THE MAASTRICHT UNIVERSITY SUSTAINABILITY CURVE

Alex Baker-Shelley

PhD Candidate; Organisational Transformation

*Sustainability Intelligence Solutions; Action Research Entrepreneur*

Ryderwilliam21@outlook.com

International Centre for Integrated assessment and Sustainable development

THIS TALK

1. **Characteristics '***Merkmalen***' of Transformative Sustainability**

2. **Context and Place:** Outlier in NL, Core in Euregio

3. **Timeline:** Quick History of Maastricht University

4. **The Current Situation:** State of Play now

5. **Take-Away Lessons** from UM's Experience & **Open Discussion**

The world is a complex, interconnected, finite, ecological-social-psychological-economic system. We treat it as if it were not, as if it were divisible, separable, simple, and infinite. Our persistent, intractable global problems arise directly from this mismatch.
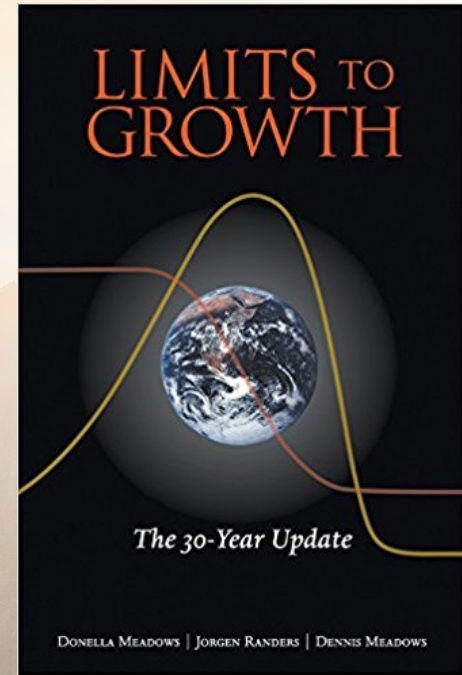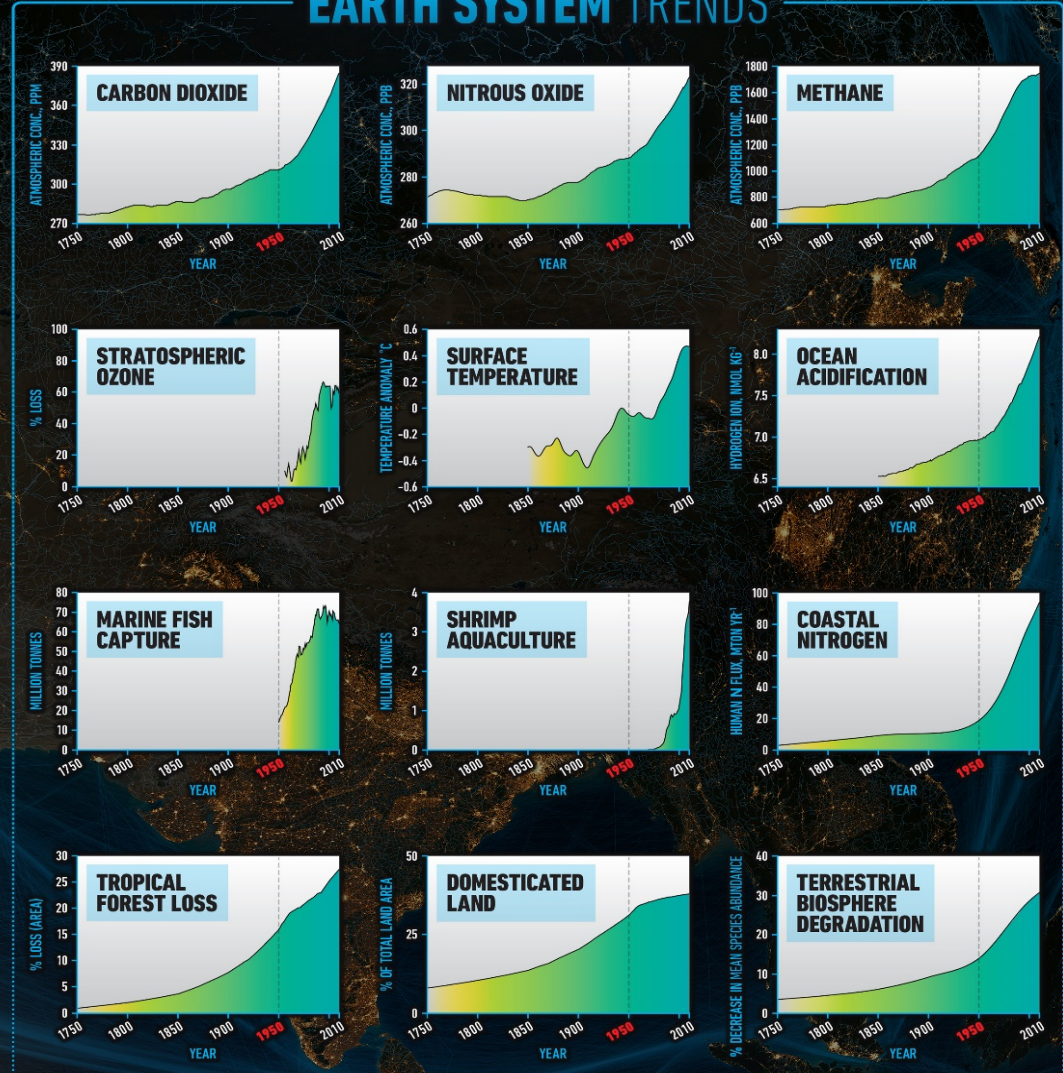
Donella Meadows; 1941-2001

LIMITS TO GROWTH

The 30-Year Update

DONELLA MEADOWS | JORGEN RANDERS | DENNIS MEADOWS

THE GREAT ACCELERATION

SOCIO-ECONOMIC TRENDS

EARTH SYSTEM TRENDS

WHAT DOES SUSTAINABILITY MEAN?

Planetary Boundaries
A safe operating space for humanity

Source: Steffen et al. Planetary Boundaries: Guiding human development on a changing planet, Science, 16 January 2015.
Design: Globaia
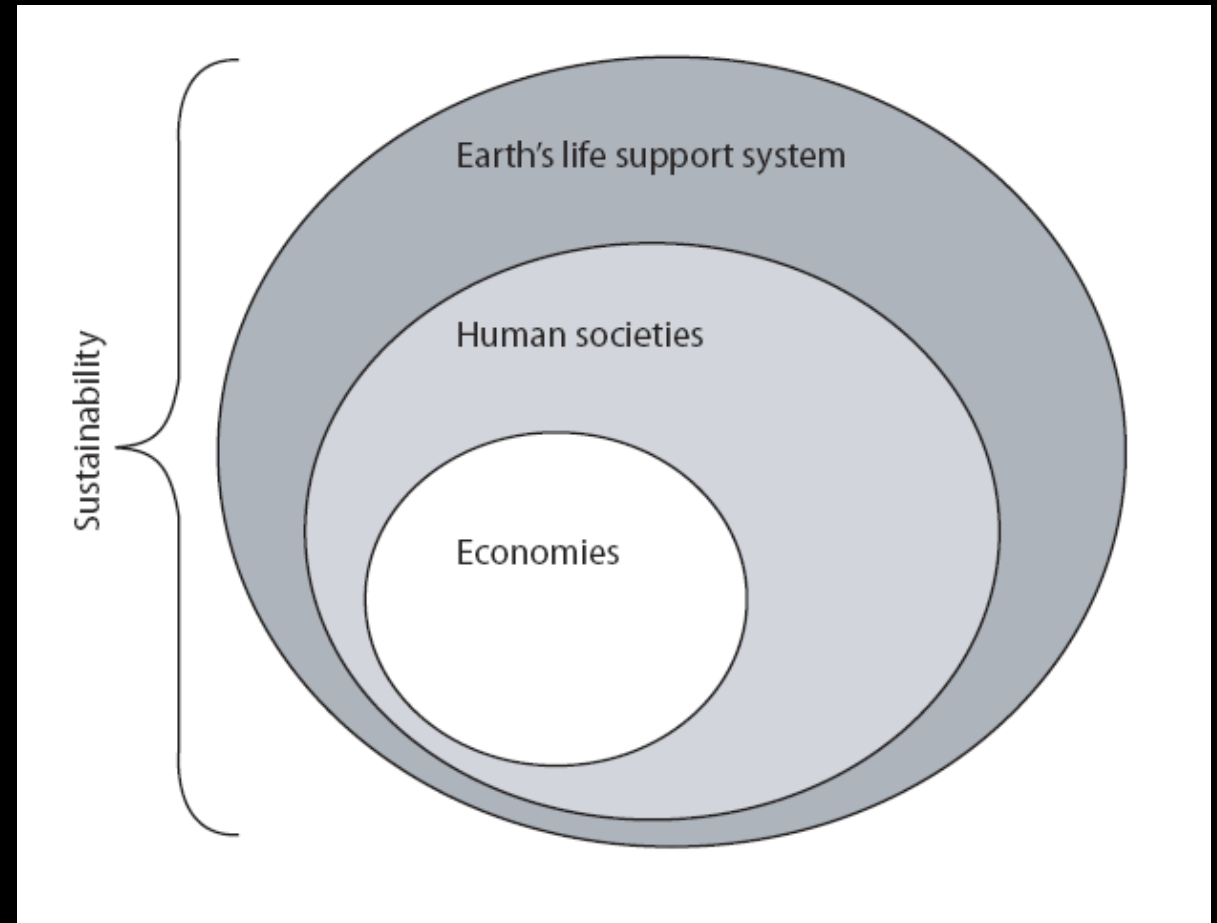
The Imperative for Change, is Simply put

→ Radical human transformation of the environment **both necessitates** and **threatens** an equally radical transformation of human life

→ We must generate solutions through active learning, experimentation and innovation; it is necessary to go well beyond ideals

→ Nothing less than a transformation of our **social, organisational** and **economic** systems is needed for humanity to attain a fundamentally more resilient, interdependent and harmonious way of living, as part of the **ecologies it belongs** to.

So, the Bottom line is Stark

*"Educational institutions and governments <u>should provide</u> the **institutional support**, **resources** and **legitimacy** for **youth-led change** towards <u>sustainability.</u>*
*This requires a <u>combination</u> of **bottom-up initiatives** and **top-down steering**.*
Mechanisms should include <u>dedicated funding</u>, <u>institutional integration</u>, <u>working space</u>,
<u>*mandates*</u>, <u>*recognition*</u>*, and* <u>*training*</u> *for* **youth-led sustainability initiatives***."*

UNESCO Education for Sustainable Development Youth Statement, 2015

A RENEWED ROLE?
REDESIGNING UNIVERSITIES AS STEWARDS

- Universities as principal "**change-agents**" in society and the environment

- In order to move from the university to the regional environment, we first need to zoom into the **university** itself.

- **Macro-level impact** seems rooted in university actors **learning** to better **effectuate** and **navigate** their own organisation's **sustainability** performance.

1) CHARACTERISTICS OF THE TRANSFORMATIVE SUSTAINABLE UNIVERSITY

"Merkmale" der transformativen Nachhaltigkeit

❖ Governance for Sustainability

❖ Effective Intrapreneurship

❖ Training Sustainability Competences

❖ Educational Innovation

❖ Fusing Academic Disciplines

❖ Scientific knowledge as a societal service

THE TRANSFORMATIVE 'SUSTAINABLE' UNIVERSITY

- Substantive **reconceptualisation** of the university institutional model, an old model, <u>centuries old</u>.

- Universities are **organisations *of* learning**, yet they <u>struggle</u> to set up <u>structures to promote</u> **their own organisational learning**

- However, many now realise they must **undergo transformations** themselves to be <u>more</u> **commensurate** to the **needs** <u>of our society</u> in the <u>twenty-first</u> century.

THE TRANSFORMATIVE 'SUSTAINABLE' UNIVERSITY

➢ Helping transformations towards sustainability **around them** includes the **co-responsibility** for the <u>privilege</u> of <u>learning</u> and <u>knowledge mastery</u> that universities provide to students and researchers.

➢ It behoves the university to **act as a steward for society**, in an academically <u>rigorous</u>, <u>pragmatic</u> yet <u>innovative</u> advocacy for transformational change towards sustainability, **nested within their regional environments**

UNIVERSITIES AS CHANGE-AGENTS

❖ The capacity of universities to 'redesign' themselves so as to transform as organisations towards sustainability is interlinked and interdependent on their competencies of response to complex sustainability challenges.

❖ Universities need to effectuate and navigate their own transformative change, "*in order to provide the knowledge and critical abilities an educated citizenry needs as the foundation for the transition to a thriving, just, and sustainable society*" (Cortese, 2016, pp. 1, 4)

UNIVERSITIES AS CHANGE-AGENTS

- External capacity for transformation is **linked** to internal capacity for **systemic** change.

- Some universities **derive success** and progression in their **academic missions** from the extent to which they generate positive societal impact via their education, research and practice.

2) MAASTRICHT UNIVERSITY: PLACE & CONTEXT

UM was set up in 1976 amidst heated competition in the Dutch HE Sector

➤ The establishment was founded on "the spread of **university education**, **compensation** for the **large-scale closure of mines** in the province [of Limburg], and the need for a university in the **German-French-Dutch** cultural triangle." Klijn, 2016. *The Maastricht Experiment 1976-2016*

The Maastricht Experiment

Underdogs leading interdisciplinarity and educational innovation

"*Maastricht University has successfully cultivated an inferiority complex for years, but it is time to let go of these feelings.*"

- They were pioneering
- They sought a niche
- They leveraged their place

What Distinguishes UM?

- Student mobility & and an **international** orientation

- Decentralised organisational structure; physically and socially

- Academic freedom; "Kings in their castles"

- **Periphery** of the Netherlands, **but central** in the Euregio

- UM has always been an outlier with regards to other Dutch universities; therefore it has **mandate to innovate**

EDUCATIONAL INNOVATION

UMagazine

October 2017
on education and research at Maastricht University

More fun in the **legal classroom**
Innovative education using simulations, virtual worlds and holograms
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p4

The musical, athletic psychologist
Portrait of new KNAW member Anita Jansen
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p12

May the best (wo)man win
Isabella Grabner on diversity policy
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p7

Maastricht University

...ng

...ent way of learning from traditional university
...gage in hands-on training and attend (far) fewer
...am up with ten to fifteen students to tackle real-
...hat gives you better retention of knowledge,
...o develop skills that are essential for the labour
...out you, your tutors are very approachable and
...m you into an assertive professional.

Problem-based Learning formed foundation of differentiation from other Universities, in NL as well as DE, BE and others.

Research shows that PBL teaches students to:

- really understand the subject matter, rather just learning by rote
- collaborate with partners and small teams
- think critically with a view to solving problems
- study and work independently
- feel comfortable with public speaking

3) TIMELINE & HISTORY

How does one characterise UM and its Sustainability Trajectory?
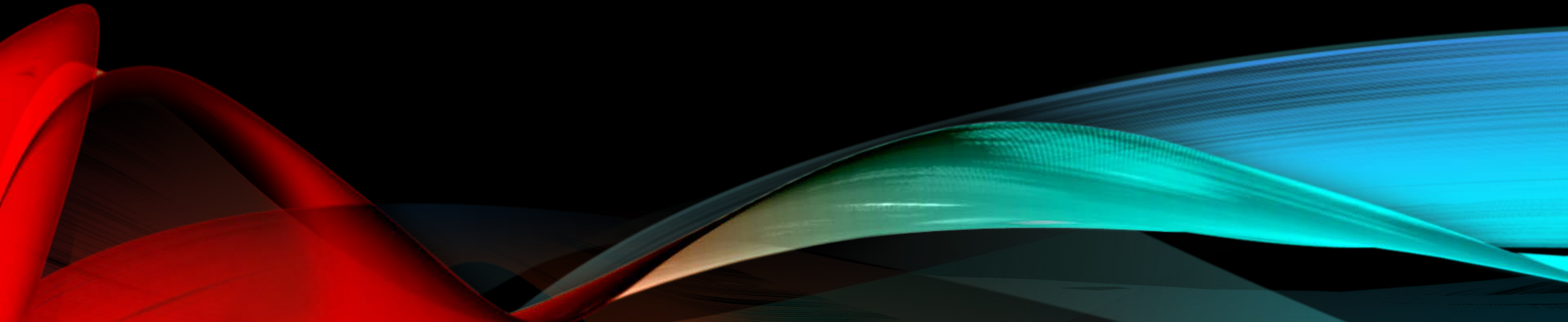
2014: Decentralisation + Faculty Siloes

2010: First Green Office gets formal internal approval as a 'student-driven, staff-supported, sustainability department

2012: Maastricht University wins 'Sustainabul' award as Dutch university with most transparent Sustainability efforts

2013: **Innovative ICIS-Green Office PhD project** begins on organisational transformation for sustainability of universities

2014: **Communications Strategy Intervention**: lack of strategic internal and external communications strategy between UM organisational units. **Open innovation, external partnership**.

2017: UM–wide Sustainability Policy

2018: 2018: Implementation of Taskforce roadshows across UM in education, research and operations.

- **SDG**'s are academic year theme

- UMGO SDG Living Lab.

- ICIS-GO PhD concludes, insider action research findings are shared in community

2017: 'Sustainable UM 2030' document approved based on external and internal consultation, from Arcadis and the UM environmental advisor at FS.
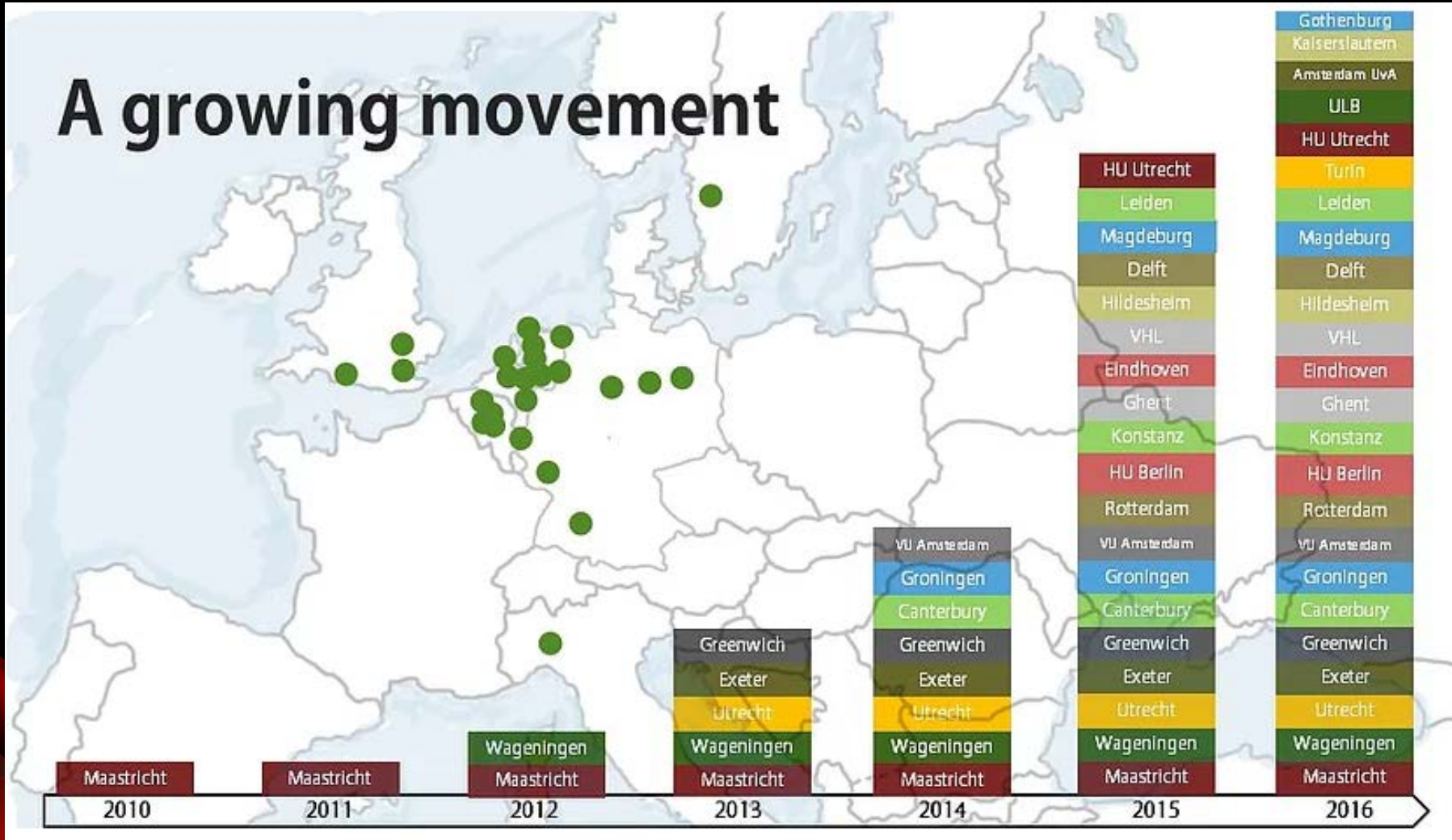
- A **Sustainability Taskforce** was established as part of the overarching programme

2016: **External Arcadis consultant** begins **Sustainability Policy** work
Rootability commissioned to Audit Green Office

2015: Efforts focus on **Governance** and **Organisational Sustainability Performance**. - Reporting Framework produced.
UniSAF-NL

https://www.greenofficemaastricht.nl/

SUSTAINABILITY SCIENCE & POLICY RESEARCH CENTRES

International Centre for **Integrated assessment** and **Sustainable development** (ICIS)
Maastricht University's <u>scientific institute</u> for sustainable development

Vision: **research, education** and **learning** for sustainable development provides a <u>knowledge base</u> for **policymaking** and **innovation** in the **pursuit of sustainability**.

Mission & Impact: ICIS contributes to the **scientific debate** about sustainable development, but also tries to <u>achieve</u> a **constructive social impact** towards <u>sustainability in practice</u>.

Researching Sustainability Science, Integrated Assessment and Policy since 1992

In February 2012, Maastricht University receives the Sustainabul Award as Dutch university with the most transparent sustainability efforts

Jeanine Gregersen - Director of Marketing and Communications - upon receiving the award in the name of UM: "We owe this award to the driving force of our students at the Green Office and we as management embrace this honour wholeheartedly."

Andre Postema – Vice President of Maastricht University: "Looking back to 2011, it strikes me that the Maastricht University Green Office has achieved so much. Naturally, it faced numerous challenges, but to put it in a nutshell: The experiment works."

Maastricht University Green Office

PEAK VISIBILITY 2012:

UM PERFORMANCE RECOGNISED BY DUTCH HE SUSTAINABILITY AWARD

GREEN OFFICE SPIN-OFF

'ROOTABILITY'

Social Enterprise for <u>sustainability</u> in <u>Higher Education</u>

Product + Service: Green Office Model

Now: European-level Network Impact

Dr. Judy Walton

"*<u>I place rootAbility at the forefront of the sustainability education transformation in Europe</u>.*"

Founding Executive Director of **American Association for the Advancement of Sustainability in Higher Education** (AASHE), USA

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rootAbility

Establish Your Green Office   For Green Offices   For GO Alumni   About Us

We work with you to make your university more sustainable

rootAbility is a non-profit social business that builds a movement of students and staff who mobilize institutional support for sustainability projects and

You want to inform, connect and support students and staff to act on sustainability?

Get started!

You're already working in a Green Office and looking for ways to improve your work?

Learn more

You've just completed your time in the Green Office and want to stay involved?

Sign-up here

4) THE CURRENT SITUATION

The Impulse Now:

Sustainability needs to move from being seen as a worthy project involving a few change-agents, to a *central feature* of the university ethos, intrinsic to its values, character and strategy

Analysis:

Unless everyone is intrinsically motivated, it is better to implement subtly not aggressively.

"It's easier to ask forgiveness afterwards than to ask permission before".

ASSETS

- **Experimental approach to problem solving** observed at the GO - **academic knowledge** of relevance was 'put into their hands', **solution-oriented**, **small-scale interventions** that took place from 2014-2016, had positive outcomes, despite most failing! It **captured leadership attention**.

- **Resilient relationship** between the **academic research + teaching centres** of sustainability science and teams of change-agents

Prospects:

1. **ICIS-UMGO SDG Living Lab**. **Intra**preneurial sustainability, The **Mapping of Sustainable Development Goals** (SDGs) at Maastricht University (UM) aims to **evaluate the activities** of the University, through the areas of **policy, research, education, innovation** and **societal engagement**.

2. **City-level SDG planning:** Improving connections/collaboration between **students**, the **municipality** and **external organizations** to accomplish the SDGs

"University research may function increasingly as a locus in the ''laboratory'' of … knowledge-intensive network transitions" (Etzkowitz & Leydesdorff, 2000).

Building on and implementing the **Triple Helix of university–industry–government relations** – <u>UM sets up</u> and <u>guides</u> **regionally-based innovation hubs** in the areas of materials and natural sciences.

- Focus on **spurring start-up** incubation
- **Entrepreneurship** & **Knowledge Transfer**
- **Keeping graduate** talent in the **area**
- **Preventing Brain Drain** and generating 21st-century ready jobs
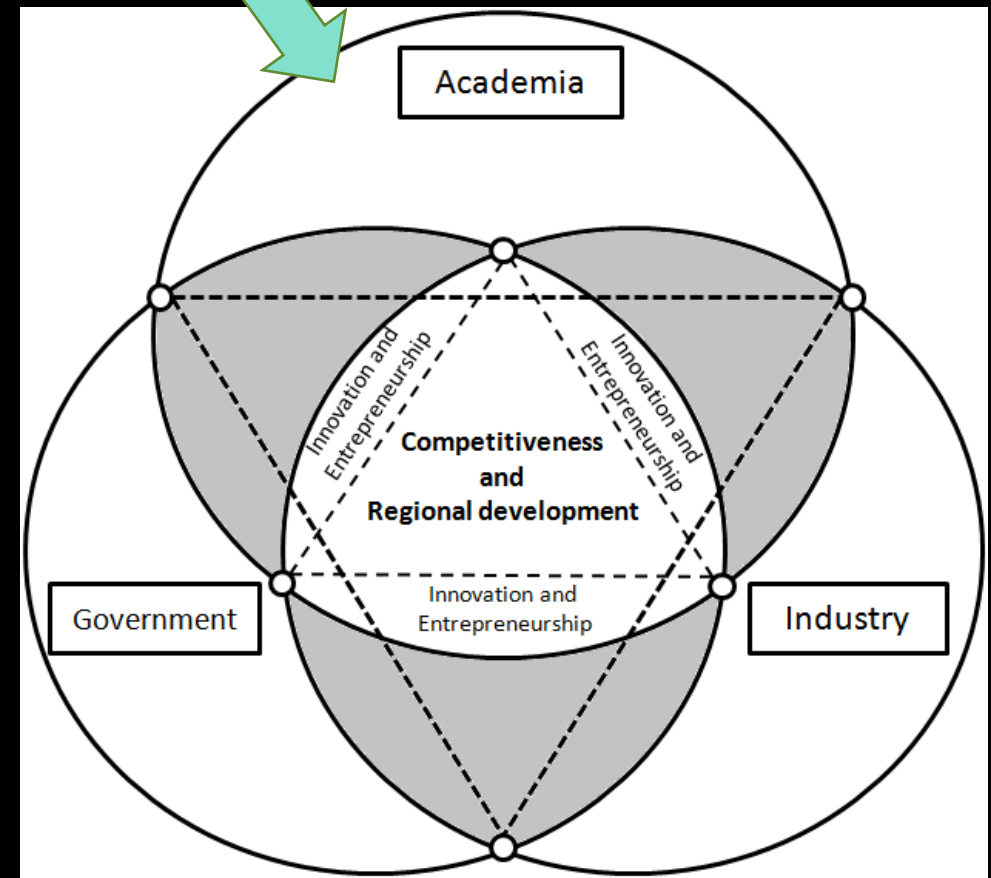
SOCIETAL IMPACT: PRAGMATIC RESEARCH IMPLEMENTATION

Maastricht University **Maastricht UMC+**

Societal Impact

Researchers at the Maastricht UMC+ feel a strong public responsibility to contribute towards the health of the population and are continuously working so as to have a societal impact, both in the shorter and longer term. In the Quality Assurance process Societal Impact plays an important role. In the Standard Evaluation Protocol 2015-2021 'relevance to society' is one of three assessment categories, next to 'research quality' and 'viability'.

23 May 2017

IMPACT COURSE: learning to utilise knowledge

On 9 May, Maastricht University launched its first IMPACT COURSE: an exclusive course about societal impact of research and knowledge utilisation. The UM wants to create awareness among its researchers about social impact of research and the opportunities of knowledge utilisation through this course, and how to realise more impact with their research. The IMPACT COURSE is interdisciplinary, which means that participants come from all UM faculties, including from the MUMC+ and Zuyd Hogeschool. This stimulates collaboration between faculties and knowledge institutes. The approach is hands-on and the end result of the course is a concrete plan for the utilization of the participants' own research.

knowledge utilisation is the third core task of the UM.

development or **improvement** of **new products**, **services** and **processes** with an economic target (**knowledge exploitation**).

2) **application** of research results in the **public and social domain**, such as **education**, **care**, and **culture**.

3) **communication about science**, for example **media presentations**, interviews, expert panels and lectures.

Universities that undertake a **transformative** and **open inquiry** into their <u>own workings</u> as organisations **trigger** pathways to sustainability in their **regional environments** by **leveraging** the interdisciplinary knowledge they produce

They develop transformative competencies, design thinking, and service logics that enable them to improve their surrounding communities and society, *<u>exactly because</u>* they have striven to attain a <u>greater depth of sustainability</u> **intrinsically**.

They, **through learning** and **research** <u>on themselves</u>, can better apply knowledge of <u>structural transformations</u> **within** and **about** their <u>surrounding societies</u>.

Being nested as a **sub-system** in <u>**society**</u>, their **sustainability** is also **dependent** on that of their <u>social environment</u>.

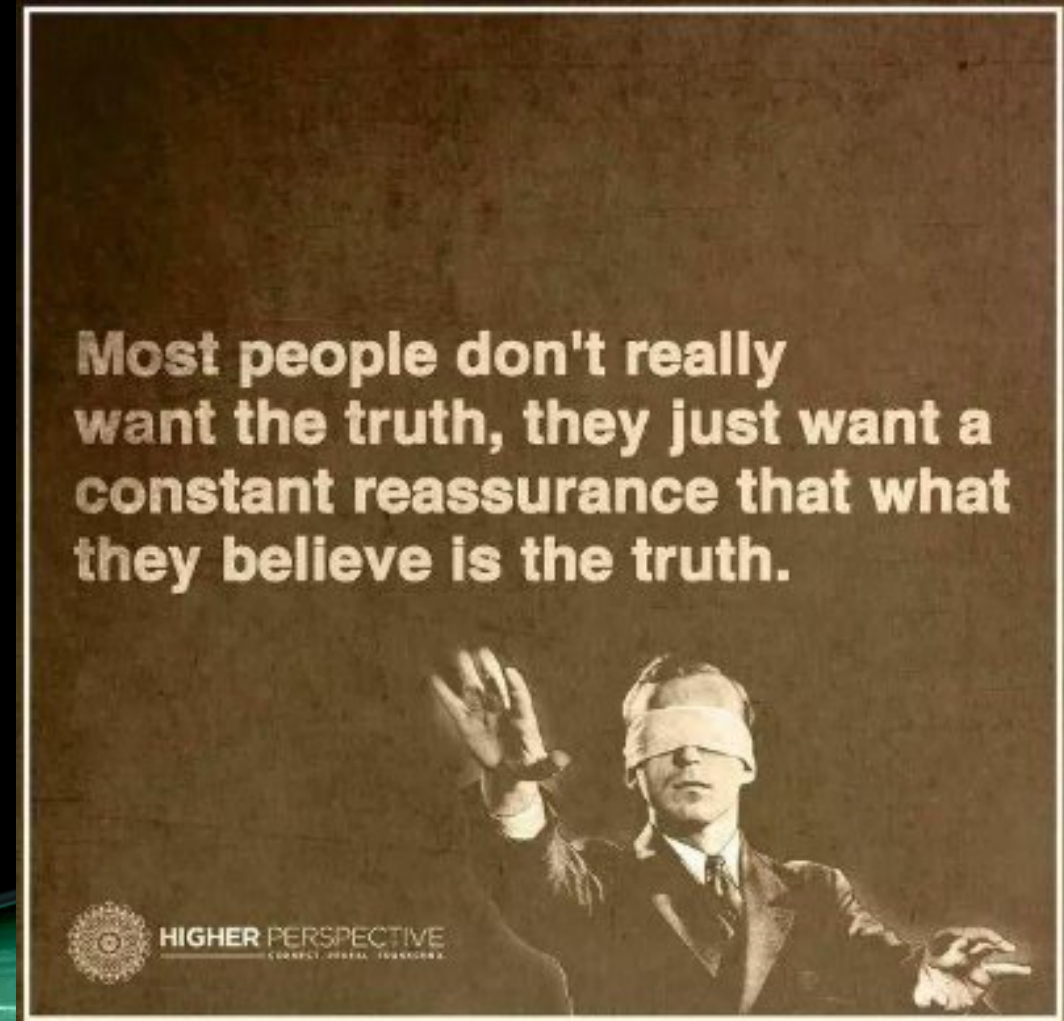# IF YOU WANT TO MAKE AN IMPACT, START FROM THE INSIDE, OUT!

➢ UM was an early adopter when it formally approved the establishment of the Green Office in 2010.

➢ In 2016, after years of inertia, UM lagged behind in sustainability performance of public research universities in the Netherlands.

➢ In 2018, promising signs of collaboration, innovation, and entrepreneurial spin-offs, are generating an ecosystem of small organisations externally, that are linked to UM's own organisational learning internally.

➢ This organisational development leaves UM more in sync with its societal surroundings, adopting civic responsibility

➢ Sustainability transformation and impacts extrinsically, appear driven by intrinsic logic

➢ This long-term investment requires **adaptive**, **iterative** and **self-reflexive** <u>organisational-societal</u> *learning*

THANK YOU FOR YOUR ENERGY!

" On the surface , there was always an impeccably realistic world, but underneath, behind the backdrop's cracked canvas, lurked something different, something mysterious or abstract…"

"On the surface an unintelligible lie; Underneath, the unintelligible truth."

Sabina in Milan Kundera's *The Unbearable Lightness of Being*

Most people don't really want the truth, they just want a constant reassurance that what they believe is the truth.

HIGHER PERSPECTIVE

TOM WAITS, American Musician