



# SCHOOL OF SUSTAINABILITY

AT ARIZONA STATE UNIVERSITY

## Careers in Sustainability

AASHE Conference 2008

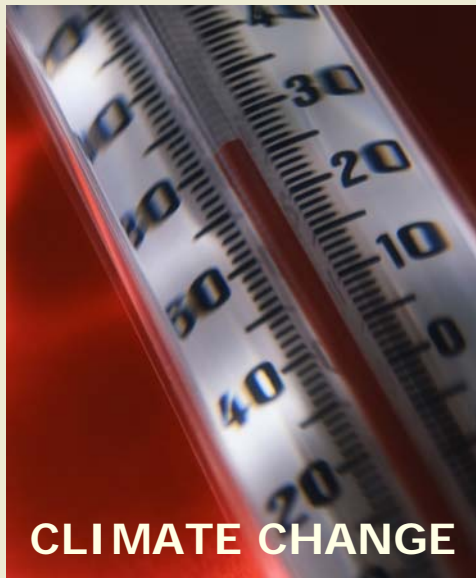
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Program Development Specialist



# Careers in Sustainability

## An Urgent Need



# FAQs

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1. What is a career in sustainability?
2. What does the market look like?
3. What do employers get?
4. What exactly are the career opportunities?



# What is a Career in Sustainability?

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## ENVIRONMENTAL (Green / Sustainability)

- Statistics about environmental jobs are not tabulated well
- They defy the classic methods of measuring employment
- Many do not fit into the Standard Industrial Classification (SIC) code system very clearly
- Environmental jobs cut across all types of employment, making classification difficult

--[vault.com](http://vault.com)

# What is a Career in Sustainability?

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## ENVIRONMENTAL (Green / Sustainability??)

- “Environmental Job” as defined by Management Information Services, Inc. are “those which, as a result of environmental pressures and concerns, have produced the development of numerous products, processes, and services, which specifically target the reduction of environmental impact. Environment-related jobs include those created both directly and indirectly by environmental protection expenditures.”

--vault.com

# What does the market look like?

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- Environmental jobs in the US range from 2 million – 5 million
- It is estimated that between 30–50% of the environmental and conservation workforce within federal and state government agencies will be eligible for retirement within the next several years.

--[vault.com](http://vault.com)



# What does the market look like?

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- Increasing level of awareness
- New administration
- Companies are listening
  - Triple bottom line
  - Higher stock value
- Beware of green washing
- Education programs are addressing sustainability issues

# What does the market look like?

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“As a **\$315 billion sector of the economy** - and one that will **train future leaders** -higher education has a special responsibility to encourage environmental stewardship. Arizona State has just opened an entire School of Sustainability that will start taking **undergraduates in the fall of 2008.....”**

The logo for Newsweek magazine, featuring the word "Newsweek" in a bold, white, sans-serif font set against a solid red rectangular background.

*August 2007*



# What does the market look like?

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- Private Sector/Industry
- Non-Governmental Organizations
- Non-Profits
- Utilities
- Regulatory Agencies
- Higher Education
- Government
- Consultancies
- Entrepreneurial



# What does the market look like?

## Trends

- Clean Tech
  - Huge opportunities! From 2006-2007, venture capital investments in North America and Europe grew 40%
  - Alternative Energy
  - Green IT:
    - *“One in five major companies around the world have adopted eco-friendly computing practices and another third plan to roll out similar strategies within the next two years”*  
(Datamonitor – 2008 Trends to Watch: Green IT)
  - Need for entrepreneurial ventures, marketing/sales, and green-collar jobs



# What does the market look like?

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## Trends

- Green Building
  - Accounts for 38% of US CO2 emissions
  - Globally, buildings account for some 40% of all raw materials
  - \$12 billion industry (being embraced by hotels, hospitals, homebuilders, and corporations) – expected to increase to \$60 billion by 2010 (Green Careers, Wet Feet, 2008 Edition)
- Socially Responsible Investing (SRI)
  - Large growth from 1995 – today
  - Represents roughly 11% of assets under management



# What does the market look like?

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## Trends

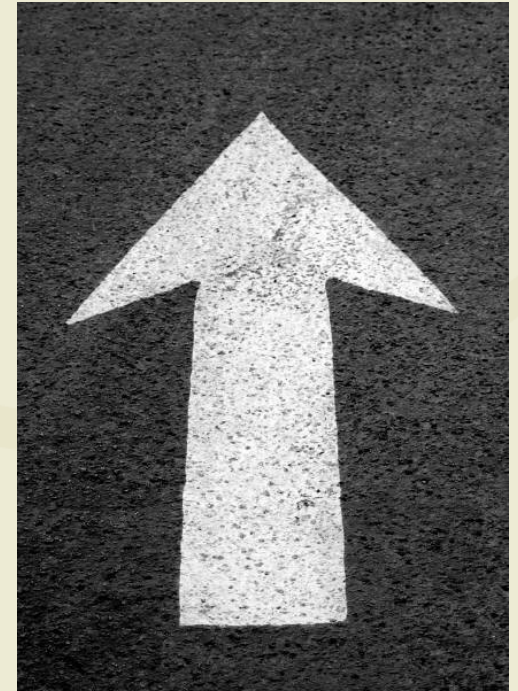
### LOHAS or Lifestyle of Health and Sustainability

- Drive \$209 billion in sales, and are expected to reach more than \$400 billion by 2010 (Natural Marketing Institute)
- Consulting and Professional Services
- Government
  - Federal, State, and Local
- Higher Education
  - Approximately 100 FT and 150 PT sustainability managers nationwide (Julian Dautremont-Smith)

# Careers in Sustainability

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- Growing Number of:
  - Sustainability Officers
  - Sustainability Analysts
  - Sustainability Managers
  - Sustainability Directors
  - Sustainability Coordinators
  - Sustainability Consultants



# Science Careers in Sustainability

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Geography

Sociology

Mathematics and Statistics

Ecology

Chemistry and Chemical Engineering

Psychology

Biology

Geosciences

Engineering

--AAAS

# Sustainability Graduates

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## Green Public Service Employers Want:

- Communications skills
- Collaboration abilities
- “Customer” orientation
- Creativity, innovative thinking
- Broad environmental sciences understanding
- Analytical ability, critical thinking, problem solving
- Work orientation, professionalism, positive attitude
- Occupation-specific skills and knowledge
- Mastery of information technology, including GIS
- Leadership ability

+ Passion

-- USEPA Workforce Assessment Project

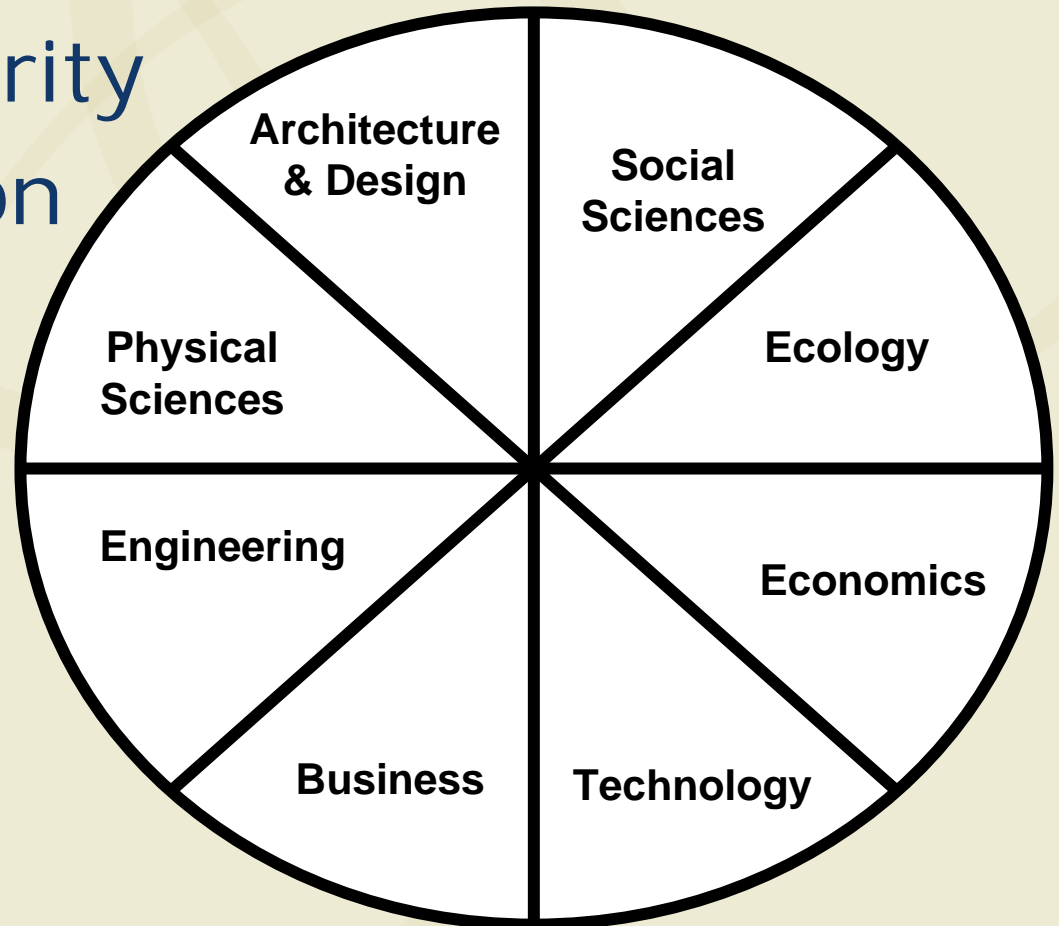




# Sustainability Graduates

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- Problems and Projects
- Interdisciplinarity
- Communication
- Teamwork



# Sustainability Graduates

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## Sustainability Literacy:

- Systems Dynamics: Human systems and natural systems are linked. Changes in any part of any system has multiple consequences that reach far beyond the initial change.
- Tradeoffs: Solving almost all problems related to sustainability involves tradeoffs. There are rarely perfect solutions with no costs, and there are often winners and losers.
- Cascading Effects and Unintended Consequences: There are cascading effects (positive and negative, intended and unintended) of human policies, decisions, and actions, all of which have implications for sustainability.
- Scale: Problems of sustainability exist at multiple scales. Solving a problem at a local level is a very different thing than solving a problem across international boundaries.
- Transdisciplinarity: There is no one "solution" to address sustainability – no one person has the answer. We need scientists and social scientists of all disciplines, politicians, entrepreneurs, artists, farmers, business and community leaders, and *you* to work towards a sustainable future.

# Sustainability Graduates

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## SOS Students study challenges:

- Society & Sustainability
- Policy & Governance in Sustainable Systems
- International Development & Sustainability
- Sustainable Urban Dynamics
- Sustainable Energy, Materials, & Technology
- Economics of Sustainability
- Sustainable Ecosystems

+ Disciplinary Area

+ Applied Experience



# Ways to Experience Sustainability

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- Network with Graduate Students
- Study Abroad + Disciplinary Area
- Student Organizations + Applied Experience
- Professional Associations
- Internships
- Volunteer
- Attend Lectures



# Resources

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- Sustainable Business
  - Earthworks Jobs
  - Eco Employ
  - EnvironmentalCareer
  - Green Biz
  - Green Jobs
  - Treehugger Jobs
  - Green Energy Jobs
- + Many More!

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<http://schoolofsustainability.asu.edu>

