

# CDKM Leermiddag 3: Institutionaliseren kun je leren

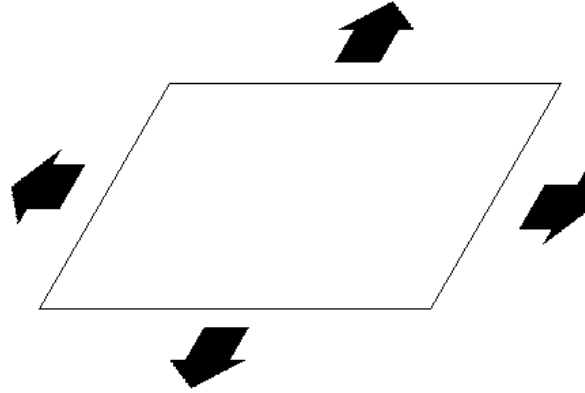
Met John Robinson (University of Toronto), Peter Pelzer (Urban Futures Studio, UU), Siu-Siu Oen (Min. OCW), Suzanne Potjer en Joshua Cohen (begeleiders CDKM leernetwerk rondom Opschaling)

# Program of the session

- 13.30-13.40 - Introduction
- 13.40-14.05 - Pyramids, Planes and Scaling Up: some thoughts on the institutionalization of sustainability in a university context (John Robinson, University of Toronto)
- 14.05-14.25 - Discussing the Mixed Classroom in relation to John's ideas on institutional change (Peter Pelzer, Urban Futures Studio)
- 14.25-14.40 - A systemic perspective on institutional change in the Dutch context (Siu-Siu Oen, Ministry of Education, Culture and Science)
- 14.40-14.45 Closing the session

# Institutional entrepreneurship

- “institutional entrepreneurs [are] change agents who, whether or not they initially intended to change their institutional environment, initiate, and actively participate in the implementation of, changes that diverge from existing institutions”  
(Battilana et al., 2009, p.70)



Pyramids, planes and scaling up: some thoughts on the institutionalization of sustainability in a university context

Presentation at City Deal on Education conference,  
Breda, The Netherlands



John Robinson  
University of Toronto

Jun 3 2022



# A New Social Contract?

nature Vol 462/12 November 2009

## OPINION

### Universities need a new social contract

To reconcile solution-driven research and blue-skies thinking, academic institutions urgently need innovative collaborations and new funding models, says **Indira V. Samarasekera**.

Over the past year, academic leaders from around the world have met to contemplate the future of higher education and university research, against the backdrop of global financial upheaval. As president of the University of Alberta in Edmonton, Canada, I have participated in some of these international roundtables. My conclusion? It is time to construct a new social contract between research universities and their public and private partners, one that both promotes the pursuit of basic research and encourages solution-driven work. We, the academic leaders and universities, should embrace this new relationship, establishing a funding mechanism to fit. We should devise new ways to measure success, and actively copy the organizations that work best. If we can do all that, we stand a better chance of solving the world's problems — now and in future.

Public and private universities worldwide face a bleak financial future. The value of endowments has plummeted — by as much as 30% in some institutions over the past year. Government support has been slashed — by up to 20% in the United States and up to 8% in Canada. Philanthropic support is harder to come by, and aspiring students can barely afford current fees, let alone increases in debt.

Yet nations are counting on the talent of graduates and on the discoveries of university researchers to restore and advance the global economy. As testimony to this faith, investments in research and development feature in stimulus packages — including US\$16 billion in the United States and Can\$2 billion in Canada. Many of these investments are targeted to support solution-driven research in specific areas. The US stimulus package includes funding for advanced energy research and climate-change research. The Canadian package funds ready-to-be-built infrastructure projects at colleges and universities. In addition, Can\$200 million over seven years has been committed to the Canada Excellence Research Chairs, a new federal programme to attract top academics to build world-class centres. These hubs will focus on areas identified as strategically important to Canada's long-term economic plan: environment, natural resources, life and health sciences and information technology.

This push towards more solution-driven research funding, which pre-dates the recession, is a source of growing concern for many academic researchers, and for good reason. They are worried about the potential devaluation of basic-science research and arts scholarship, which have led to profound advances in human knowledge and to major commercial successes. Such 'blue-skies' research was, until recently, considered the mainstay of universities and a crucial part of the education of undergraduate and graduate students, and it must remain so.

But converging forces — the expansion of globalization, the increasing ease of communication and the trend of 'open innovation', whereby companies promote research outside their own buildings — are reshaping how public universities work, and to what end. Understandably, the supporting populace, governments, industries, philanthropic organizations and social agencies are calling for researchers to focus on seeking solutions to specific challenges.

Some researchers have responded enthusiastically. But academic thinking and funding mechanisms have not kept pace with the dual imperatives of blue-skies research and solution-driven research. It is time to bridge this gap.

**Slow going**  
The most urgent problems demanding scientific and technological research attention today are global — from international security to energy, environmental sustainability and economic recovery. To be fast and effective, we must stimulate and support interdisciplinary, inter-profession and inter-sector approaches, funded internationally.

What obstacles stand in the way? Inertia and



**SUMMARY**

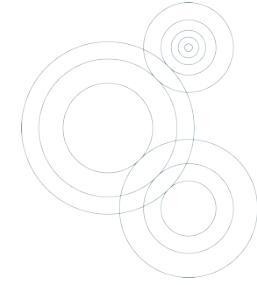
- Answers to big global problems are being lost to structural inertia
- Interdisciplinary, inter-institutional, international projects need support
- The world's government funding leaders must design a fix together

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“It is time to construct a new social contract between research universities and tier public and private partners; one that both promotes the pursuit of basic research and encourages solution-driven work.”  
(Samarasekera, 2009 in *Nature*)

This has also been called the “Third Mission” of universities.  
(e.g. Pinheiro et al, 2015)

# Regenerative Sustainability



Simultaneously increase human  
and environmental wellbeing

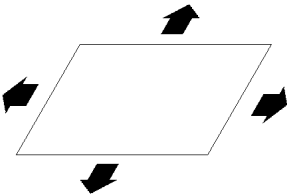


# Outline

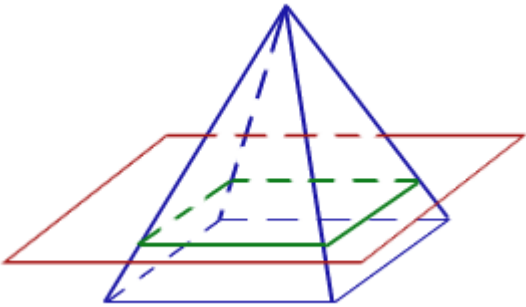
1. Institutional culture change
  - The pyramid and the plane; strategies for creating change
2. Infusion of sustainability action into higher education
  - enabling and institutional embedding
3. Scaling up
  - scale-inflected theory of change, and role of university

# Institutional Culture Change: the pyramid and the plane

Academic



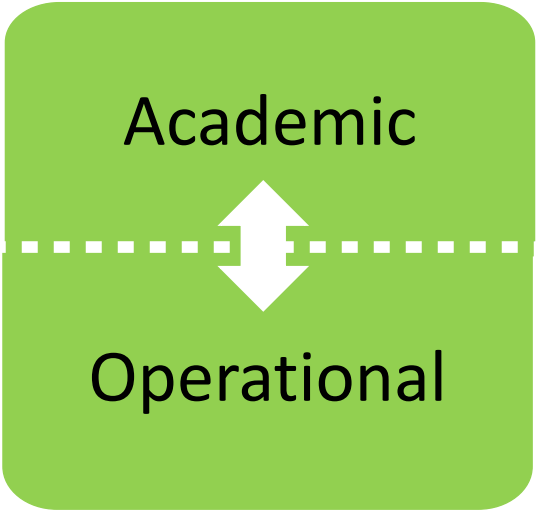
“The Plane”



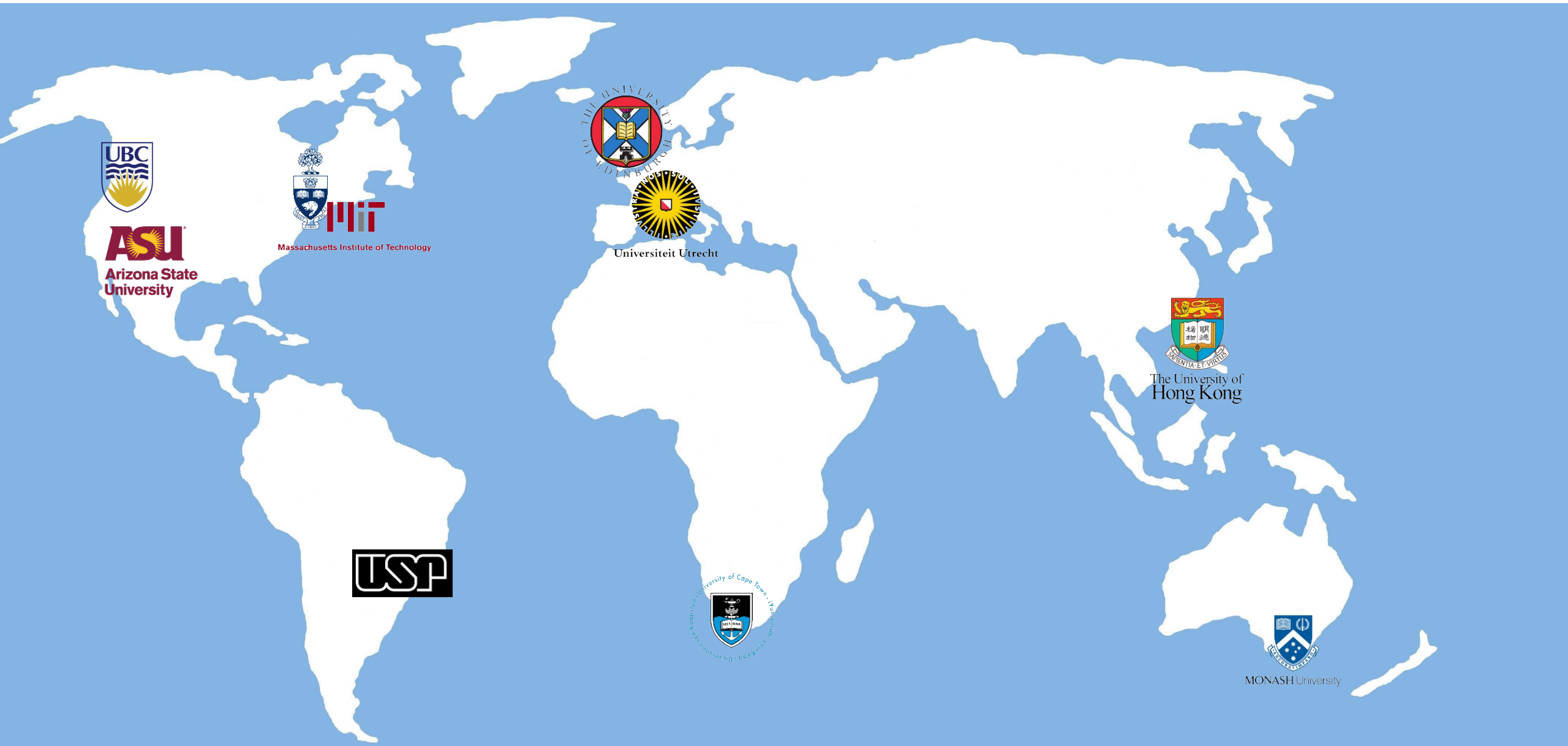
Operational



“The Pyramid”

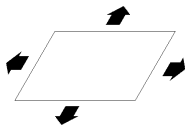


# Towards a whole institution approach to sustainability



# A Whole Institution Approach to Sustainability Governance

Distributed Agency (DA) vs. Central Coordination (CC) in 10 universities



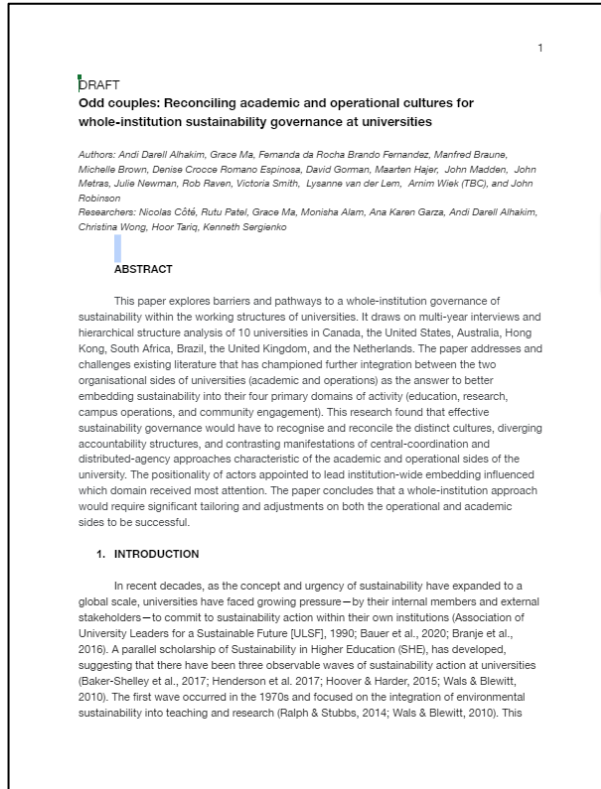
“The Plane”



“The Pyramid”

Academic Sustainability Governance	Operational Sustainability Governance
Culture is inherently DA, with CC providing support	Culture is primarily CC, with supporting DA components
Independence in research and teaching, ‘republic of scholars’	Results-oriented, directives from upper management
Departments can influence, administrations not so much	Administrations direct sustainability work
Buy-in is voluntary; incentives needed	Buy-in in mandated; no incentives needed
Need CC for institutional engagement	Need DA for academic engagement (e.g. living lab)





## Reconciling Distributed Agency with Central Coordination

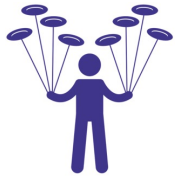
A whole institution approach must be tailored to differences in cultures, in accountability structures, and in the manifestation and importance of CC and DA governance models

- Must speak to agendas on both sides
- Need flexible and adaptable governance structures
- Students as crucial intermediaries
- 5 principles:
  1. Enabling role
  2. Collective and inclusive narrative
  3. Integration of operational and academic
  4. Leveraging CE for TD research
  5. Embed sustainability across curriculum

# Implementation Challenges and Responses



1. Path Dependence (*"Needle in the groove"*)  
→ perseverance; visibility; multi-level approach



2. Coordination (*"Plate spinning"*)  
→ build bridges; frequent visits; connect to agendas



3. Momentum (*"Brick laying"*)  
→ Constant forward progress; updates; follow-up



4. Partnerships & Team-building (*"Mosaic "*)  
→ Joint goals; 'no net increase'; 'mutual benefit']

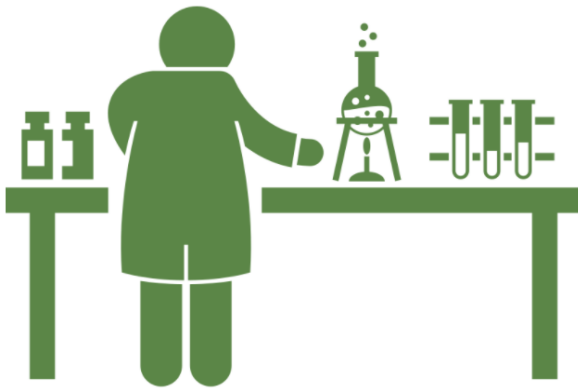


5. The Role of the University (*"Wall flower"*)  
→ cross-cutting projects; living labs; agent of change



# Two more (with thanks to Fiona Miller)

## 6. Protected niche



Reflects the need for **experimentation**, to identify and test new practices

- What new practices need a protected niche for experimentation?

## 7. Catching waves



Reflects the constancy of change; we are not starting but **steering**

- What existing reforms can you leverage (or tilt) to make this change?

## What we have learned

Institutional issues are as important as substantive ones: need to change the rules of the game

Hold needle up; spin plates; lay bricks; create mosaics; join the dance; experiment; and catch the wave: the common thread is *continuous engagement*

Is a big latent demand for change and sustainability in organizations: key is to find ways forward that work for various partners

Is very important to enable others, not control, manage or direct

Success is when sustainability is normalized throughout the institution: it becomes the default not the change



## President's Advisory Committee on the Environment, Climate Change, and Sustainability (CECCS)

Goals (whole institution approach; enabling role):

- Sustainability a key component of U of T identity: whole institution approach
- Local and international leadership in sustainability; and
- Recognition, sharing and aggregation of good sustainability practices across the university.

Four Cross-cutting Themes (apply to all activities):

Campus as Living Lab



Student Engagement



University as Agent of Change



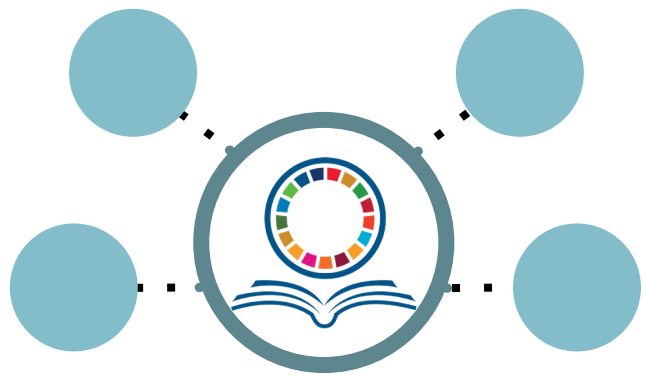
SDGs





# CECCS Subcommittees

Sustainability  
Pathways

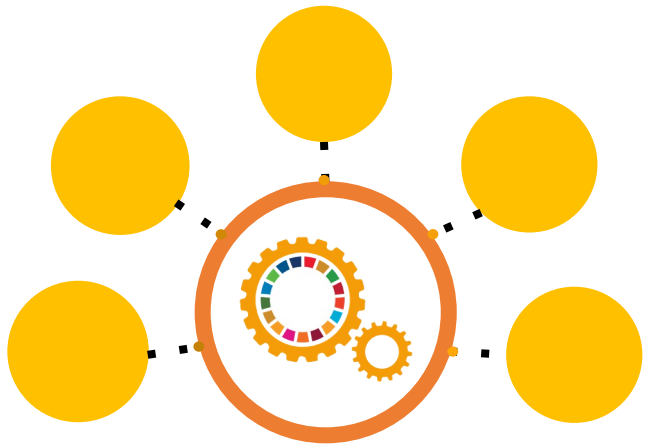


Teaching and Learning

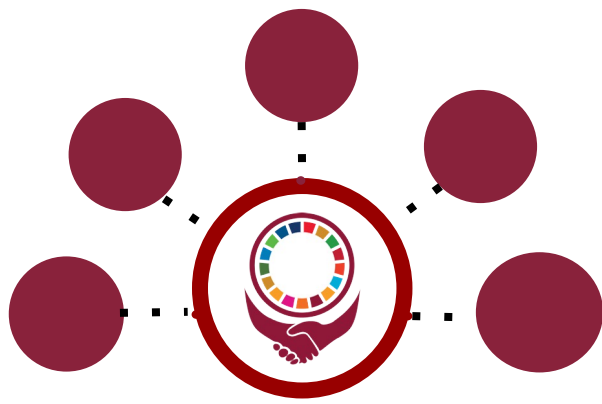


Research

Climate  
Positive  
Campus



Operations

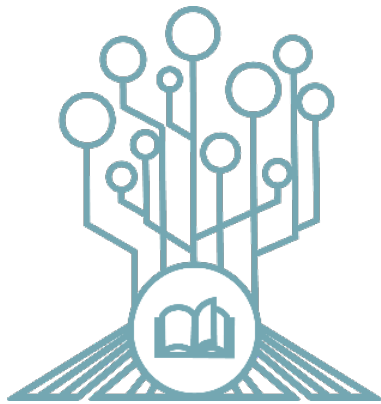


Engagement &  
Partnerships



Teaching and  
Learning

## Sustainability Pathways Framework



**Sustainability Citizen** (acknowledgement of sustainability-related co-curricular activities, recorded on Student Co-Curricular Record (CCR))

**Sustainability Scholar** (sustainability curricular pathways certificate or minor, recorded on transcript)

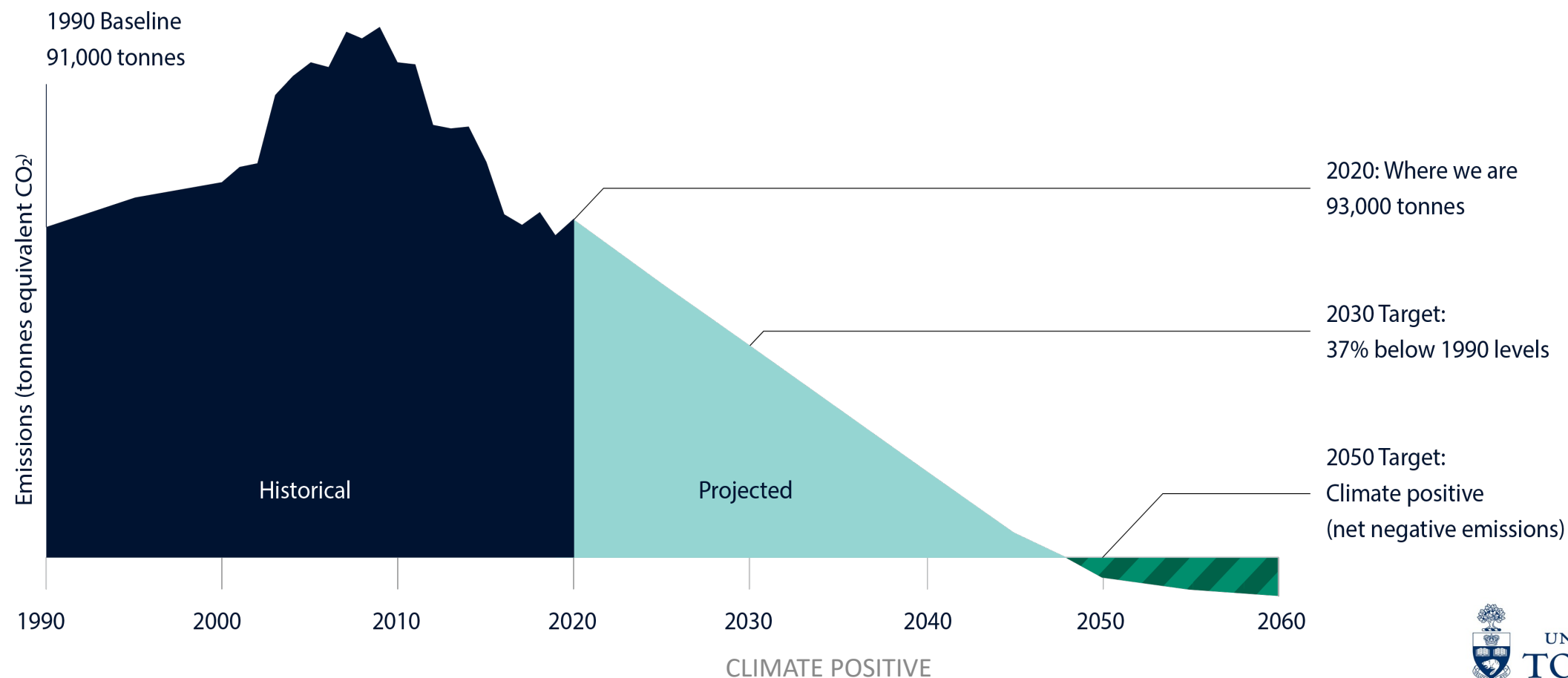
**Sustainability Leader** (Citizen + Scholar + designated capstone or community-engaged learning course)

Will be offered to all undergraduate students at the university (not mandatory)



Operations

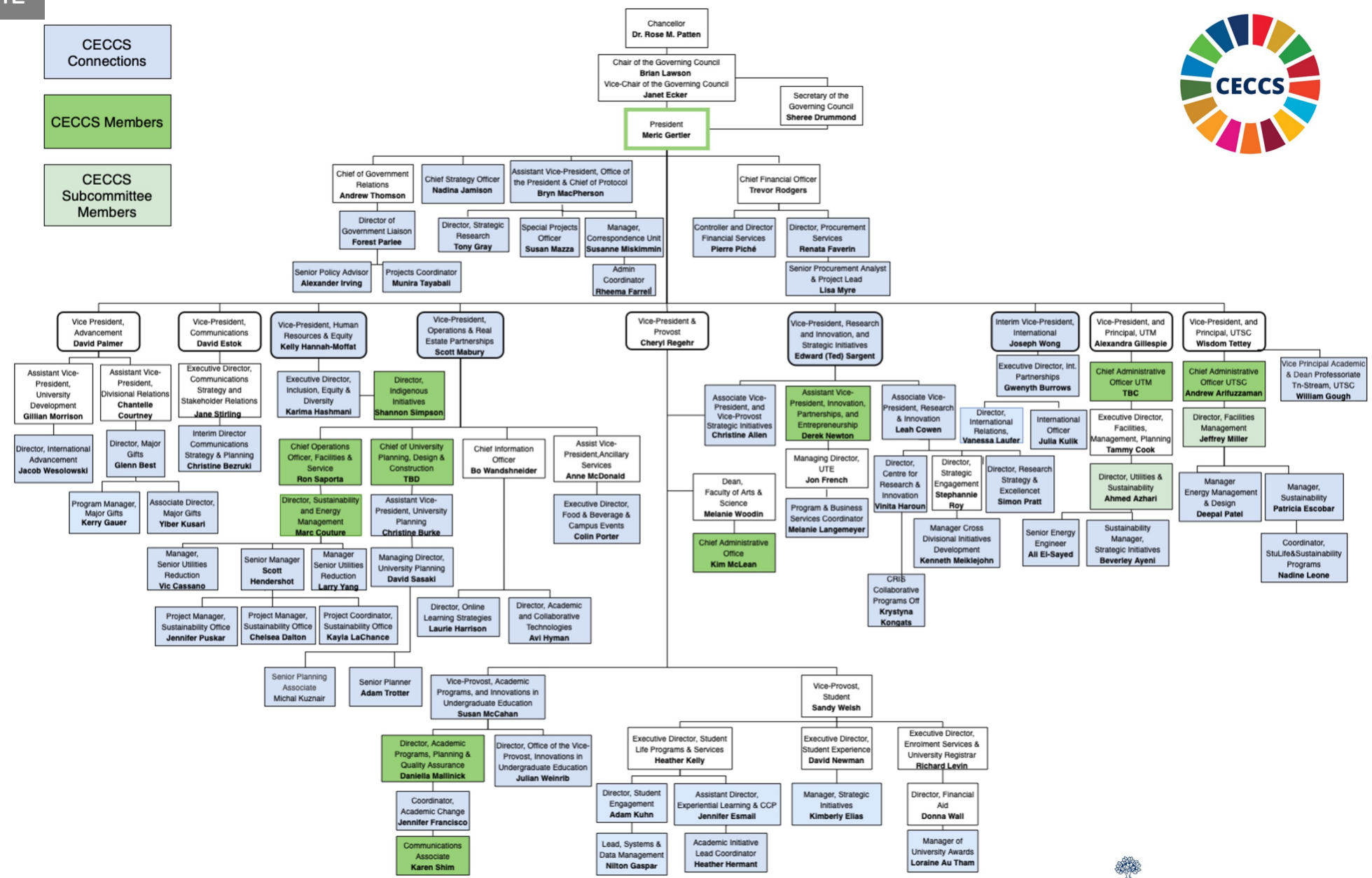
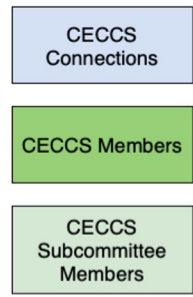
“The University of Toronto St. George Campus will become climate positive by 2050”



# Embedding Sustainability at U of T

As of Nov 2021:

- CECCS has engaged all 9 Vice-Presidential offices and 9 of 18 divisions
- CECCS takes an enabling role: celebrating, initiating, piloting, embedding



## Urban Climate Action Project (UCAP)

Many cities have adopted climate targets that will require “transformational changes in how we live, work, commute and build” (City of Toronto, 2020)

Create a city-university collaborative

Focus on contributing actionable knowledge to help the City of Toronto achieve its TransformTO climate action goals and targets

Toronto node of UCAN network:



PROJECT: UC3 Cities Climate Action Network (UCAN)  
CHAMPIONS: University of Arizona, University of British Columbia, Drexel U, University of Toronto

### Actionable Knowledge

Campus as a living lab  
Urban transition labs  
Evaluations of programs and processes  
Databases and models  
Analysis of transition processes  
Student internships with city  
Community engagement research  
Convening function (events, activities, meetings, etc.)  
Network learnings and jurisdictional scans



# The Role of the University in contributing to scaling up

RESEARCH	ENGAGE & CONVENE	INNOVATE & EXPERIMENT	EVALUATE	BUILD CAPACITY
<p>R1: develop <b>collaborative interdisciplinary research</b></p> <p>R2: identify <b>best practices around the world</b></p> <p>R3: <b>scan of relevant local and global trends</b></p> <p>R4: scan <b>funding mechanisms</b></p>	<p>EC1: Convene <b>partner events</b> and activities</p> <p>EC2: <b>Share operational practices</b></p> <p>EC3: Jointly develop <b>community engagement programs</b></p> <p>EC4: Grow and strengthen <b>strategic partnerships</b></p>	<p>IET1: Turn campuses into <b>living labs and testbeds</b></p> <p>IET2: Set up <b>urban transitions labs</b> in city neighbourhoods,</p> <p>IE3: Jointly develop <b>databases &amp; models</b></p> <p>IE4: Share <b>new approaches for problem solving</b> (e.g., multi-solving)</p>	<p>E1: <b>Evaluate</b> city programs and processes.</p> <p>E2: Embody and enhance <b>reflexive practice</b> to create new knowledge and mindsets</p>	<p>BC1: Engage graduate and undergraduate students <b>internships and RAs.</b></p> <p>BC2: Help to <b>grow the UCAN network.</b></p>

## In conclusion . . .

Institutional culture change at universities is needed to effectively address issues like sustainability and climate change

Ultimate goal is normalization of sustainability through academic/operational partnerships and institutional embedding

There is also a major opportunity to strengthen and deepen relationships with non-academic partners

Such projects offer a way for the university to contribute to scaling sustainability in the community



Peter Pelzer (UFS) – Mixed Classroom











OF THE LINEAR ECONOMY

me to your 24/7 corner shop.

the curious and strange era of the linear  
get how we used to 'throw away' useful  
sources from Mother Earth. Between 1945  
le than ever before, and we consumed the  
le. Back then, we were convinced that this  
'I shop therefore I am'. Little did we know.

ience the transformation of the linear  
ty. Last night.

2019-2020

MUSE  
OF THE  
LINEAR  
ECONOMY







