



Management Workshop: “Participation as Trigger for Committed University Communities”

Tom Kelly Ph.D
Executive Director
Sustainability Institute
University of New Hampshire
USA

UAS Spring Campus, Berlin, March 27-31, 2017
“Societal Transformation to Sustainability:
Universities as Pacesetters?”



University of New Hampshire

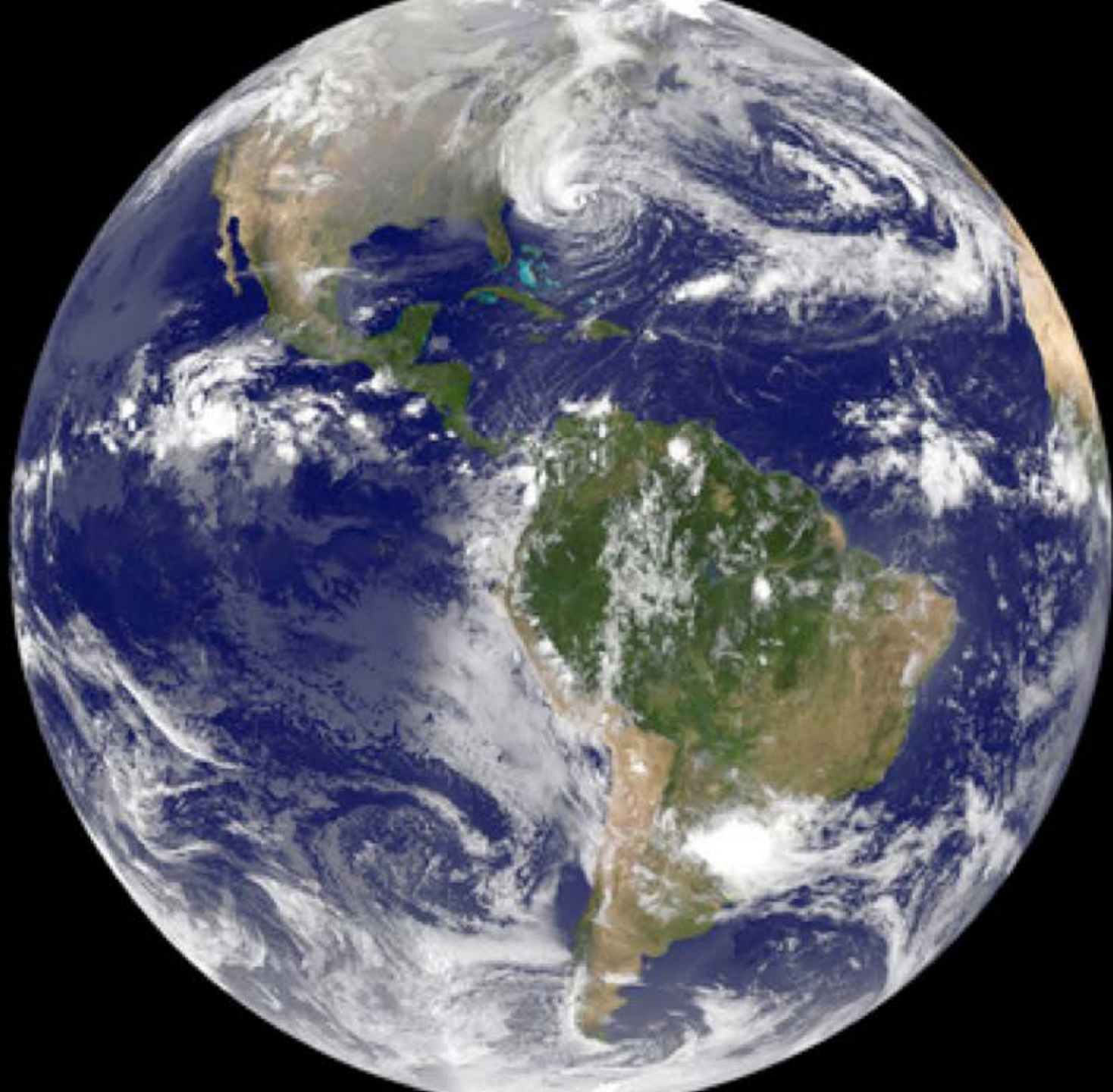
Multiple Roads Lead to Participation

Sustainability

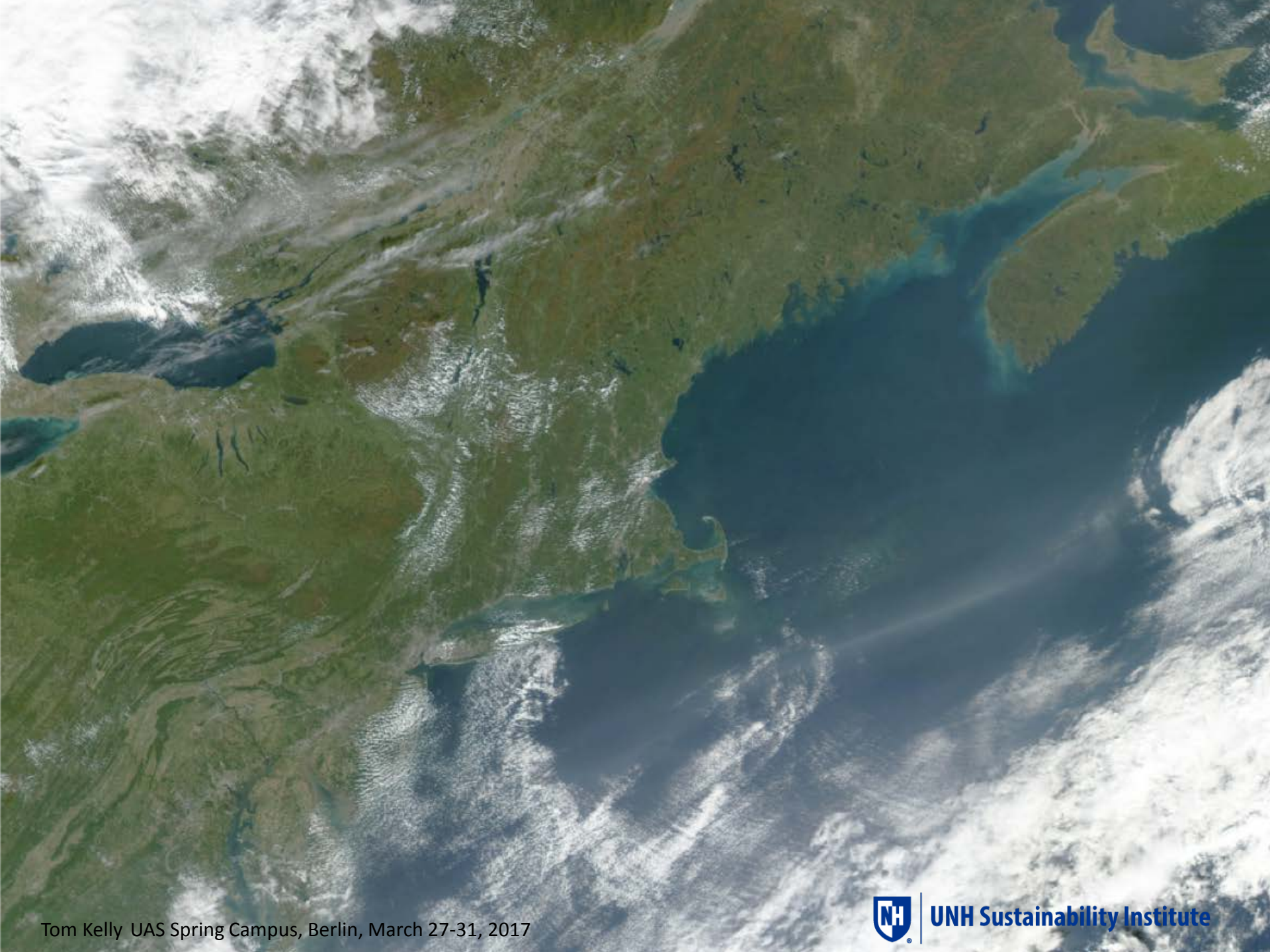
Sustainability Framework

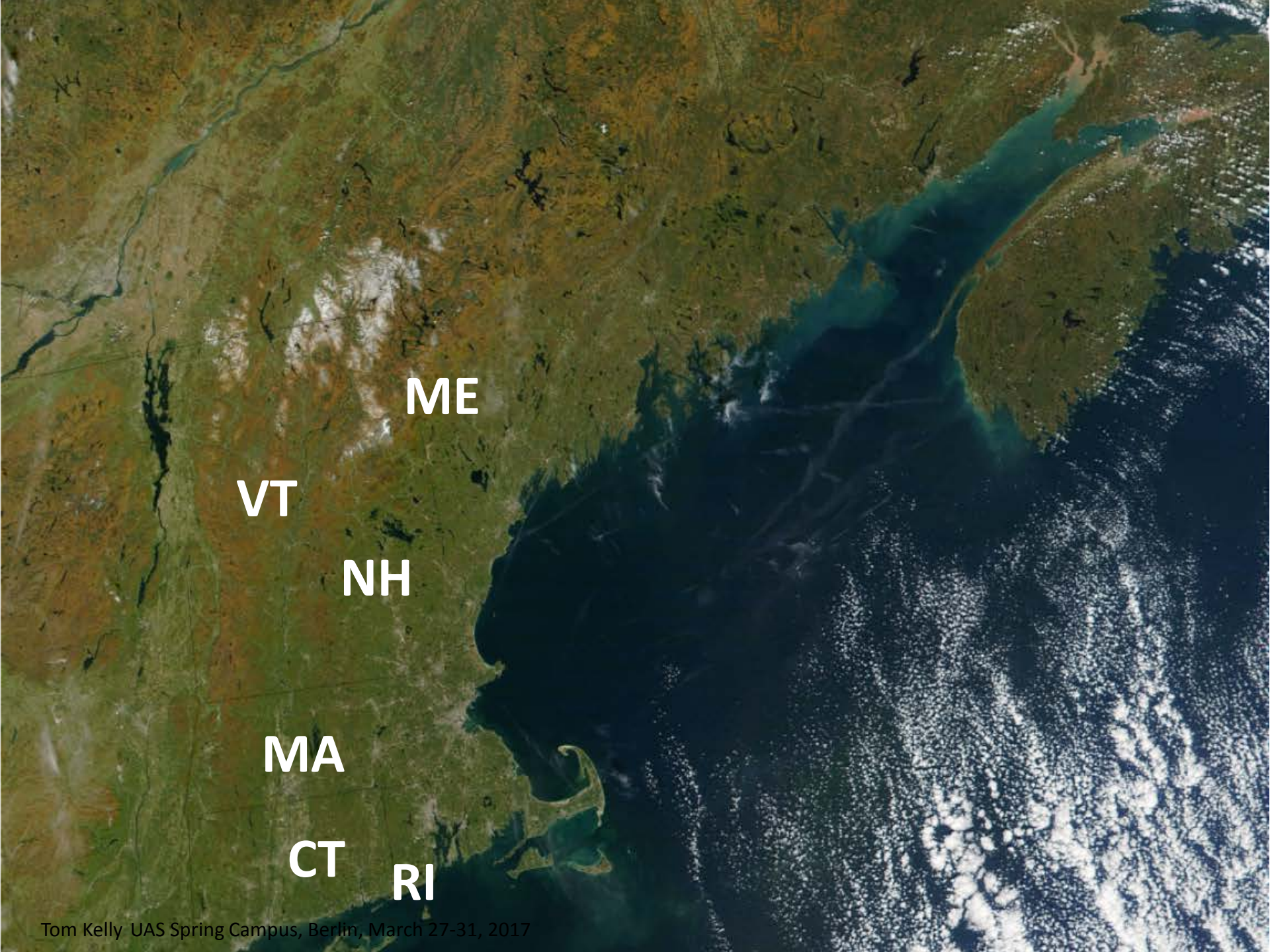
Examples of Participation

Enabling Factors and Challenges









ME

VT

NH

MA

CT

RI



Founded 1866 Land Grant University

9 Colleges, Schools

Interdisciplinary Institutes, Centers, Programs

Cooperative Extension

~14,000 Students

~3800 faculty and staff (full and part time)



UNH Sustainability Institute

~2600 acres total land
~300 acres core campus
~6.6 M gross sf floor space



Sustainability Institute

[Who We Are](#) [What We Do](#) [Sustainability Dual Major](#) [Summer Fellows Program](#) [Tools & Resources](#)



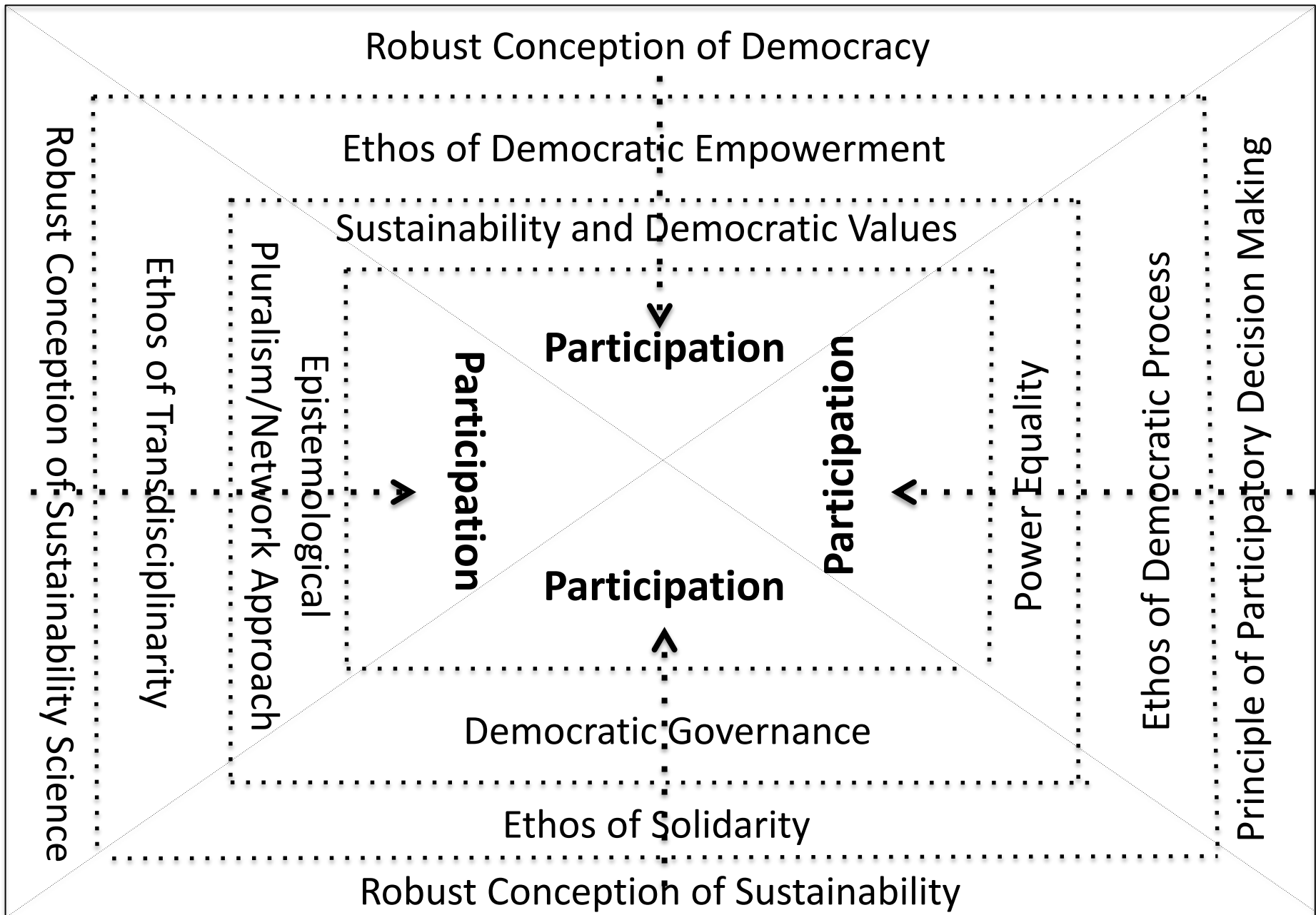
Climate Impacts Maple Breakfast with Senator Maggie Hassan

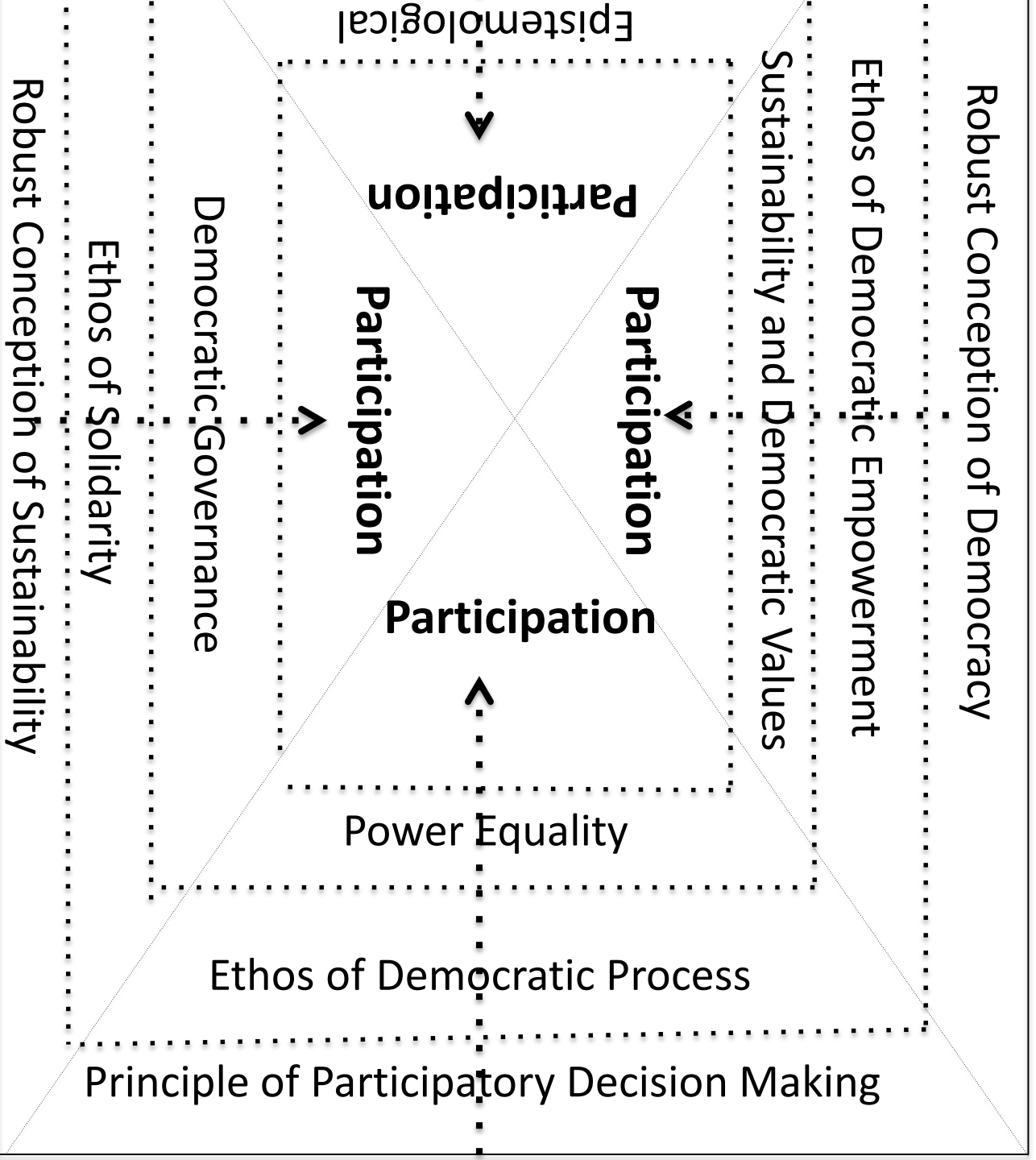
Maple syrup is a New Hampshire institution, but climate change could have tragic impacts on the future harvest in NH. Come celebrate and learn how to protect this home-grown delight at the annual pancake breakfast.

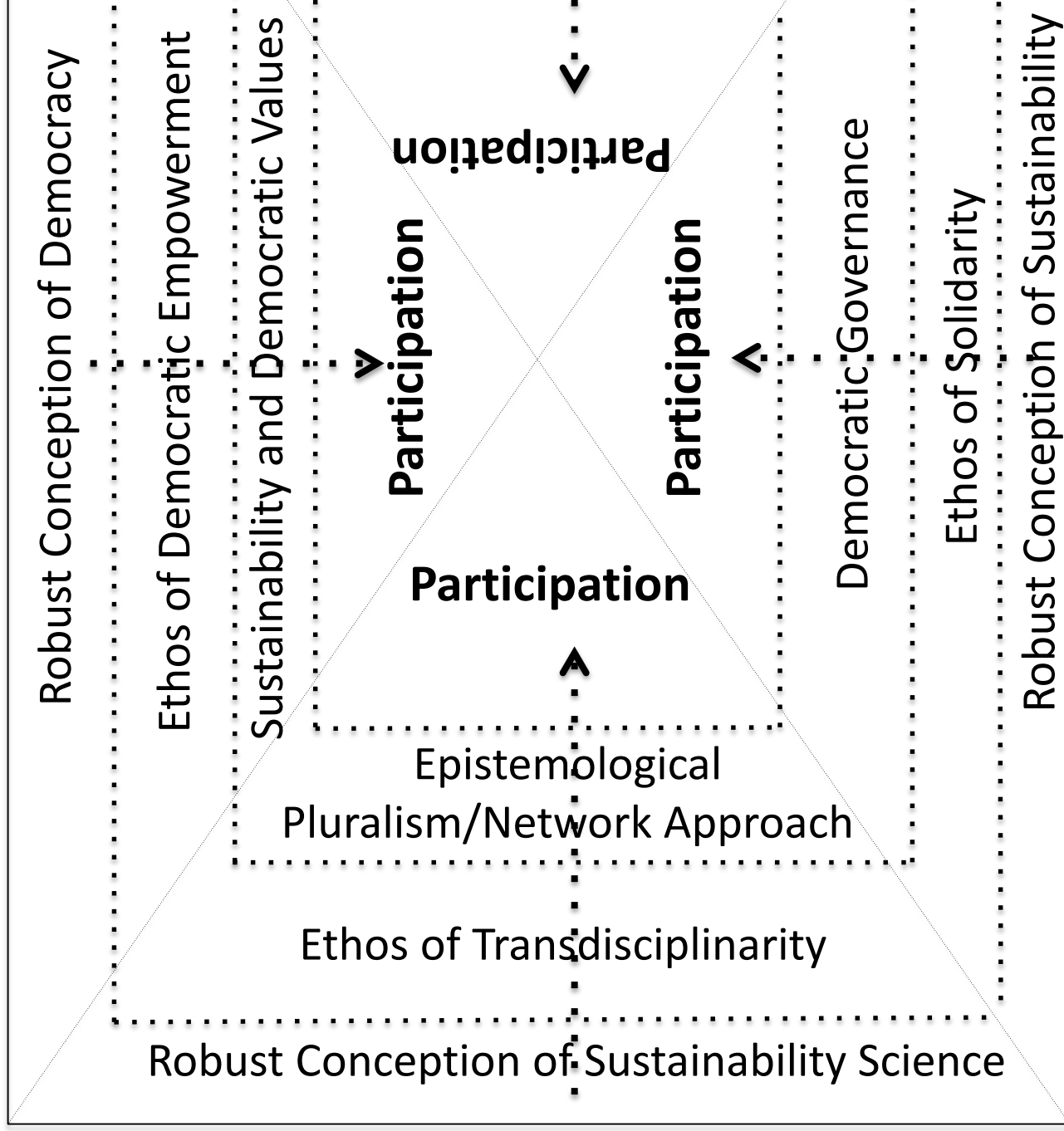
[Click here to watch a recording of the event.](#)

Established 1997

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What is Sustainability?

What Sustains Us?

Sustainability

Sustainability

Sustainability

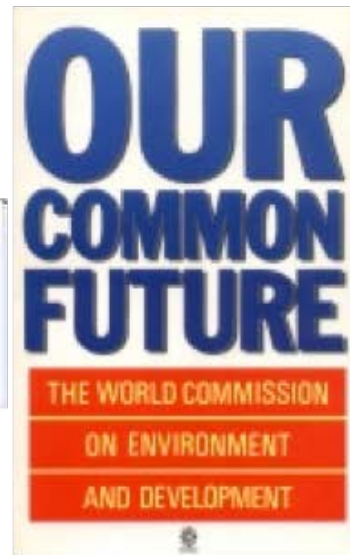
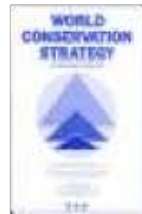
Sustainability



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1972



1987



1992



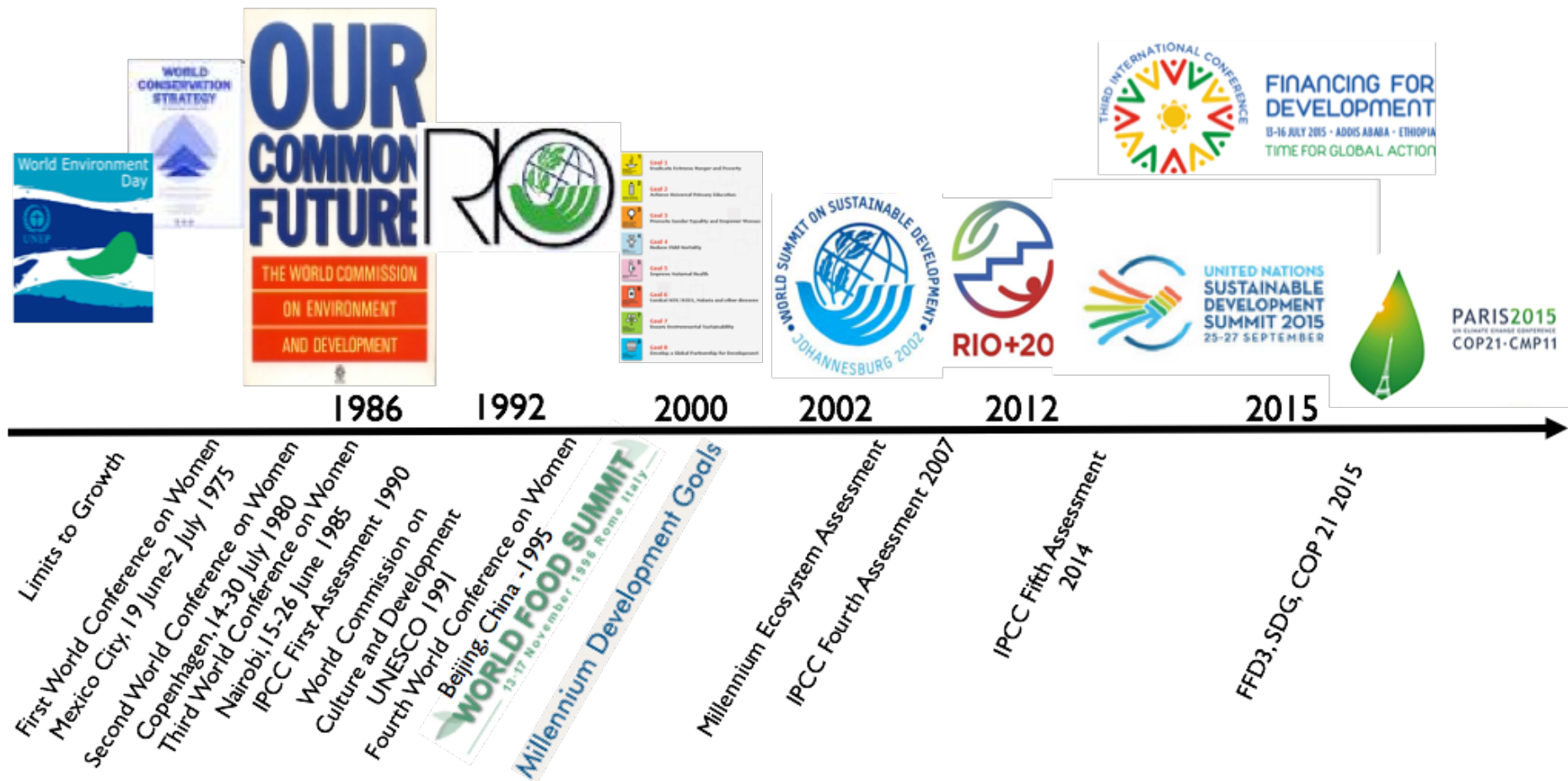
2002 2004



- Limits to Growth
- First World Conference on Women
Mexico City, 19 June-2 July 1975
- Second World Conference on Women
Copenhagen, 14-30 July 1980
- Third World Conference on Women
Nairobi, 15-26 June 1985
- International Geosphere-Biosphere
Programme initiated
- IPCC First Assessment 1990
- World Commission on
Culture and Development
UNESCO 1991
- Fourth World Conference on Women
Beijing, China - 1995
- WORLD FOOD SUMMIT
13-17 November 1996 Rome Italy
- Millennium Ecosystem Assessment
- Millennium Development Goals
- IPCC Fourth Assessment 2007
- Arctic Sea Ice extent
record seasonal minimum
- IPCC Fifth Assessment
2014

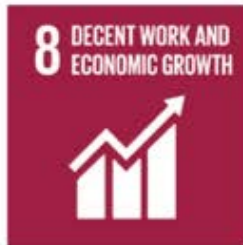


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SUSTAINABLE DEVELOPMENT GOALS



Sendai Framework for Disaster Risk Reduction 2015 - 2030

Vertical dimension:
Progressively ensuring
higher levels of
protection,
guided by Convention
No. 102 and more
advanced standards

Outcomes can be
guaranteed through
different means
– there is
no-one-size-fits-all



Horizontal dimension:
Guaranteeing access to essential health care
and minimum income security for all, guided by
Recommendation No. 202



COP21+ CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

SUSTAINABLE DEVELOPMENT GOALS



Aichi Biodiversity Targets





Six essential elements for delivering SDGs (UN 2014)

The Road to Dignity by 2030 ending poverty, transforming all lives and protecting the planet

World Commission on Culture and Development 1994



<http://www.davidrenka.com/LeOpere/Rilievi/FestinaLente.html>

urgency

nature of education

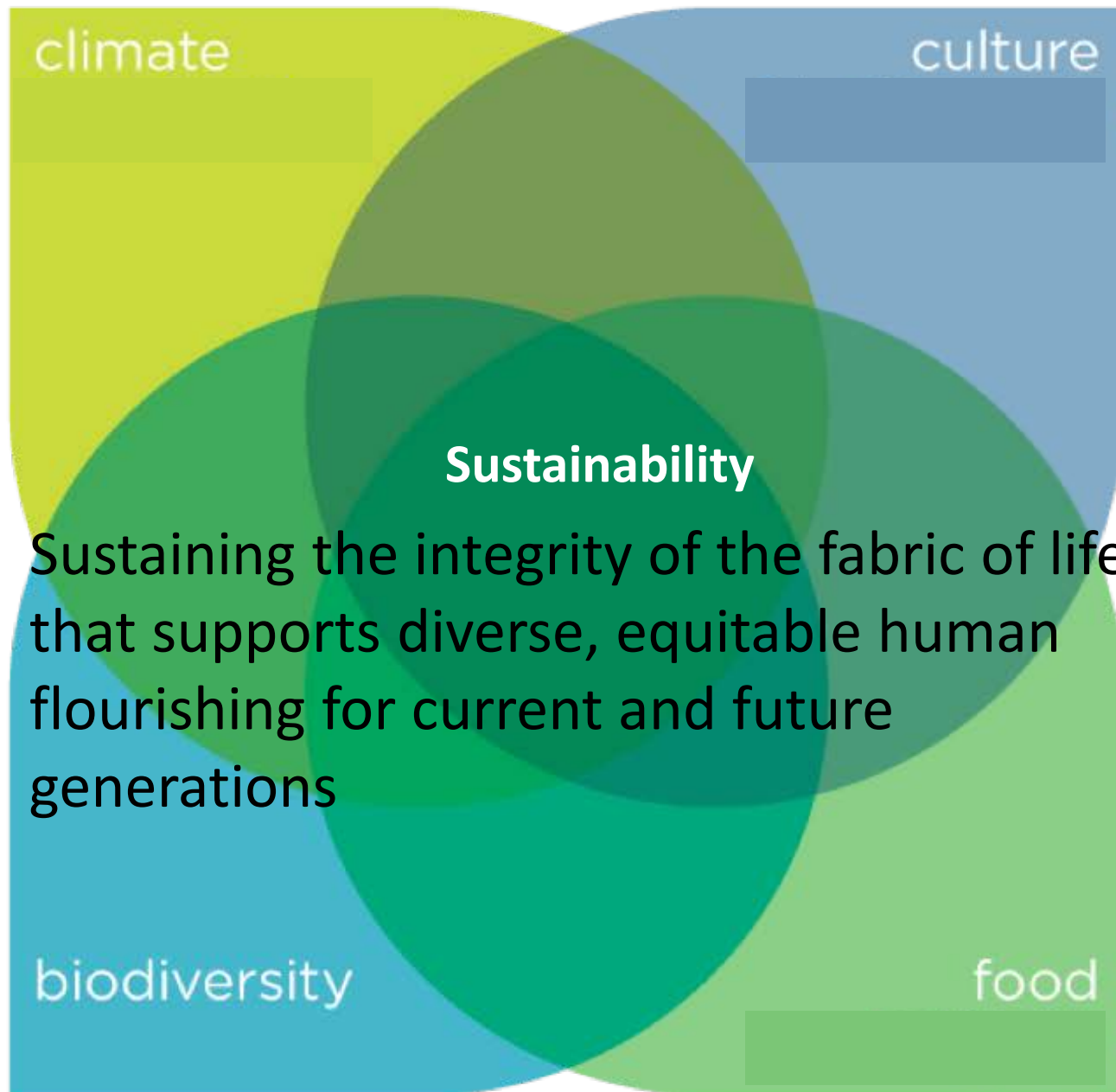
**must accelerate
change**

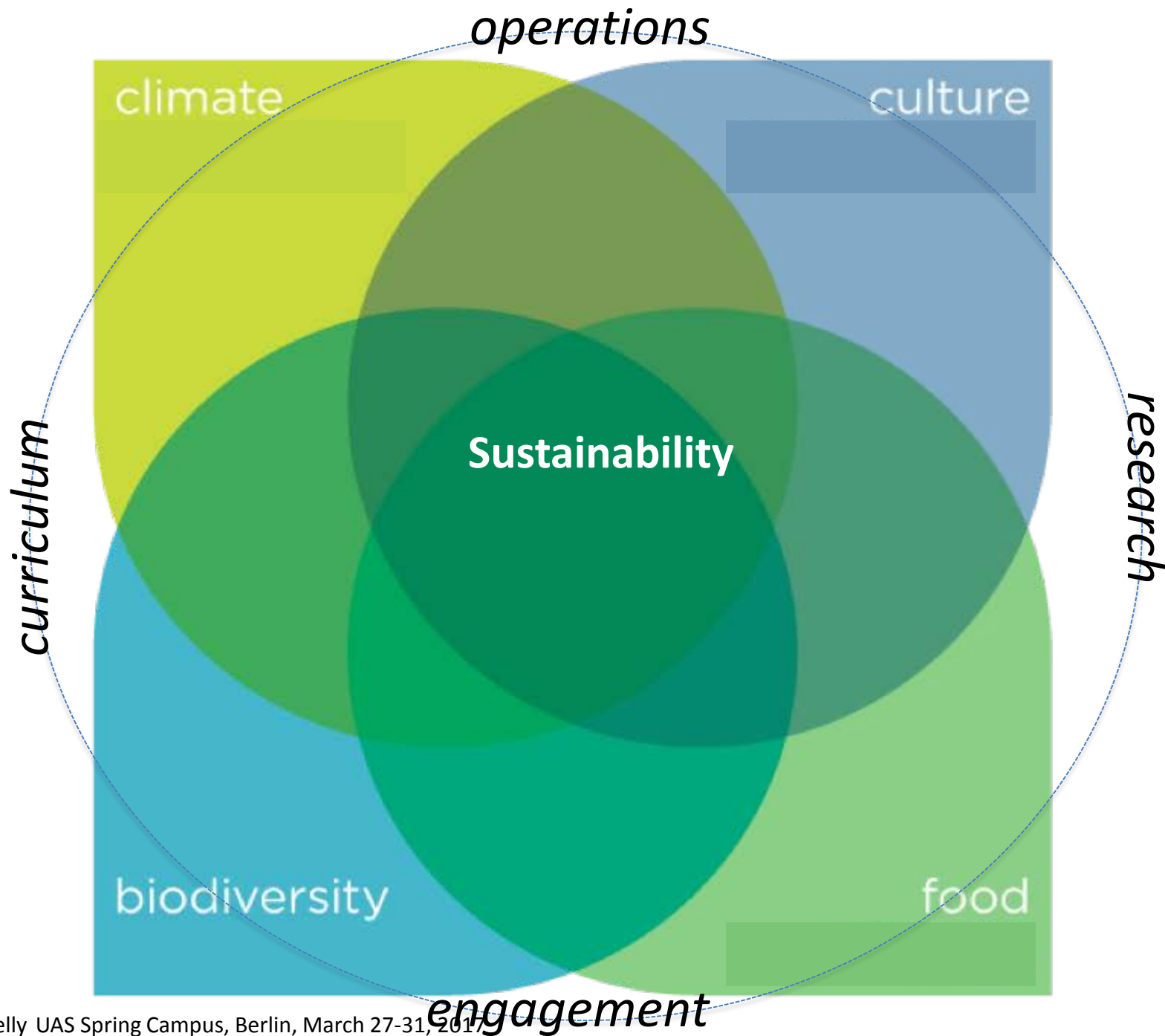
**must be grounded
and open**

must avoid hubris



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Operations

climate

Climate Education
Initiative

**Energy Task
Force**

culture

Culture & Sustainability
Initiative

**Culture and
Sustainability
Task Force**

SUSTAINABILITY

Curriculum

Research

**Ecosystem
Task Force**

biodiversity

Biodiversity Education
Initiative

**Food System
Task Force**

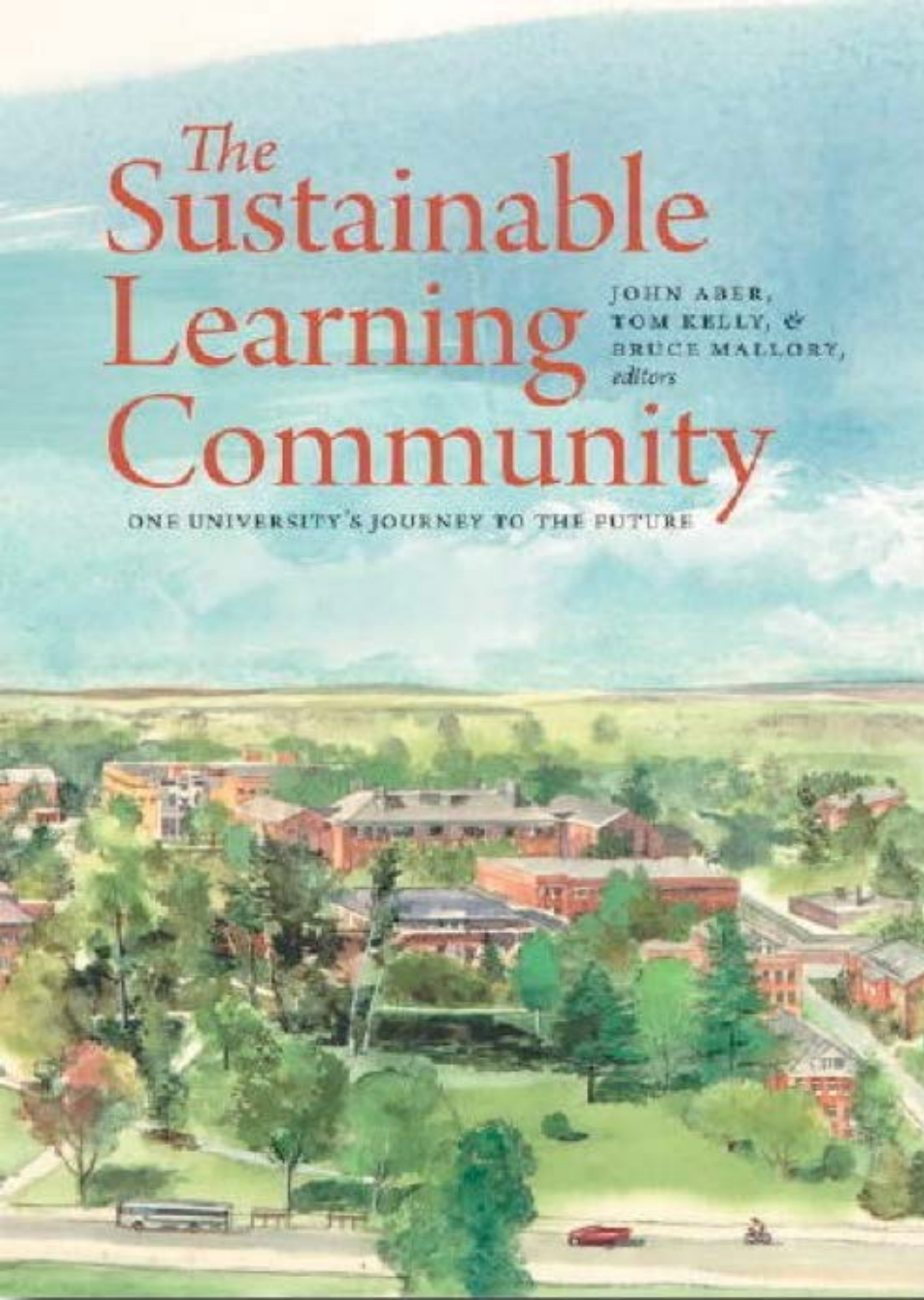
food

Food & Society
Initiative

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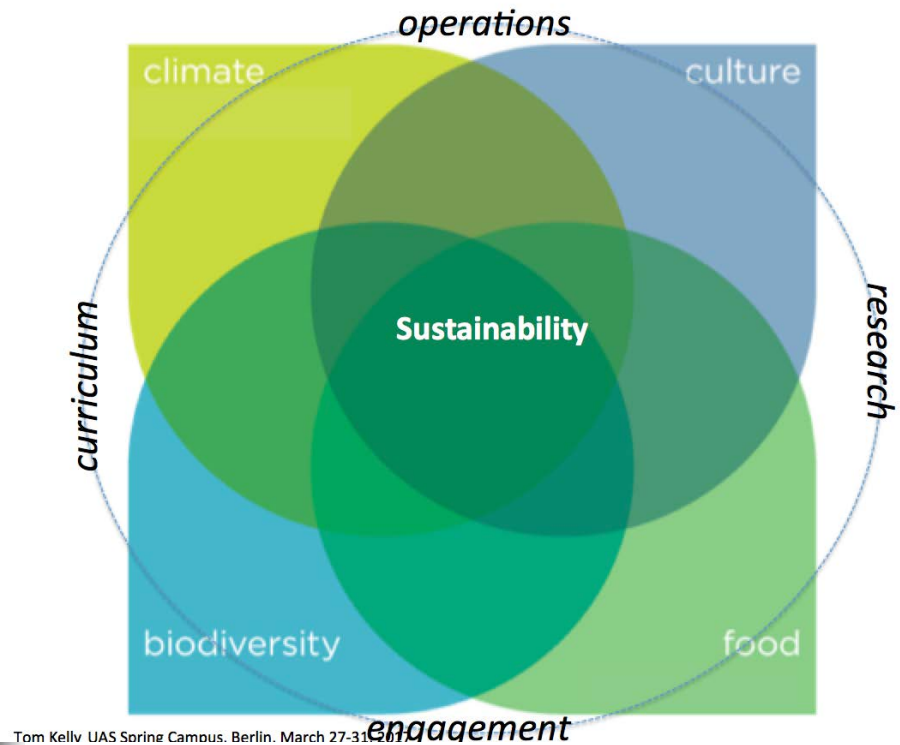


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The Polis Teaches



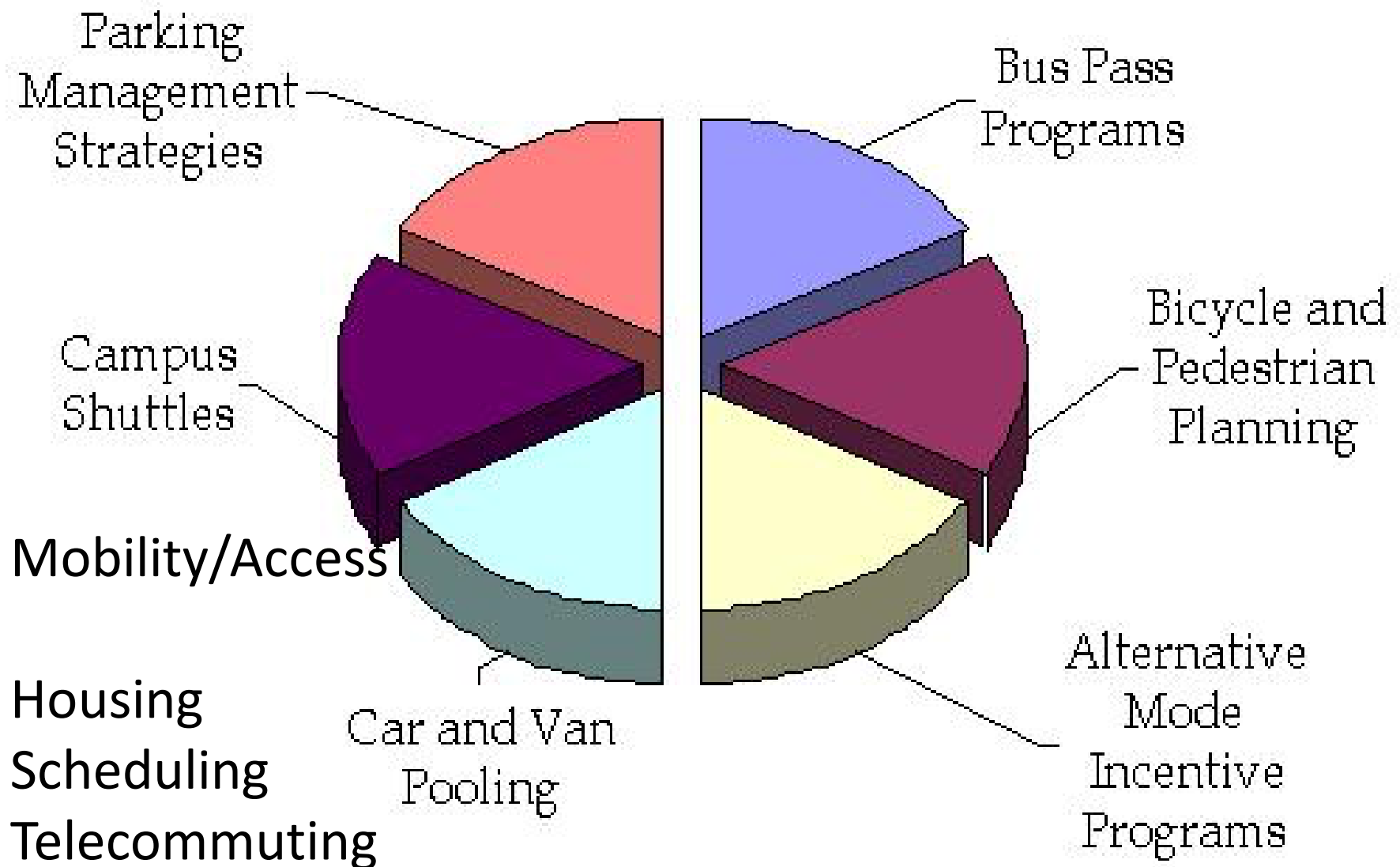
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The Community Teaches



UNH Campus circa 1925

Transportation Demand Management







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12/14/01, Durham, NH welcomes
back commuter rail service
after 30 year hiatus.



We adopted a **demand management strategy** in 2000

It focuses on strategies such as:

- great transit – free for fac/students/staff
- a walkable, sustainable campus (10 min core walk)
- Improved bike /ped experience (2,500 bike parking)
- Flexible work schedules
- technologies and services making UNH a great place to study, live, work and get around to/from without a private car...

It worked...

- Transit ridership up over 100% in past 10 years
- Parking permit demand flat –even down for commuters
- Improved visitor access for those arriving by car, bike and train

Transportation Policy Committee 2016-2017

(updated 2.10.2017)

* denotes new member

Chairman

Christopher Clement VP for Finance and Administration

Christopher.Clement@unh.edu

Voting Representatives:

Students:

Jochen Wirsing Graduate Student Representative
Jonathon Dean Student Body President
Carley Rotenberg Student Body Vice President
Tyler Anderson Student Rep
Zachary Dumont Campus Senate Structure Chair

jw1085@wildcats.unh.edu
cam536@wildcats.unh.edu
Carley.Rotenberg@unh.edu
tpf32@wildcats.unh.edu
zsd1@wildcats.unh.edu

Faculty:

Danielle Pillet-Shore Communication, Faculty Senate
Campus Planning Committee Chair
Michael Soha Communication
John Carroll Natural Resources
Michael Mangan Psychology - Lecturer

Danielle.Pillet-Shore@unh.edu
Michael.Soha@unh.edu
John.Carroll@unh.edu
Michael.Mangan@unh.edu

Staff:

Sydney Sprague (OS) Academic Technology
Joe Jillette (OS) Transportation Services-OS Council Rep
(vacant) (PAT)
Kevan Carpenter (PAT) CEPS Dean's Office

Sydney.Sprague@unh.edu
joe.jillette@unh.edu
Kevan.Carpenter@unh.edu

Ex-Officio (non-voting)

Staff:

Douglas C. Bencks University Architect/Dir of Campus Planning
Paul Chaloux Grounds and Events
Paul Dean UNH Chief of Police
Curt Kenoyer UNH Commuter Student Coordinator
Thomas H. Kelly Sustainability Institute
David May Associate VP Business Affairs
Dirk S. Timmons UNH Transportation Services
Bruce Azotea* UNH – Manchester
Vacant AAUP Observer

doug.bencks@unh.edu
paul.chaloux@unh.edu
paul.dean@unh.edu
Curt.Kenoyer@unh.edu
tom.kelly@unh.edu
david.may@unh.edu
dirk.timmons@unh.edu
Bruce.Azotea@unh.edu

Staff Support

Stephen T. Pesci Campus Planning, Special Projects Dir.

spesci@unh.edu

Town of Durham:

Todd Selig Durham Community Representative

tselig@ci.durham.nh.us

Ex-Officio (non-voting)

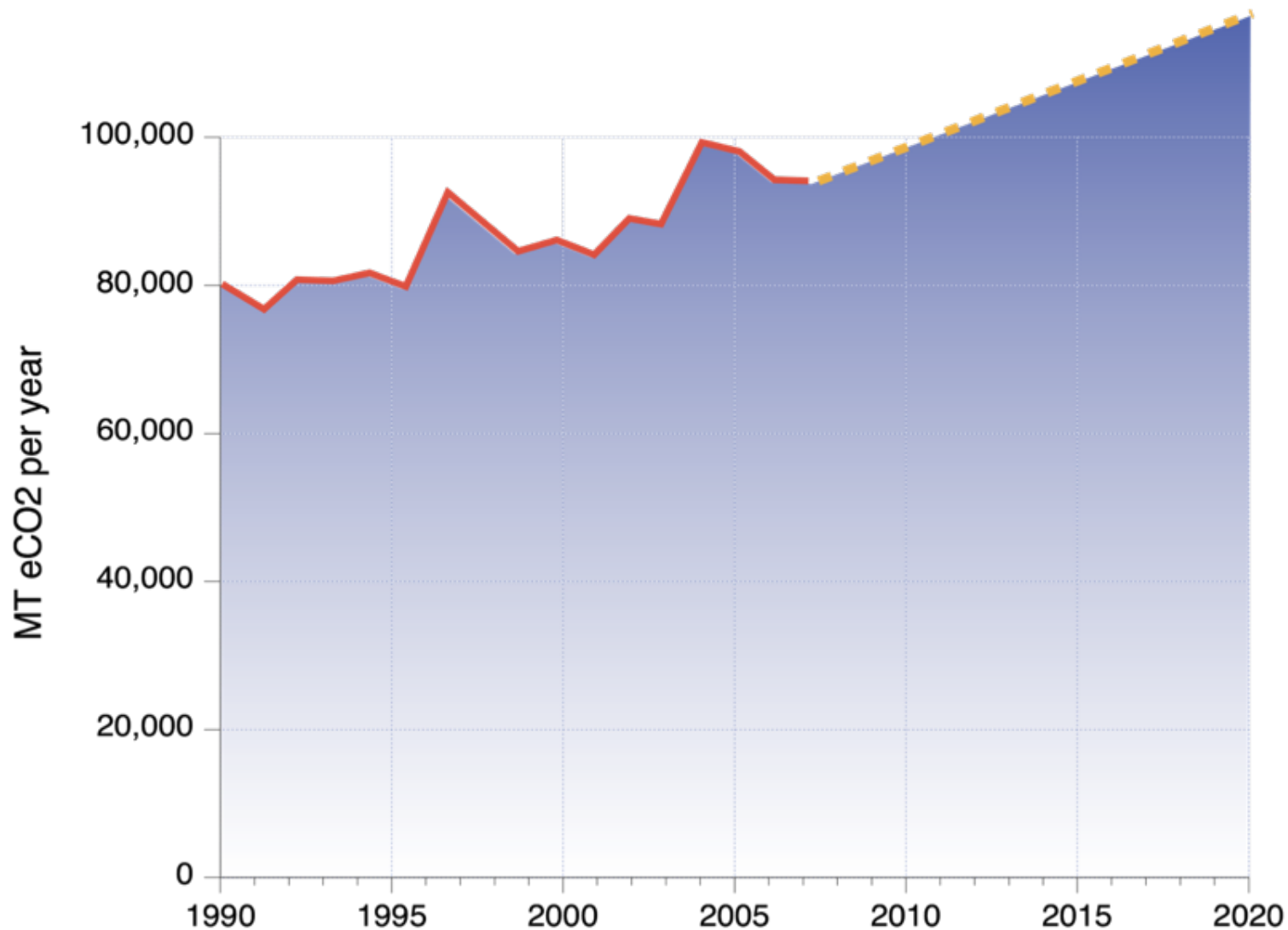
Michael Behrendt Durham Town Planner
David Kurz Town of Durham Police

mbehrendt@ci.durham.nh.us
dkurz@ci.durham.nh.us

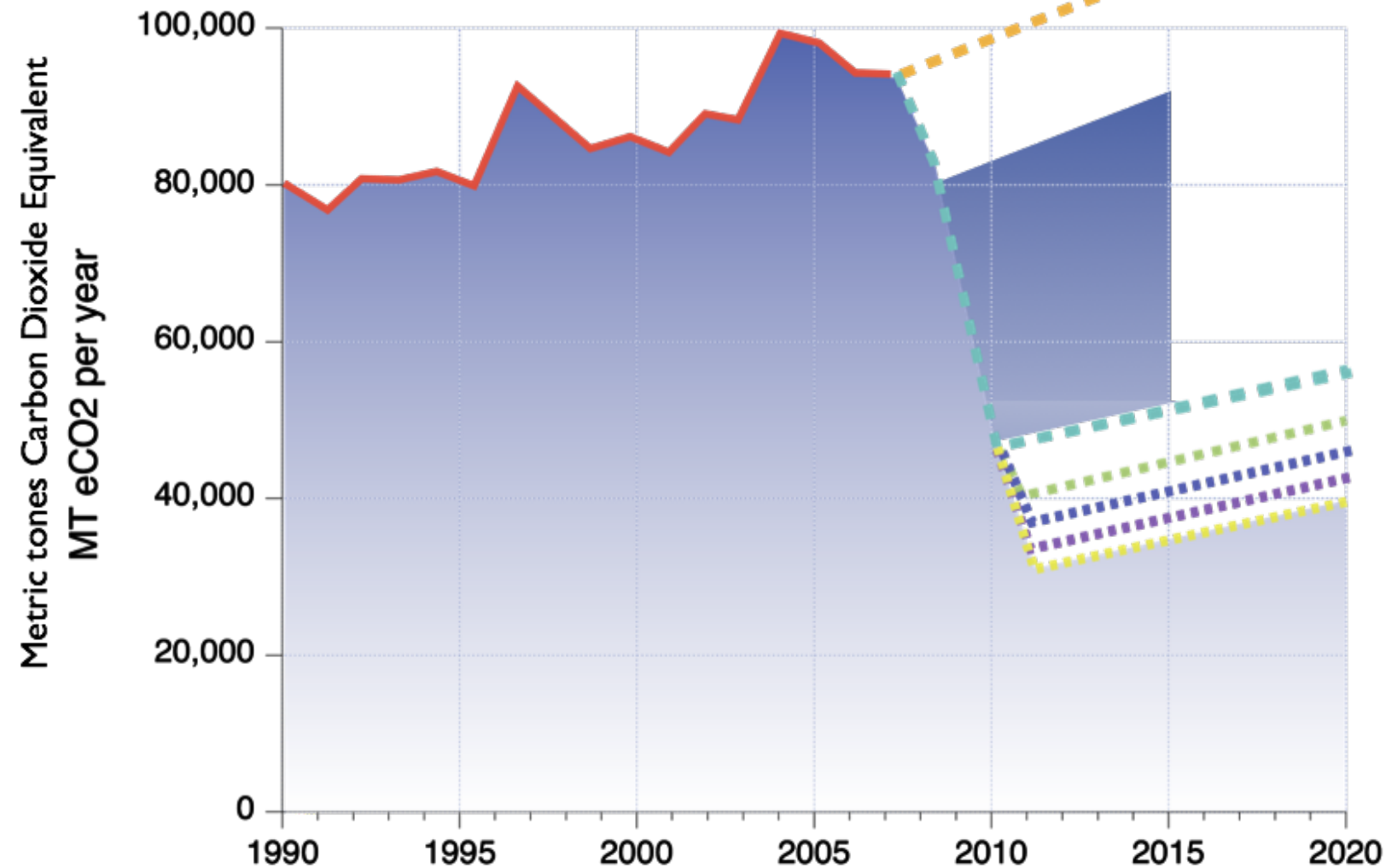
Transportation Policy Committee

- Participation is key to success
- Part of Climate Action Plan
- Now engaged in ~20 year review and update

Business as Usual

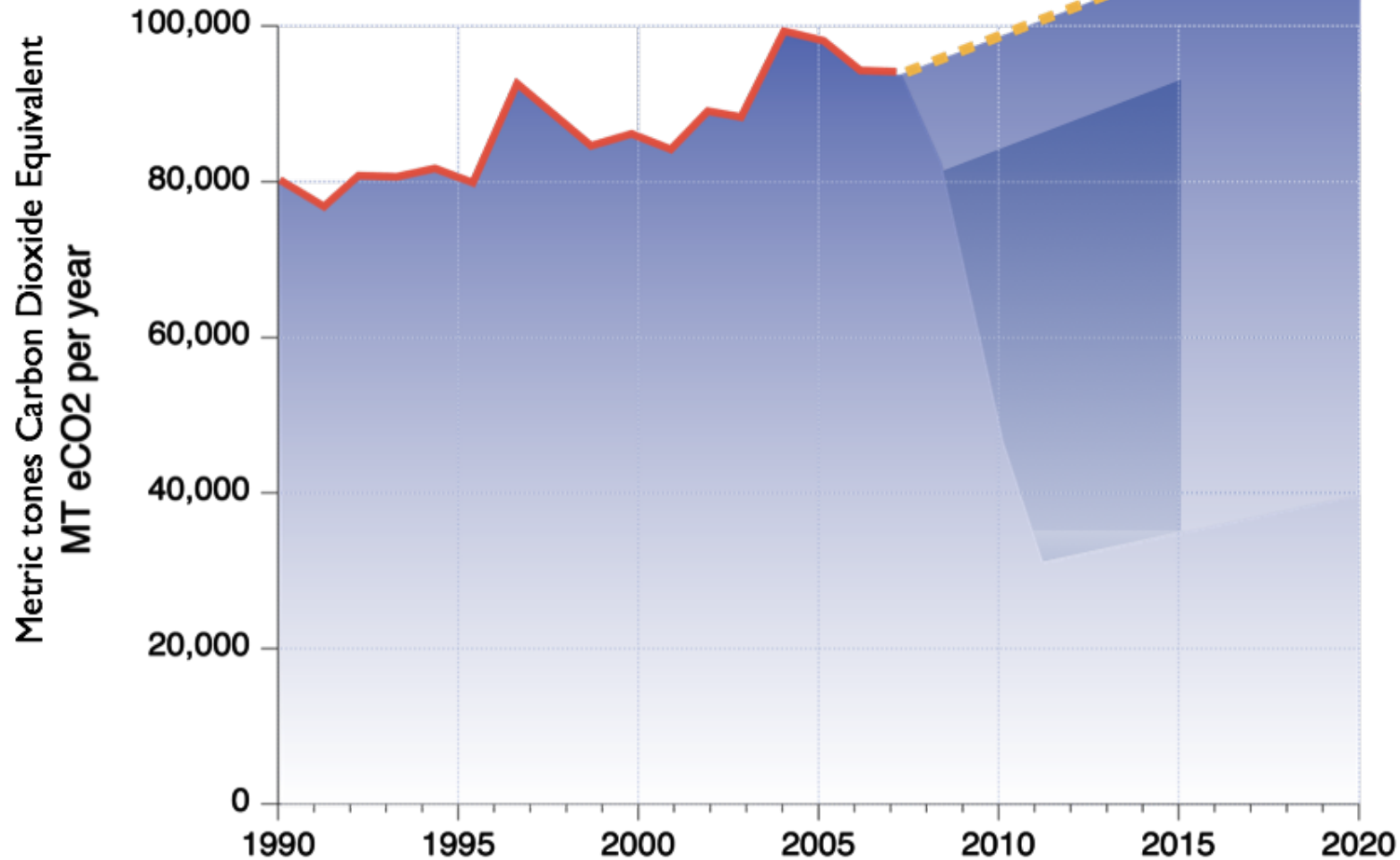


Transportation Options

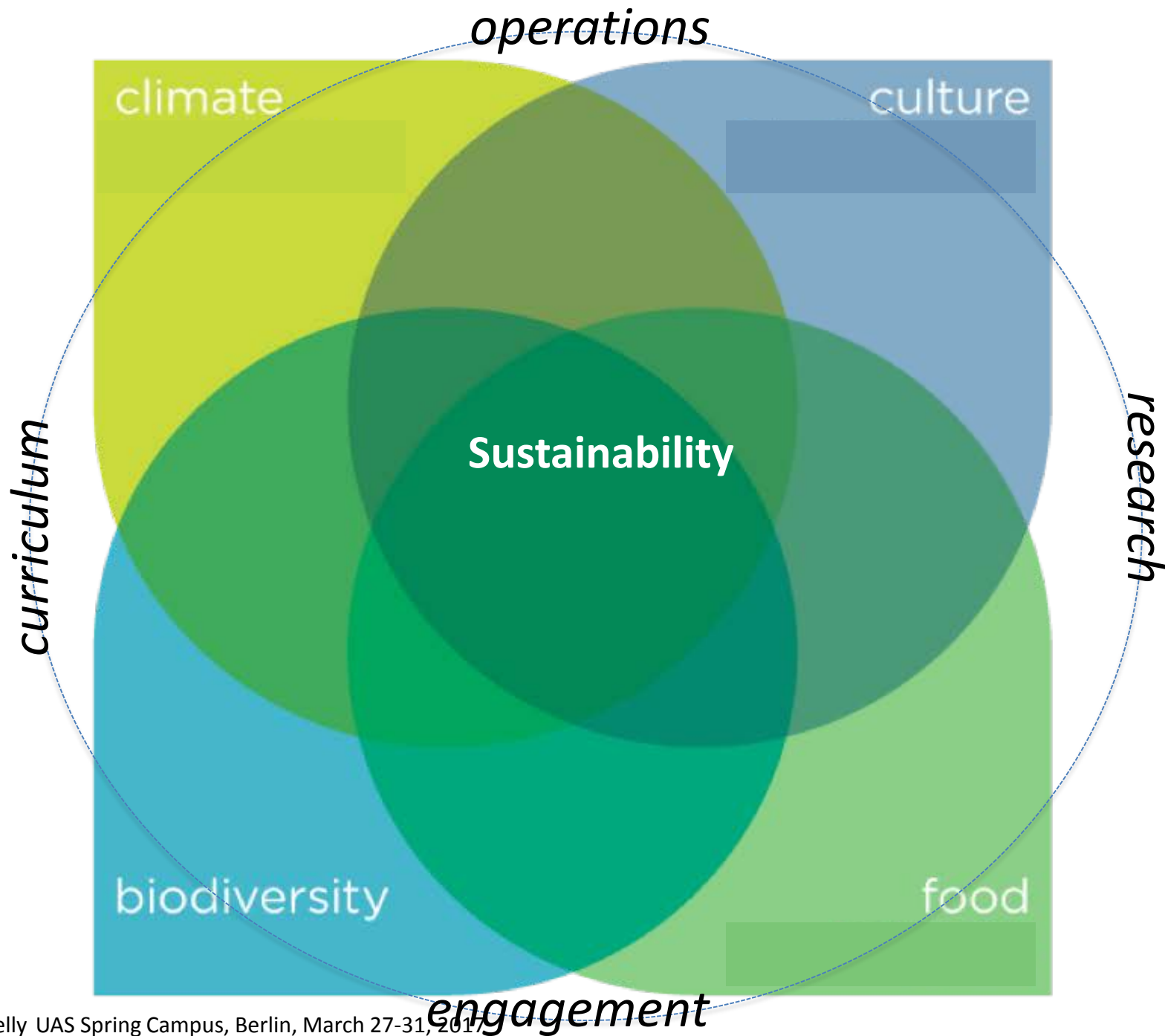


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50% by 2020



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- Food & Society Initiative
Working Group
2000

- Four Annual Soul of Agriculture Conferences 2001-2004

- Eating as a Moral Act
Symposium
2005

- **Citizen Panels on Food**
2002/2004

- **Future of Dairy Farming**
2004



NH Farm to School

2003

- ▶ More than 300 schools and 60 farmers participate
- ▶ Fish-to-school connections
- ▶ Increased direct sales from farms
- ▶ Increased school garden focus
- ▶ Ongoing connection with Northeast Regional Farm to School and Farm to Institution New England (FINE) efforts



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UNH Organic Garden Club 2003



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Dining

[Menus & Locations](#)
[Meal Plans](#)
[Payment Options & Cat's Cache](#)
[Nutrition](#)
[ID Office](#)
[Parents](#)
[Employment](#)
[Sustainability](#)
[About](#)
[Tapingo/Online Ordering](#)
[News](#)



LOCAL AND SUSTAINABLE

Fresh, local food and a healthy environment




LOCAL HARVEST

October 14, 2015 4:30pm to 7:30pm
 Holloway Commons, Stillings Dining Hall,
 Philbrook Dining Hall

11th Annual Local Harvest Dinner | UNH Tales

unh.edu

450 x 450 | [View file](#)



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UNIVERSITY OF
NEW HAMPSHIRE

ORGANIC DAIRY
RESEARCH FARM
AT THE BURLEY
DEMERITT FARM



UNH Sustainability Institute

Slow Food International Founder Carlo Petrini

2006



Curriculum in EcoGastronomy

2006



Building Sustainable Food Communities:

A Systems Approach to Integrating
Agroecology, Food and Nutrition
at the University of New Hampshire



2006-2007
2 Workshops
> 40 UNH Faculty/
Staff

2008



The Dual Major Connecting From Farm to Fork to Nutrition and Health



2008

UNH Organic Dairy Farm Agroecosystem Study

Aber et al

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Farming For the Future

College of Life Sciences and Agriculture Spring 2008 Seminar Series

February 13

Organic Standards for Animal Health and Welfare? Act Now Before It's Too Late

Kathleen Merrigan, PhD; Tufts University

February 27

Think Like A Cow - Understanding Grazing Behavior

Kathy Soder, PhD; University Park, PA

March 12

Pasture Management in an Organic Dairy System

Rick Kersbergen, Extension Professor, University of Maine

March 26

Organic Agroecosystem Management for Sustainability: a Below Ground Perspective.

Johan Six, PhD; University of California at Davis

April 2

Organic Dairy Farming: Veterinary Challenges and Opportunities

Hue Karreman, DVM; Penn Dutch Cow Care and Affiliate Assistant Professor, UNH

April 16

Holistic Herd Health From the Ground Up

Paul Detloff, DVM; Staff Veterinarian, Organic Valley

April 30

Sustainability and Profitability of Organic Dairy Farming

Francis Thicke, PhD; Radiance Dairy, Iowa

Ed Maltby, Executive Director; Northeast Organic Dairy Producers Alliance

May 7

What Do Studies Comparing Organic and Conventional Farming Tell Us?

John Reganold, PhD; Washington State University

Sustainable Ecosystems Faculty Strengths & Synergies



Kirk Broders

Microbial
Diversity
Host-microbe
interactions



Andre Brito

Organic
Dairy
Research
& Nutrition



Becca Rowe

Wildlife
Landscape
Interactions
Historical
ecology



Stuart Grandy

Soils
Biogeochemistry
Microbial ecology



Heidi Asbjornsen

Plant-water-
nutrient cycles
Ecohydrology
Ecophysiology
Forest ecology



Rich Smith

Biodiversity -
Agroecosystem -
Function
Cropping systems



Iago Hale

Plant breeding,
plant genetics/
genomics, complex
trait dissection



Wil Wollheim

Water quality
River networks
Water C

2010



UNIVERSITY of NEW HAMPSHIRE

Sustainable Agriculture and Food Systems

[Program Home](#) [COLSA Home](#) [UNH Home](#)

[HOME](#) [4-YEAR DEGREES](#) [FARMS & FACILITIES](#) [FACULTY & STAFF](#) [CAREERS](#)

Academics

[B.A. Degree](#)

[B.A. Requirements](#)

[B.S. Degree](#)

[B.S. Requirements](#)

[Honors in Major](#)

[Featured Courses](#)

Experiential Learning

[Field Experience](#)

[Undergraduate Research](#)

Related Opportunities & Connections

[Dual Major in Ecogastronomy](#)

[NH Agricultural Experiment Station](#)

[Organic Garden Club](#)

[UNH Cooperative Extension](#)

[UNH Sustainability Academy](#)

Major in Sustainable Agriculture and Food Systems



Undergraduate student research assistants sample cantaloupes that are being grown as part of an experiment to evaluate varieties for New Hampshire's short growing season.

Sustainable Agriculture and Food Systems Quiz

Which breed of cattle are raised at the UNH Organic Dairy Research Farm?:

[Contact Us](#)

[Visit Us](#)

[Admissions Info](#)

[Apply Now](#)

Students in the SAFS Major





Local & Sustainable

We practice energy conservation and efficiency as well to enhance our environment and community. We use a variety of fresh local products from suppliers using sustainable methods that result in great quality foods.

[See more information on our local vendors.](#)

The UNH Dairy Bar restaurant uses compostable packaging and unique recycling sorting bins for guests to contribute in our efforts for a more sustainable UNH.

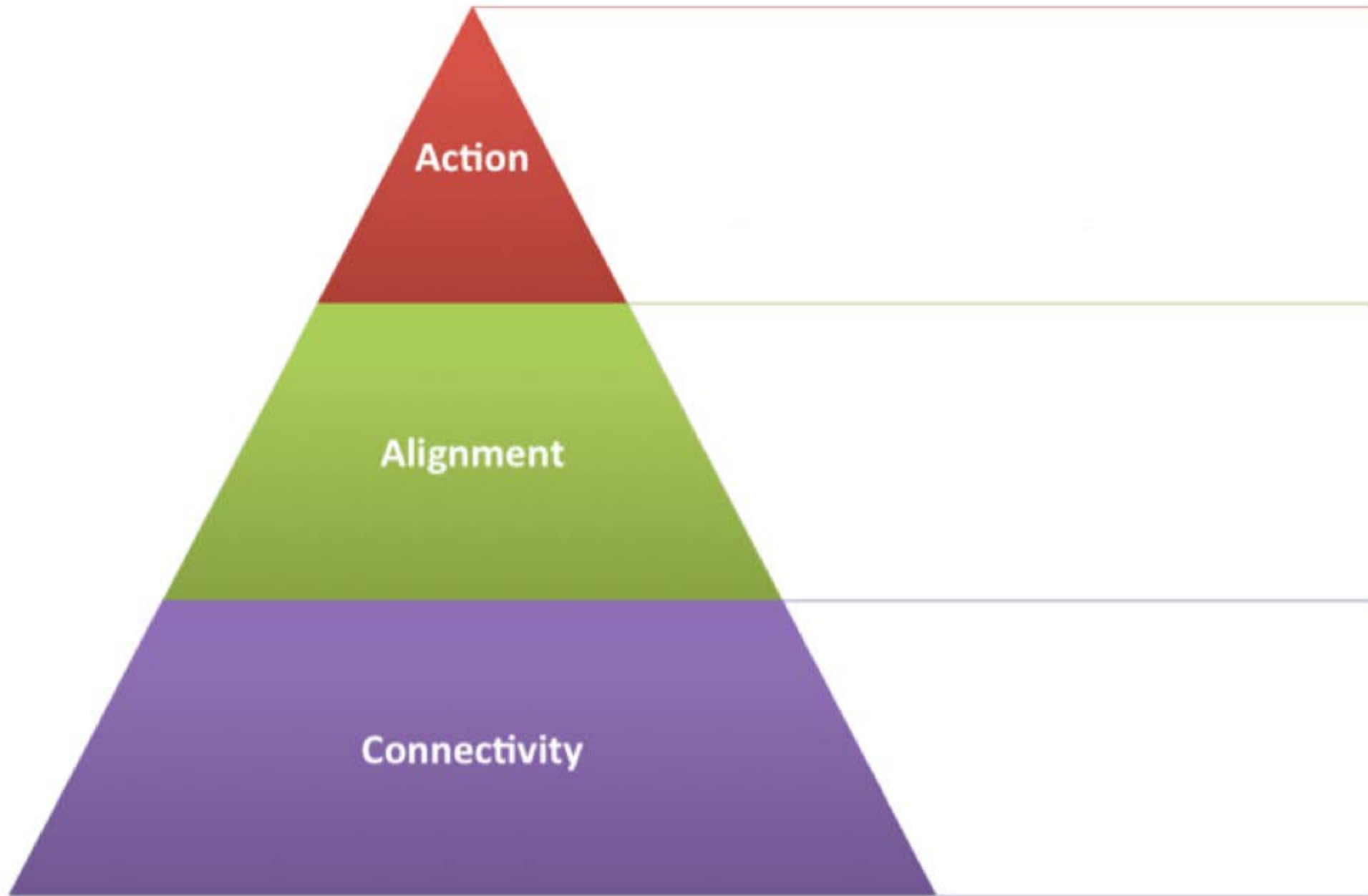


2010-11

ME
VT
NH
MA
CT
RI

*what can we do
better together as a
region than separately
as states and
communities?*







A NEW ENGLAND FOOD VISION

Transforming New England's Food System Together

Food Solutions New England (FSNE) is a regional, collaborative network organized around a single goal: to transform the New England food system into a resilient driver of healthy food, sustainable farming and fishing, and thriving communities.



A New England Food Vision



- *Healthy Food for All*
- *Sustainable Farming and Fishing*
- *Thriving Communities*





Marilyn Moore



Karin Spiller



Julius Kolawole

FSNE Ambassadors: Who Participates Matters

FSNE Food Business Case

popular
engagement,
mobilization,
& activism
for FSNE food

open, participatory
access to research,
information
+ inspiration
(NARRATIVE) *



LEADERSHIP

Identify, engage + support
leaders who will work
across sectors to champion
the FSNE vision

NEW ENGLAND FOOD VISION

At least 50% of our food is
produced in the region by 2060

Sustainable
farming
& fishing

Healthy
food
for all

Racial
equity &
food justice

Thriving
communities

Make the
Business
Case

Cultivate
Leaders

SUSTAINABLE
ECONOMY

Mobilize
People

A NEW FOOD STORY

A New England
Food System with
DIGNITY

Inspire with
knowledge
and stories

DEMOCRATIC
EMPOWERMENT



WHO WE ARE | SIX STATES, ONE REGION | GET INVOLVED | NEWS & RESOURCES | A NEW ENGLAND FOOD VISION



HOME // GET INVOLVED // FOOD SOLUTIONS NEW ENGLAND NETWORK LEADERSHIP INSTITUTE

Food Solutions New England Network Leadership Institute



HARNESSING THE POWER OF
NETWORKS FOR SOCIAL IMPACT

CONNECTING TO CHANGE THE WORLD

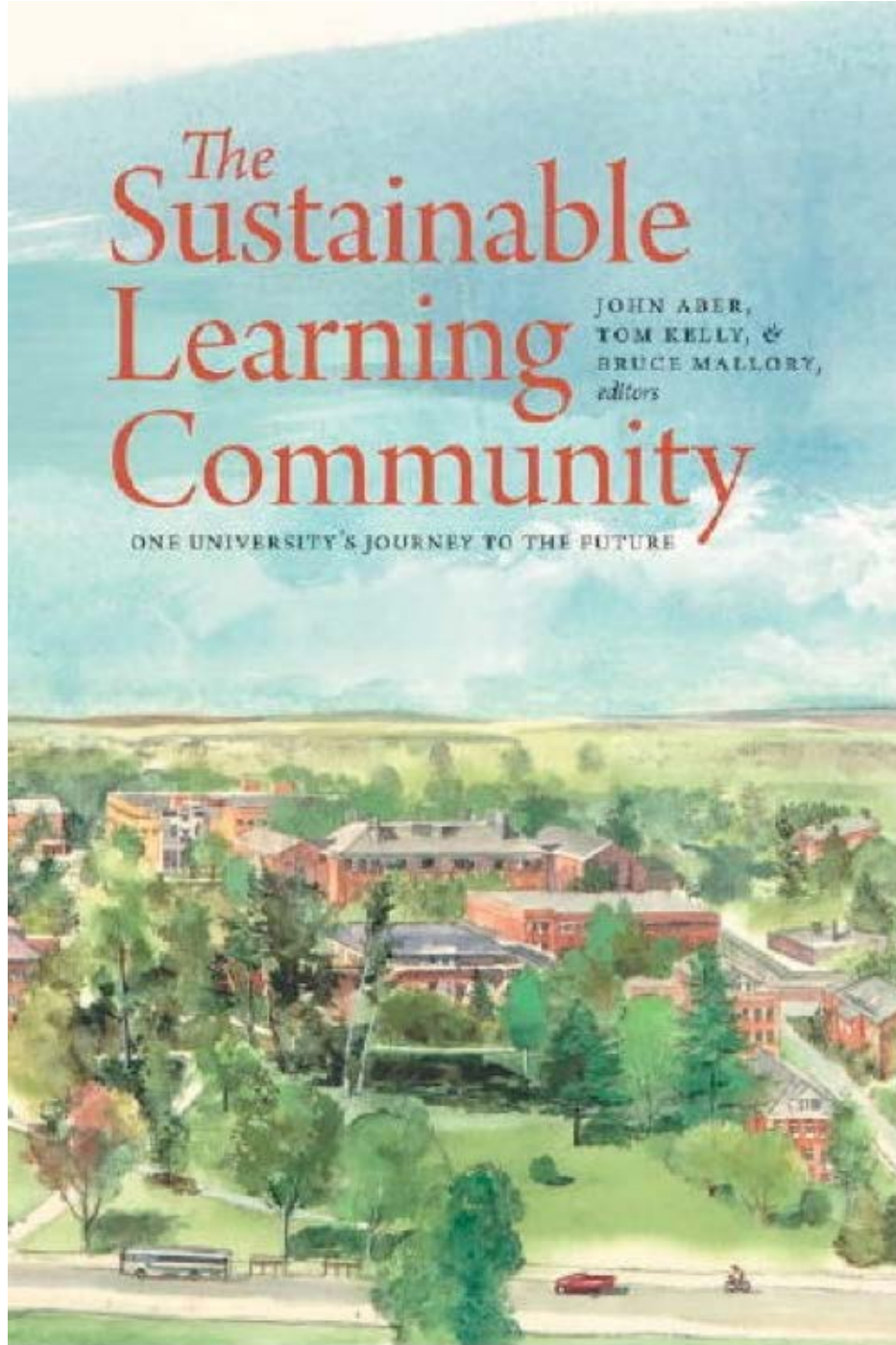


PETER PLASTRIK
MADELEINE TAYLOR
JOHN CLEVELAND

Networks
where systems and
sustainability can come
together



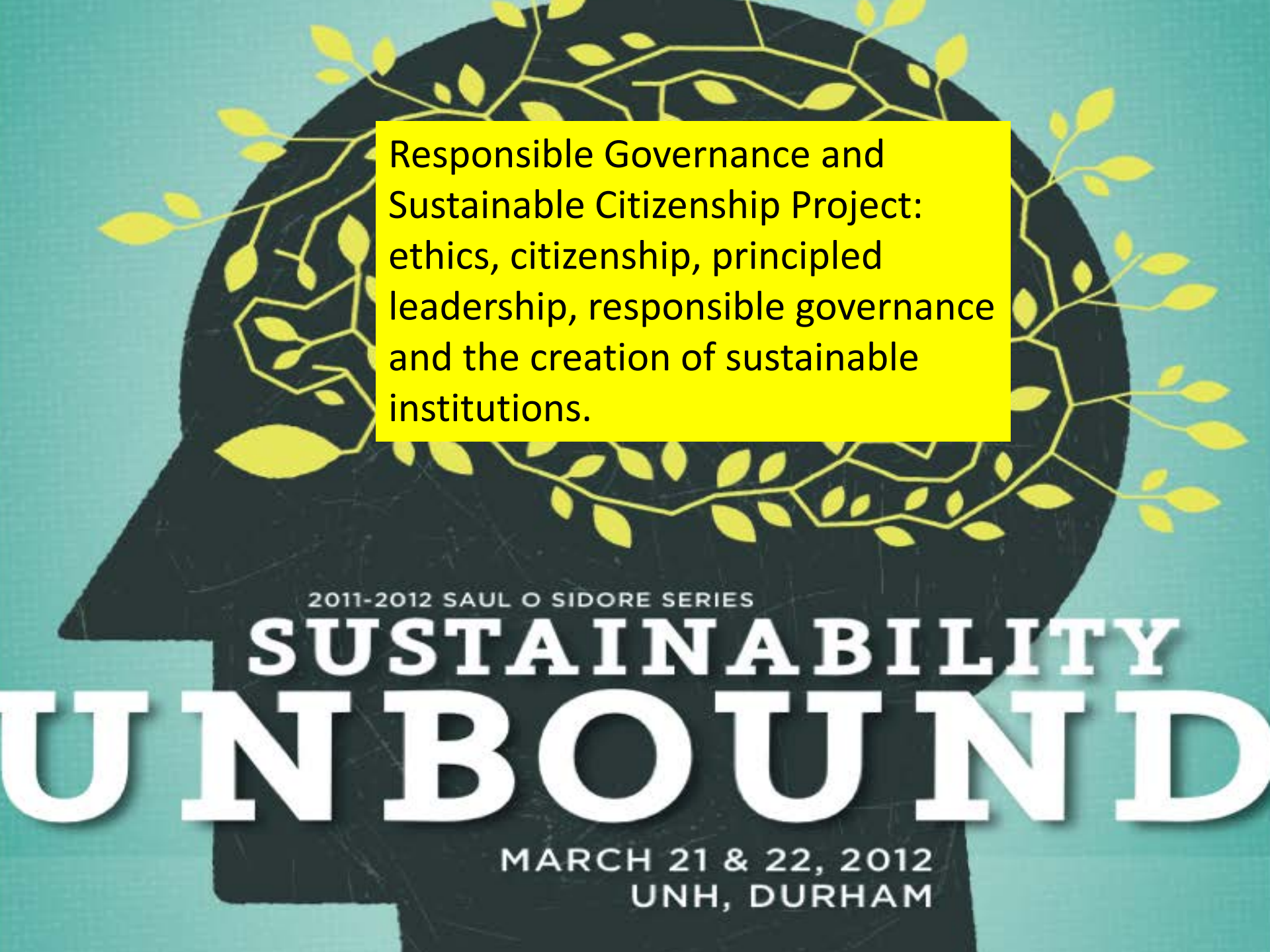
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> 60 authors
from faculty
and staff



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Responsible Governance and
Sustainable Citizenship Project:
ethics, citizenship, principled
leadership, responsible governance
and the creation of sustainable
institutions.

2011-2012 SAUL O SIDORE SERIES

SUSTAINABILITY UNBOUNDED

MARCH 21 & 22, 2012
UNH, DURHAM

What is STARS?



What Works

- Robust conception of Sustainability/Sustainability Practice and Science
- CORE Framework with Engagement
- Network Practice/Facilitative Leadership
- Vision/Shared Vision
- Trust Building
- Patience/Tenacity

Challenges

- “Internal/External” dichotomy
- Culture of specialization and experts.
- Ph.D students and publications legitimize
- Reductionist Science
- Territoriality
- Fear/suspicion of Sustainability disruption

sustainability as university moon shot

sustainability as social justice movement

*ends not already
agreed upon*

*plurality of values
contested ends and
means and priorities*

*a question of both ends
and means*

*mobilization of civil
society and institutions*

*ends already agreed
upon*

*only a question of
means*

*mobilization of science
and technology*

*transformation of
political problems into
technical problems*

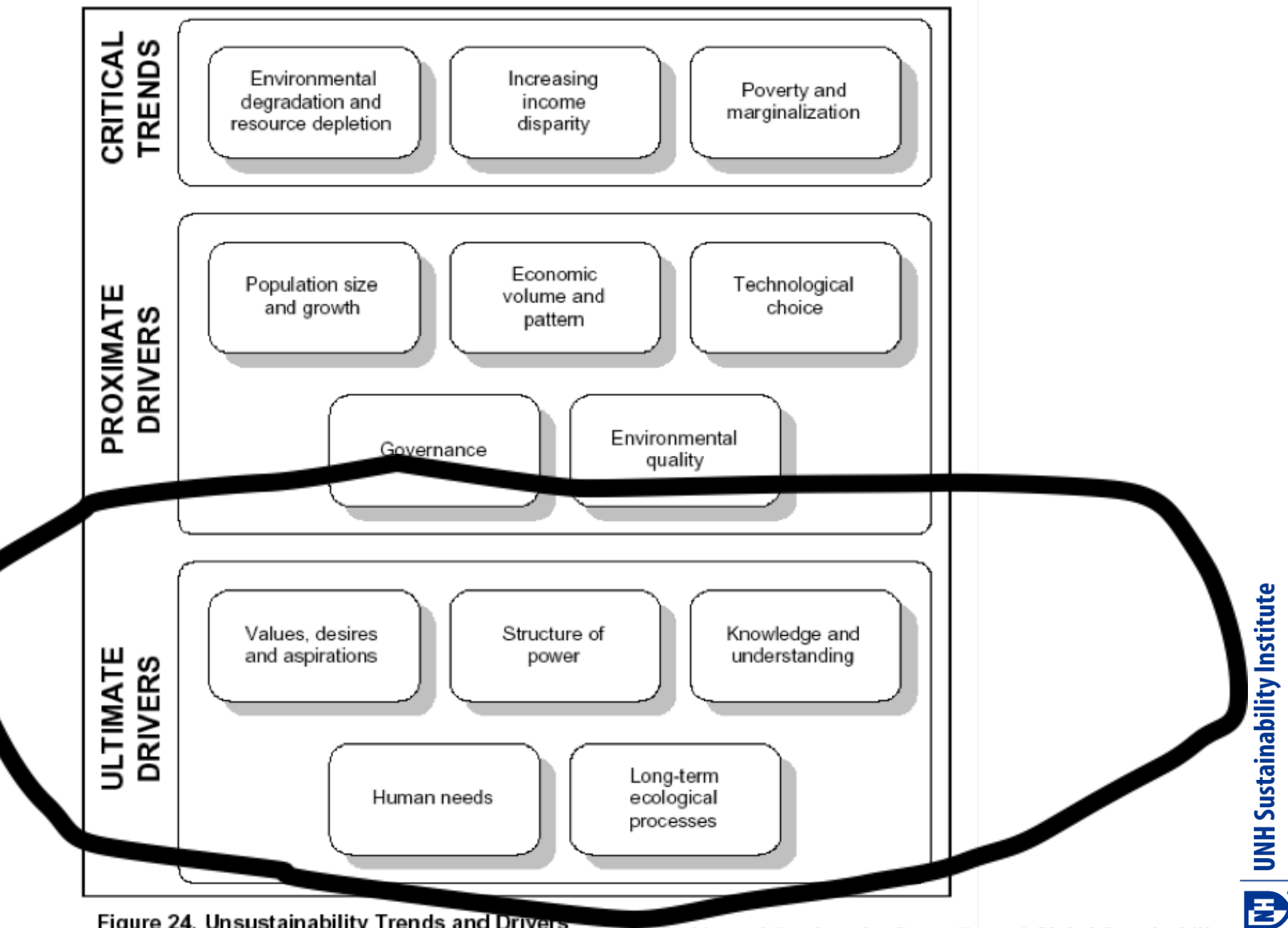


Figure 24. Unsustainability Trends and Drivers