UNIVERSITY FACULTY
SENATE MEETING

DECEMBER 11, 2013
AGENDA

• Call to Order – Interim Speaker Charlie Walcott (2 min)
• Consent Items – Speaker Walcott (2 min)
  • Approval of Minutes from 11/13/13 Senate Meeting
  • Report from Nominations & Elections
• Dean’s Report –
  Dean of the University Faculty Joe Burns (14 min)
• Report from the Educational Policy Committee –
  David Delchamps, EPC Chair (12 min)
• Resolution: “Cornell Investment and Divestment Strategies for a Sustainable Future” –
  Brian Chabot, Ecology & Evolutionary Biology and David Shalloway, Molecular Biology (10 min)
• Discussion of Resolution (35 min)
• General Good and Welfare (15 min)
CONSENT VOTE BY SENATORS

• APPROVAL OF MINUTES FROM NOVEMBER 13, 2013
  FACULTY SENATE MEETING

• REPORT FROM NOMINATIONS AND ELECTIONS
Introductions
On-line Discussion of Resolution

Committee Activities
Academic Programs & Policies
Financial Policy
Educational Policy
Distance Learning

Additional Professorial Titles?
Questions & Comments
Cmtte. on Academic Programs & Policies
Initiation of B.S. in Biomedical Engr
Joint JGSM & Tsinghua U (Finance)
Financial Policy Committee
“Divestment and Reinvestment”
New Budget Model
“Start-up NY” program
Educational Policy Committee
Next Presentation
Distance Learning Committee
Introductions
On-line Discussion of Resolution

Committee Activities
Academic Programs and Policies
Financial Policy
Educational Policy
Distance Learning

Additional Professorial Titles?
Questions & Comments
EDUCATIONAL POLICY COMMITTEE MEMBERSHIP

- David Delchamps, Chair (Electrical & Computer Engineering)
- James Bisogni (Civil & Environmental Engineering)
- Patricia Cassano (Division of Nutritional Sciences)
- Paula Cohen (Biomedical Sciences, VET)
- Ronald Harris-Warrick (Neurobiology & Behavior, CALS)
- Cynthia Leifer (Immunology, VET)
- Paul Sawyer (English, A&S)
- Yervant Terzian (Astronomy, A&S)
- Robert Thorne (Physics, A&S)
- Crystal Lee, Graduate Student
"Inequalities in society and climate change are the two biggest challenges we face in the world today"

David Skorton Nov 2013
Proposed actions:

• Achieve climate neutrality by 2035

• Divest from the 200 companies with the largest carbon reserves
Why now?
Assessing dangerous climate change: Required reduction of carbon emissions to protect young people, future generations and nature

“Rapid emissions reduction is required to restore Earth’s energy balance and avoid ocean heat uptake that would practically guarantee irreversible effects. Continuation of high fossil fuel emissions, given current knowledge of the consequences, would be an act of extraordinary witting intergenerational injustice.”

(J. Hansen +21 others, Plos One December 2013)
This is a moral, ethical issue
Albert Einstein: “Setting an example is not the main means of influencing others; it is the only means.”

Edmund Burke: “Nobody made a greater mistake than he who did nothing because he could do only a little.”
Resolution Designed for Minimal Financial Risk

- **Specifically targeted:** The resolution does NOT call for divestment from all energy-related companies; only from the publicly-traded 200LCR companies.

- **No constraint on reinvestment:** Divested funds can be reinvested in the most profitable alternatives (i.e., including other energy-related investments)

- **Phased:** Linearly phased divestment over 22 years, consistent with our accelerated progress to carbon neutrality

- **Reinvestment:** To publically acknowledge companies that take positive action re fossil-fuel reserves.
The affected companies are not the leaders (or even strong participants) in the transition to climate-neutral energy sources.

2012 *global corporate spending* on:

- “finding and developing” new fossil fuel reserves: $647 billion\(^1\)
- renewable energy research and development: < $4.8 billion\(^2\)

2012 *total global spending* on renewable energy research and development: $244 billion\(^2\)

\(^1\)The Guardian, April 19, 2013
The CIO estimate does not correctly characterize this resolution
Divestment will affect < 1.5% of the Long Term Investment Pool (LTIP)

9% in energy*

*Office of University Investment
Divestment will affect < 1.5% of the Long Term Investment Pool (LTIP)

3% public energy equities*

91%

6%

3%

Energy (public)

Other

Energy (private partnerships)

*Office of University Investment; “Our private partnerships invest in private companies.” The 200 companies are public
Divestment will affect < 1.5% of the Long Term Investment Pool (LTIP)

< 3% in the 200 companies
Divestment will affect < 1.5% of the Long Term Investment Pool (LTIP)

*22 year linear divestment schedule*
Historical Effect of Complete 7.6% Fossil Fuel Divestment on Broad Market Return: ± 0.2%

“Full Carbon Divestment” = complete Oil, Gas and Consumables market subsector (7.6% of complete market capitalization)*

*Aperio Investment Group
Combined with the <1.5% fraction of the LTIP affected by the resolution, historical performance implies less than $\pm 0.04\%$ average annual effect on LTIP return$^1$

$^1 \pm 0.2\% \times (1.5/7.6)$
LTIP income is 13% of 2013-2014 Operating Budget\(^1\)

- \(<\pm 0.00025\%\) effect on operating budget in first year (\(\pm\$5,250\))\(^2\)

- \(<\pm 0.01\%\) average annual effect over 22 year divestment period (\(\pm\$210,000/\text{year}\))\(^3\)

\(^1\) 2013-2014 Operating and Capital Budget Plan (13% for Ithaca campus; 8.8% overall)

\(^2\) \(\pm 0.2\% \times (3.0/7.6) \times 0.13/22 \times \frac{1}{2}; \times \$2.1B \text{ (Ithaca operating budget)} = \pm\$5,250\)

\(^3\) \(\pm 0.2\% \times (3.0/7.6) \times 0.13 \times \frac{1}{2}\)
Our attempts to “beat the market” by emphasizing subsectors (e.g., energy) have failed

10-year annualized returns
Cornell LTIP:* 8.2%
Russell 2000 (through Fidelity): 9.6%
Vanguard 500 Index Fund: 7.7%

*OUI June, 2013 Quarterly Report
It’s hard to predict the stock market, with or without divestment
No Time to Waste

*Climate scientists:* Feedback and inertial effects require meaningful action by government (e.g., *carbon tax*) before 2020

**It’s time that our research results are implemented towards real-world solutions**

We must take action NOW to encourage this

The social benefit of our *leadership* in motivating grassroots and political action will be felt as *soon* as we pass the resolution
"Environmental justice is an issue students care about."

- Cameron Pritchett, Student Assembly Minority Liaison At-Large
WHEREAS there is overwhelming evidence that the use of fossil fuels is disrupting the Earth's climate system and acidifying its oceans, and that such disruptions will create significant challenges for Cornell University, the state of New York, the United States, and all countries for the next millennium;

AND WHEREAS Cornell has committed to becoming carbon neutral by 2050 and has made significant progress in achieving this goal;

AND WHEREAS many other colleges and universities have also committed to achieving this goal, with some having established an even more ambitious goal of eliminating fossil fuel use by 2025;
AND WHEREAS reducing the use of fossil fuels will reduce the value of investments in companies holding large fossil fuel reserves; 
AND WHEREAS Cornell is a leading research and public education institution with significant impact within New York, the United States, and the world; 
AND WHEREAS the Cornell Student Assembly has passed by an overwhelming majority a resolution calling upon the University to adjust its investment practices to draw further attention to the detrimental effects of fossil fuel use; 
THEREFORE BE IT RESOLVED that Cornell faculty, responsible university offices and officials should seek a more aggressive reduction in the use of fossil fuels that will achieve carbon neutrality by 2035.
BE IT FURTHER RESOLVED that Cornell investments in companies producing such fuels be reduced consistent with Cornell’s progress towards carbon neutrality so as to achieve full divestment by 2035.

BE IT FURTHER RESOLVED that this should be done by a schedule that prioritizes divestment from those companies holding the largest fossil fuel reserves;

BE IT FURTHER RESOLVED that the President of Cornell will submit an annual report to the Faculty Senate describing the progress that the University has made in becoming carbon neutral and divesting from companies holding the largest fossil fuel reserves.
Proposal for an Undergraduate Program in Biomedical Engineering

Cornell University Faculty Senate
December 11, 2013
Why a BME Degree? Why Now?

• Student demand
  – BME is #1 in “Hot College Majors That Lead to Jobs” (USNWR 9/10/13)
  – BME is #1 in “Best Jobs in America” (CNN 11/12/13)
  – Consistent interest from applicants in bio-related engineering

• Peer institutions
  – Vast majority of peers offer BS in BME/BE
    • 13 out of top 15 colleges of engineering (exc. Cornell and CalTech)
    • 6 out of 8 Ivies (exc. Cornell and Princeton)
    • 18 out of 20 Big 10+ (exc. Cornell and Nebraska)

• Diversity
  – Nationally BME attracts female and URM students
Program Objectives

• Prepare BS graduates for professional practice, graduate study, or professional medical study

• Support strategic objectives of CoE and University
  – Bio-related engineering, connections to WCMC, Cornell NYC Tech

• Address national need for BMEs
  – NBLS report: 16,000 BMEs needed by 2020  exceeds collective capacity of top 25 programs

• Enhance ability of CoE to attract students from diverse backgrounds and those with bio-interests
Timeline for Cornell BS in BME

2013
- September: Directors & Chairs
- October: Meet with Departments
- November: CoE Faculty Meeting
- December: Faculty Senate
  - Proposal to Dean of Faculty (11/24)

2014
- January: CU Board of Trustees
- February: External Review
- March: NYS BHE

Goal: Start affiliating sophomores in Fall 2015
alternate timeline

2013
- September: CCGB
- October: Directors & Chairs
- November: Meet with Departments
- December: Proposal to Dean of Faculty (11/24)

2014
- January: CoE Faculty Meeting
- February: Faculty Senate
- March: CU Board of Trustees
- April: External Review (April – May 2014)
- NYS BHE (June 2014)

Goal: Start affiliating sophomores in Fall 2015 ??