Princeton University Woodrow Wilson School of Public and International Affairs Spring 2017

WWS-402-S04: Policy Task Force

Sustainability at Princeton University: Lessons for Campus and the World

Room 012 Robertson Hall Mondays 1:30-4:20 PM

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Overview

As global populations grow and affluence increases the use of natural resources, pollutant emissions and greenhouse gas emissions are increasing while undisturbed natural ecosystems are disappearing. As a result of unsustainable practices, the world is confronting increasing environmental challenges.

Princeton University can help lead the world to a more sustainable path. Under President Eisgruber's leadership, Princeton University is planning substantial commitments to increasing sustainability on campus as both a vehicle for education and for environmental leadership. The role of this task force is to consider specific initiatives under the umbrella of sustainability and provide carefully researched guidance and recommendations on opportunities to move Princeton towards more sustainable policies and opportunities for Princeton's policies to influence decision-making off-campus.

This task force will research and provide recommendations to senior Princeton administrators and the Ivy Plus university sustainability consortium on a variety of opportunities including: 1) Campus sustainability culture; 2) Campus recycling; 3) Energy efficiency and renewable energy use; 4) Architecture and building sustainability; 4) Food service and vendor criteria; 5) Central purchasing criteria; 7) Campus conservation planning; 8) Outreach: How to scale up campus successes to the Princeton town and national communities; 9) Career services needed for those wishing to consider professional environmental opportunities. Each student will be asked to choose one of these topics on which to write their independent junior research paper. The senior commissioner will write a synthesis document that summarizes the research and recommendations of the individual papers. The class will present their findings in a session to senior Princeton administrators during spring reading period.

As part of the task force's analysis the technical foundation of these issues will be examined, cost-benefit analysis of various more sustainable options will be considered, outreach mechanisms to students, staff and off-campus organizations and government will be identified, and psychological aspects of decision making processes will be explored.

To inform analysis at Princeton, the task force will also examine initiatives that are underway at other universities and analyze the opportunities and challenges that have been encountered during their implementation and determine which might be applicable to Princeton. The ultimate goal of the task force will be to make recommendations to senior members of the Princeton administration on effective policy measures that Princeton can implement to become a world-leader in sustainability initiatives and in the leveraging of these initiatives for broader education and implementation beyond the university.

Structure and Calendar

The goal of the task force is for each student to write a research paper that will contribute to the group report. Sessions in the early part of the semester will consist of lectures and relatively extensive reading. Later sessions will focus more on individual research topics, establishment of the objectives of the group report, and finally on the presentation of the group report to senior administrators at Princeton University. Initial readings for the task force are either available on Blackboard, are available on web sites described below or identified during the semester, or are on reserve in the Stokes library.

The calendar for the task force described below is subject to modification as the semester progresses. We will have several guest speakers who are still being scheduled. Our initial plan is that each student will spend the first eight weeks of the semester on a research paper that will form the basis of the group report. Paper outlines will be developed and discussed with advice from the task force director, sustainability director

and senior commissioner and draft JPs will be written. The task force will then work together to integrate their individual report into a final report and presentation to senior Princeton administrators during reading period the week of May 8, 2017. Revised junior papers will be due Tuesday May 9, 2017 with the final senior commissioners report due on Dean's Date Tuesday May 16, 2017.

Individual papers are expected to be approximately 20 double-spaced pages in length (or 10 single spaced pages with spaces between paragraphs), with tables, graphs and references additional. **Each report should be preceded by an abstract which distills the essence of the findings of the report into one paragraph**. The end of each paper should be followed by a list of references that were consulted in writing the paper. Web sites, interviews, and paper documents should all be listed here. The final group report will synthesize the major goals and objectives identified in the individual papers. Appendices may be used to provide additional details.

Readings are available on Blackboard or via web links provided below. Additional material is on reserve in Stokes Library. Material will be added throughout the semester and students are encouraged to post key material they identify on the BlackBoard Discussion board to share with fellow task force students.

Schedule

Week 1- February 6, 2017. Sustainability – Global Issues

An excellent way to obtain an overview of climate issues is to watch Al Gore's film "An Inconvenient Truth". If you have not already seen the movie, please try to see it before the first class. It is available electronically via Blackboard under our class, "Course Materials/ Films" on certain specified computers on-campus (see Blackboard site for details).

Required Reading

Please be sure to read the following articles which are available under "Course Materials/Wee1. Introduction to Sustainability" on BlackBoard and by following the links below.

Special Report: Sustainability, Scientific American, April 2010.

Paul Ehrlich, Peter Kareiva, Gretchen Daily, Securing natural capital and expanding equity to rescale civilization. *Nature*, vol 486, June 7, 2012.

U.S. Environmental Protection Agency. What is Sustainability?

The United States Environmental Protection Agency has a nice website that explains what sustainability means and why it is important.

Copy this link into your browser: https://www.princeton.edu/reports/sustainability-20080219/#comp0000481ea26f0000000043dc6

Then, read material on that page and follow the links in the section on 'Why Is Sustainability Important?' to learn more about how the US has been committed to sustainability since the National Environmental Policy Act of 1969. Think about how the EPA strategy to incorporate sustainability principles into its work might be applied at Princeton.

Under 'How Does EPA Promote Sustainability?' Follow the link to President Obama's executive order of March 19, 2015 'Planning for Federal Sustainability in the Next Decade' and think about how his orders would encourage sustainability of federal operations and how they might be adopted/adapted for Princeton's operations.

Edward O. Wilson, The Future of Life, chapter 2: The Bottleneck. 2002.

Intergovernmental Panel on Climate Change (IPCC), Scientific Summary for Policymakers. 2013.

Please read the article in the New York Times, "Science Panel Calls Global Warming Unequivocal" summarizing the IPCC conclusions at: <u>http://www.nytimes.com/2007/02/03/science/earth/03climate.html</u>

Week 2 – February 13, 2017 – Introduction to Sustainability at Princeton.

Campus sustainability plans and campus organizations and administrative entities working on sustainability. Campus as Laboratory. Princeton policy environment. Where are the opportunities?

Princeton Speakers

- Shana Weber, Director of Office of Sustainability
- Kristi Wiedeman, Sustainability Initiatives
- Caroline Savage, Campus as Laboratory
- Tom Nyquist, Director, Engineering and Campus Energy Department

The following readings are posted on Blackboard: Princeton's Sustainability Steering Committee Principles DRAFT Princeton Sustainability Plan Campus Systems Guide Recommendations by Princeton Presidential CO2 Task Force Sustainability at Princeton Campus as Lab at Princeton Executive Summary of Student Papers from ENV 327 New York Times electricity supply explanation

Week 3 – February 20, 2017. Sustainability Initiatives at other Universities

Many universities are taking major steps to increase sustainability of their operations in areas that span energy, water, food, purchasing, building design, transportation, etc. You can find visionary and practical initiatives at the institutions below as well as at many other universities. Your aim will be to examine the initiatives described at other institutions and determine whether and how they (or other initiative's) can be implemented at Princeton.

Stanford University: https://sustainable.stanford.edu

Yale University: http://sustainability.yale.edu

Harvard University: https://green.harvard.edu

Cornell University: http://sustainability.cornell.edu

Duke University: http://sustainability.duke.edu/campus_initiatives/

MIT: https://sustainability.mit.edu

Middlebury College: http://www.middlebury.edu/sustainability

UC Berkeley: http://sustainability.berkeley.edu

Guest Speaker Prof. Elke Weber, Princeton University

Sustainability decisions are influenced by psychology. Prof. Elke Weber, the Andlinger Professor in Energy and the Environment and Professor of Psychology and Public Affairs, will discuss mechanisms such as social norms and how the chosen default option influence behavior. Please read the material she provided below, which are posted on BlackBoard, before class.

Nyborg et al., Social norms as solutions, Science, October 7, 2016.

Elke Weber, Climate change demands behavioral change: What are the challenges? Social Research, vol 82:3, Fall 2015.

Cass Sunstein and Lucka Reisch, Autoatically Green: Behavioral economics and environmental protection. *Harvard Environmental Law Review*, vol 38, 2014.

Week 4-6

Guest speakers from Princeton University operations and sustainability directors from other Universities. Topics to be determined based on student interests.

Spring Break March 20-24, 2017

Week 7 – March 27, 2017 Individual Consultations. No class meeting.

Draft JP outlines due by March 27. Feel free to turn them in early for earlier feedback. We will discuss the outlines during the individual meetings.

Week 8 – Week of April 3.

Discussion of integration of individual research into group research project and report. Overall objectives. Goals of presentation to Princeton administrators.

See WWS undergraduate taskforce for example of previous JPs and final presentation:

WWS 402d: Development of Policy Initiatives for the Sustainable Use of Energy at Princeton University, Spring 2007. http://www.princeton.edu/~mauzeral/WWS402d_Spr07/PTF%20Webpage%203.html

Draft research papers due, Friday April 6, 2017.

Week 9 – April 10, 2017. Oral presentations start. Discussion of final report.

Week 10 – April 17, 2017. Oral presentations continue.

Week 11 – April 24, 2017. Presentation of final report. Discussion of revisions.

Week 12 - May 1, 2017. Discussion and approval of final report.

Week of May 7, 2017. Arrangements will be made to present policy recommendations and final report to senior members of the Princeton administration.

** Final revised papers are due by Tuesday May 9, 2017. **

Senior Commissioner joint final report due Tuesday May 16, 2017.