste, and millions of children no longer die of waterborne diseases. Agriculture and industry use water efficiently, with new technologies and management approaches that conserve water and protect its purity. Our lakes and rivers provide a healthy environment for plants and animals.

- Agriculture provides sufficient food to feed the world’s entire population without harming the planet. Societies use land effectively for agriculture, shelter, and recreation, while preserving biodiversity and ecosystem integrity. Landowners find it profitable to adopt conservation measures, and economic benefits that result from healthy ecosystems, such as the flood control wetlands provide, encourage people to protect them.

- Oceans and estuaries are healthy. They teem with food and contribute to a stable atmosphere. Ocean temperatures stabilize and coral reefs thrive. Innovative management of fisheries allows fish populations to recover, providing important protein sources to people and marine animals. Sea life flourishes along our coasts, and beach closures and algae blooms are rare.

Building such a world will be an enormous challenge. It will take ingenuity, passion, and determination. It will take unprecedented collaboration among academia, business, governmental and non-governmental organizations. And it will take a concerted effort to communicate research results to those who make business and policy decisions that affect the environment.

We invite your organization to join Stanford’s Initiative on the Environment and Sustainability by becoming a formal member of the Affiliate program for the Woods and Precourt institutes. Working together we can help find working solutions to these challenges.

Jeff Koseff
Co-Director, Woods Institute for the Environment

Buzz Thompson
Co-Director, Woods Institute for the Environment

Jim Sweeney
Director, Precourt Institute for Energy Efficiency

John Weyant
Deputy Director, Precourt Institute for Energy Efficiency
Schedule

7:30-8:15  Registration/Breakfast

8:15-8:45  Welcome:

Jeff Koseff
William Alden Campbell and Martha Campbell Professor of Civil and Environmental Engineering
Co-Director, Woods Institute for the Environment

Jim Sweeney
Professor of Management Science and Engineering
Director, Precourt Institute for Energy Efficiency

8:45-9:15  Context:

Lynn Orr
Keleen and Carlton Beal Professor in Petroleum Engineering
Director, Global Climate and Energy Project

9:15-10:30  Panel on Energy Supply
Stanford faculty discusses solar, wind, nuclear, energy storage, policy status and need.

Moderator: Lynn Orr, Director, Global Climate and Energy Project

Panelists:
Stacey Bent, Professor of Chemical Engineering
Yi Cui, Assistant Professor of Materials Science and Engineering
Mark Jacobson, Professor of Civil and Environmental Engineering
Burton Richter, Paul Pigott Professor in the Physical Sciences, Emeritus

10:30-11:00  Break
11:00-12:00  Utilities Discussion: The future of energy supply and demand

Moderator: Buzz Thompson
Robert E. Paradise Professor of Natural Resources Law
Co-director, Woods Institute for the Environment

Panelists:
Ralph Cavanagh
Co-Director, Energy Program
Natural Resources Defense Council

John Bryson
Chairman and Chief Executive Officer
Edison International (parent company of Southern California Edison)

12:00-1:30  Lunch and Student Research Poster Session

1:30-2:45  Panel on Energy Efficiency
Stanford faculty discusses buildings, transportation, smart houses, efficiency, behavioral issues, industrial use, and transportation.

Moderator: John Weyant
Professor (Research) of Management Science and Engineering
Director, Energy Modeling Forum
Deputy Director, Precourt Institute for Energy Efficiency

Panelists:
Carrie Armel
Research Associate, Precourt Institute for Energy Efficiency

Martin Fischer
Professor of Civil and Environmental Engineering
Director, Center for Integrated Facility Engineering

Larry Goulder
Shuzo Nishihara Professor in Environmental and Resource Economics

Jim Sweeney
Professor of Management Science and Engineering
Director, Precourt Institute for Energy Efficiency

2:45-3:15  Break
**Panel on Policy: What could the next administration do?**
Stanford faculty discuss transitioning to a climate-friendly energy regime, technology readiness, policy approaches and readiness, free market vs. policy incentives.

Moderator: **Buzz Thompson**
Robert E. Paradise Professor of Natural Resources Law
Co-director, Woods Institute for the Environment

Panelists:

**Bill Green**
Managing Director, VantagePoint Venture Partners

**Jim Sweeney**
Professor of Management Science and Engineering
Director, Precourt Institute for Energy Efficiency

**David Victor**
Professor of Law
Director, Program on Energy and Sustainable Development

**4:30-4:45** Closing Remarks

**4:45-5:30** Reception and Tour of the Jerry Yang and Akiko Yamazaki Environment and Energy Building