

# **UW's Office of Sustainability: Why We Exist and Where We Are Going**

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Office of Sustainability

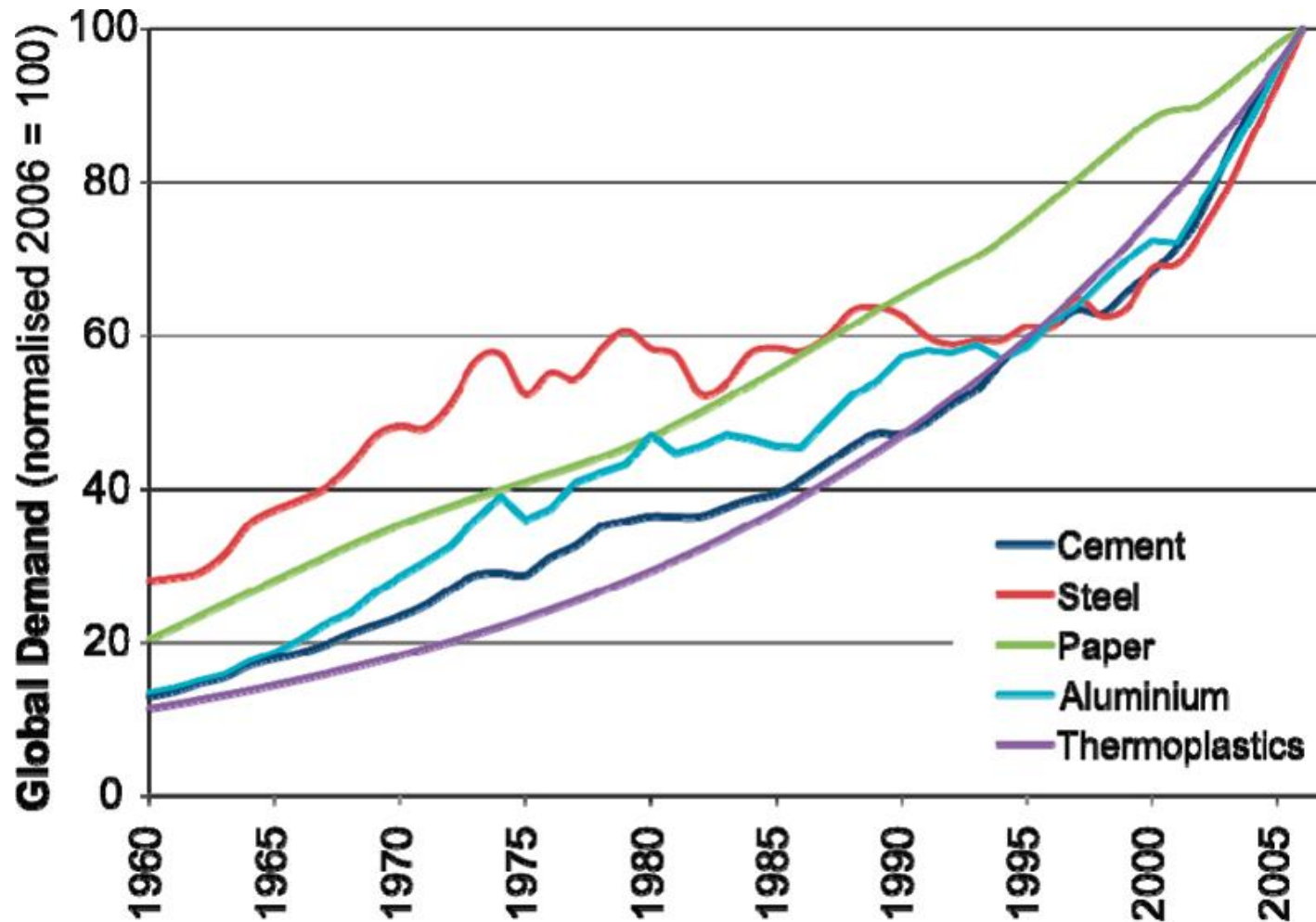
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# Why Sustainability?

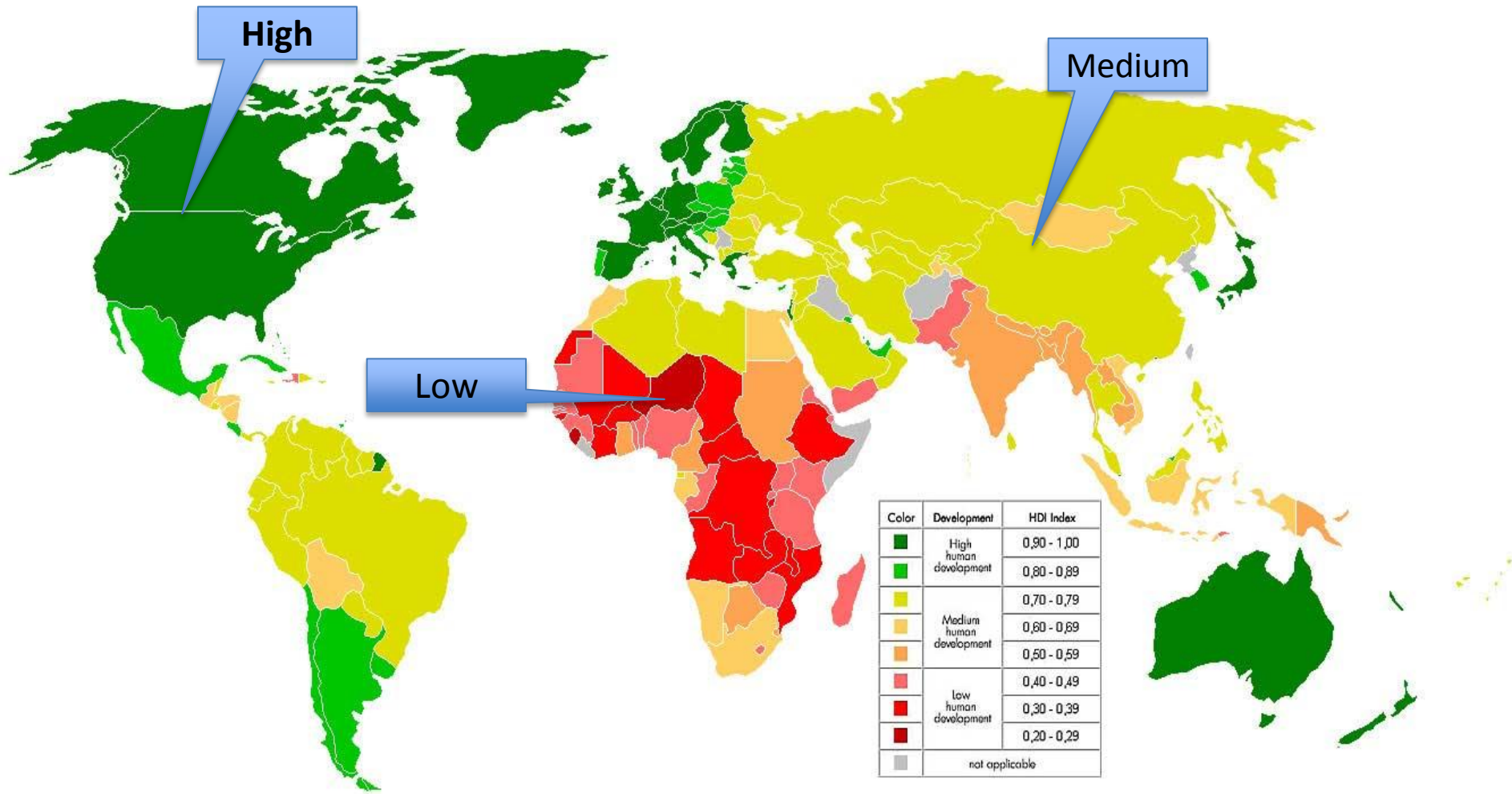
- Nexus of major issues caused by rapidly growing global economy:
  - Energy constraints
  - Emissions and environment (e.g., Global warming)
  - Resource availability (water, metals, cement, oil etc.)
- World population is 7 billion (B) → 12 B projected by 2100. US at 0.3B by 2050.
- US and EU (combined population = 0.75 B) consume most of world resources. China & India overtaking in next 20 yr.
- Remaining 6.25 B want everything we have. Not enough to go around if we do business as usual.

# Increasing Raw Material Resource Demand



Allwood, Cullen, and Milford (2010), Options for Achieving a 50% Cut in Industrial Carbon Emissions by 2050, *Environ. Sci. Technol.*, 44, 1888–1894.

# World Map of Human Development Index (HDI)



# What Do People Want?



# Implications

**Call to Action:** we must address these inconsistencies (e.g., energy, natural resources) to avoid a train wreck ... constraints foster poor behavior of societies and nation states.

## Action Items

1. Raise awareness (prevalent today)
2. Change attitudes & values (education essential)
3. Create sustainability science
4. Create policies and initiatives that direct us to more sustainable society

# Academia

- **What we have done well:** raise awareness on campus and amongst younger generation.
- **What we have not done well:**
  - Evaluate whether sustainability initiatives are actually contributing to improving sustainability (eco-decoration or ‘thin’ sustainability vs. ‘thick’ sustainability).
  - Provide science-based education to serve as foundation for rational sustainability initiatives.

## PRESIDENT REDUCES AMOUNT HOMEOWNERS OWE



Under 18



19-25



26-35



36-45



46-55



56-65

## Column: Green campuses are fine, but what about learning?

By Barry Glassner

Updated 10/26/2011 5:25 PM

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As the college selection process begins again for high school students, we can be confident that they'll be paying close attention to universities' green virtues. In a survey by *ThePrinceton Review*, [more than two-thirds](#) of college applicants said information on a school's environmental efforts would sway their decisions on where to apply and to attend.



An Internet-savvy 18-year-old will find an abundance of green colleges with inventive programs — organic campus farms, innovative energy-saving, top-of-the-line recycling. But college shoppers also will find surprisingly little about how students are actually studying the vastly complex issues bound up in sustainability. It's time to couple action with real academics in the race to "go green" on the nation's campuses.

Barry  
Glassner,  
President,  
Lewis & Clark  
College,  
Portland, OR

*USA Today*  
26 Oct 2011

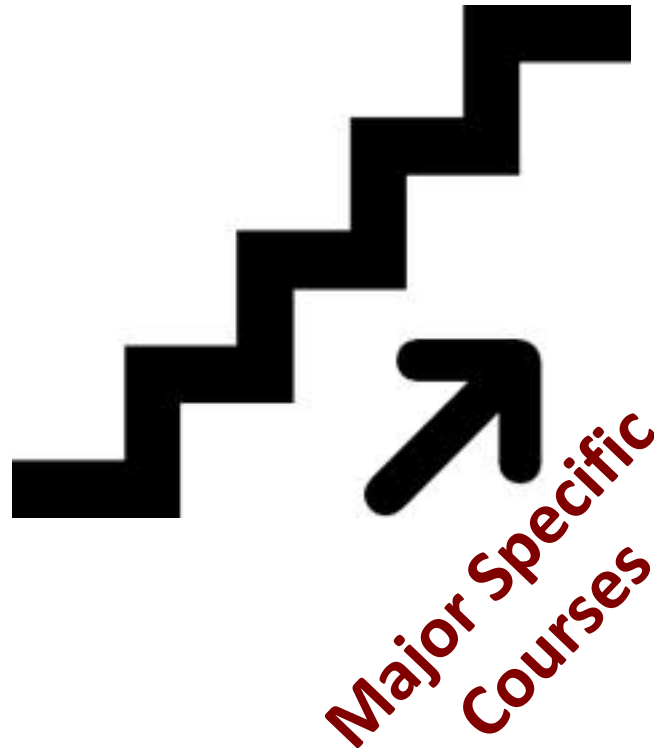
# Objectives: Office of Sustainability

- **Education:** provide all students with educational opportunity that fosters 'thick' sustainability as core value.
- **Research:** facilitate collaboration across campus to solve complex sustainability problems.
- **Operations:** Use our campus as a laboratory for experiential learning and research translation.

# Education: Integrated Sustainability Certificate Program

## Stepping Stone:

Freshman course in sustainability science with experiential learning via campus activities



**Capstone:** Senior team-based course with diverse student groups focusing on practical & complex problems

# Research: Creating Collaborative Teams to Tackle Complex Sustainability Problems

- **NSF's Sustainability Research Networks (SRN)** – 3 large cross-campus teams with 15-30 faculty on agriculture and energy, water resources, and place-based networks.
- **NSF's Sustainable Energy Pathways (SEP)** – 3 cross-campus teams of 3-6 faculty on energy issues.
- **NSF Sustainability Fellows program and Campus Seed Grants program.**

# Operations: We Conserve

ve.wisc.edu/accomplishments.htm

United MapQuest E-Office GLE Weather WebSpace Library Learn@UW Remote Doodle Voicemail

The University of Wisconsin Madison



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- Goals & Strategies
- Tips
- Video
- Signs
- Links
- Feedback

**Watch Video**

## Areas of Concentration

Use the following links for different programs:

- [Awareness and Education](#)
- [Energy Efficient Buildings](#)
- [Usage Reduction & Recycling](#)
- [Clean Power Generation](#)
- [Smart Transportation](#)
- [Water Conservation](#)
- [Eco Friendly Choices & Practices](#)
- [Participation & Collaboration](#)
  
- [Accomplishments Prior to WE CONSERVE](#)



## Awareness & Education

### Student Programs

- Directed studies, class projects
- Culture of green lifestyles

### Faculty & Staff

- Departmental & faculty coordination
- User education on buildings

### Community Outreach

- K-12 projects and awareness
- Community events, conferences



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# Operations: Wisconsin Institute for Discovery

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WISCONSIN INSTITUTES FOR DISCOVERY WISHES A HEARTFELT THANK YOU TO A MENTOR, LEADER, COLLEAGUE AND FRIEND JOHN WILEY

**Events at the Town Center**

- Saturday, Nov 05 | 10:00 a.m. Saturday Science: GIS Day
- Saturday, Nov 05 | 12:00 p.m. Living Environments Laboratory Open House
- Tuesday, Nov 08 | 12:00 p.m. Campus Stem Cell Lab Meeting
- Tuesday, Nov 08 | 5:00 p.m. Gilson Bootstrapping Event: Prototyping

[More Events >](#) | [Complete Calendar >](#)  
[Resource Clinic Schedule 8 a.m. – 5 p.m. >](#)

**BRING THE FAMILY!** SATURDAY SCIENCE AT DISCOVERY

**Adventures in GIS: Planet Walking to Crime Solving**

November 5 | 10 a.m. to Noon  
THE TOWN CENTER | EXPLORE. ENGAGE. DISCOVER.

**Discovery News**

- Nobel Prize winner to speak at UW-Madison Sep 29, 2011
- Krakauer chosen to lead Wisconsin Institute for Discovery Sep 29, 2011

[view all news](#)

Dining at Discovery

# Take Away Messages

- OS is about ‘thick’ sustainability – we must be able to demonstrate *quantitatively* that our actions make sense in terms of enhancing sustainability.
- OS is creating cross-campus initiatives on sustainability in education and research ... bringing people together who have not connected historically to deal with complex problems.
- OS is fostering integration of sustainability between education, research, and operations.