OVERVIEW & OUTCOMES FROM SUSTAINABILITY DIALOGUES

Glossary/explainer for this Summary and Overview:

Each in-depth dialogue topic has its own chapter. The outcomes of the dialogues are summarized and categorized in two main categories:

1. Little Implementable Ideas (one or only few decisions needed, few actors needed, can be done fast)

- Collected projects, actions or implementable things generally that would be easy to do.
- Lots of tangible concrete actions. Loose ends that need to be tied together.
- Collected from the overview of Dialogues 1-5 and highlighted as actionable outcomes.

2. Big Picture Action Strategy (many decisions, or/and multiple actors needed, or/and needs time)

- Potential tensions.
- Focus on bigger topics.
- Possible futures – pathways - Then coaching – guided transition.
- Seeds for preferable futures.

Wherever possible, outputs were linked to ongoing processes, projects or programmes, however, due to the richness and quantity of outputs this was difficult to be comprehensive about. There are many new ideas and often it is hard to see whether or not it has been taken up or by whom as the dialogues were not tasked with following-up ideas. We also do not make decisions about what will or will not be executed.

This is also what the Policy Brief aims to help inform as it presents clear conceptual and operational bounds with which the leadership can map out key actions to be taken or not depending on the pathway decided in and after the Executive Action Breakfast; it shows what is needed next and how to get there around a coherent proposed operational definition for sustainability transformation. This informs the big picture action strategy that is still to be mapped out in Session #6 as a result of following Responsible Futuring.

Topic #1: Education for Climate and Sustainability

Summary:

How do we prepare and empower students to contribute to a better world through the analysis and use of technology in a societal context – in this case specifically related to 'education on sustainability'?

1) Small actions (few decisions needed, few actors needed, can be done fast)

Support teachers

a. **Help lecturers** in paying attention to sustainability and climate in their curricula. Also embed sustainability metrics for evaluation / assessment of education. Basic courses are already delivered by Green Hub for teachers. Faculty Green Teams can help implement.
b. **Give Sustainability in Education priority** (top-down), as teachers show low engagement in efforts thus far to make an inventory of sustainability in education.

Other ways to foster sustainability in education

c. Insert sustainability & climate change via **design constraints** to an engineering problem: you can embed it in different ways e.g. not per se content, but in the goals and ends of the course.
d. **Findability** and general information on sustainability in education: create a clear overview of possibilities of following courses, modules, minors or extracurricular programs.

Programs outside 'regular' bachelors/masters

e. Also bring sustainability to attention to students **outside their curriculum**, e.g. via the Eco-challenge, Honours programs, study associations or by encouraging (sustainability related) entrepreneurship and activism. Also consider incentivizing associations or students.
f. Offer engineers to learn more about sustainability as part of **Life-long Learning** programs, those could follow the same structure as the courses meant for full-time students (see below).

2) Big picture action strategy (many decisions / multiple actors needed / needs time)

Definition & awareness

g. Establish **common ground** for what 'sustainability' is and build core courses that involve students from different programs. Also get to a common vocabulary of words that are used.
h. Continuous information / examples / updates to raise and keep awareness on this topic. ***"Awareness is mandatory."***

Basic course for everyone

i. Climate Change module / program / curriculum: basic-moderate-deep understanding of the topic, also to be applied to your own field of expertise. Some are already in place, but basic still to be made.
j. Suggestion Climate Change Coalition: **a 5EC compulsory basic course** on Climate & Ecological Crisis for all students, to get basic knowledge, raise awareness and discover how to apply.

Valuable approaches to embed

k. **Transdisciplinary approach**: help to understand (and use) different perspectives, see and evaluate with the whole system in mind.
l. Work with real life, actual challenges: **Challenge-based learning**. (And: have some time to reflect on what you learned and discovered.)

Goals to cover with educational programs

m. **Re-skilling**: invoke critical thinking, systems thinking, coping with complexity and communicating with general public and policy makers.
n. **Re-framing**: sustainability as a system change. Also: learn more about the scale and scope of the problem and the pace of change required to remedy it.

Topic #2: Research, Partnerships & Divestment

Summary:

How can we make the way we research 'sustainability' more valuable, futureproof and relevant to society? And: how do we foster sustainability in our research projects, also working together with societal partners?

1) Small actions (few decisions needed, few actors needed, can be done fast)

Research stakeholders and goals:

a. **Involve a broader range of stakeholders in research**. Example: farmers in research on circularity and nitrogen in agriculture
b. **Develop impact metrics** based on sectors researched and not based on publications.
c. **Map research of UT with SDGs** (via pure portal)

Collaboration with the fossil fuel industry:

d. Investigate how much money (also in services) UT receives from the fossil fuel industry for which purpose and make that information publicly available → *link to ESG reporting – making sustainability data more available for students and staff - new CSRD initiative & Green Hub Intelligence Platform & Green Hub Intelligence Platform & Green Hub Intelligence Platform & Green Hub Intelligence Platform*

2) Big picture action strategy (many decisions / multiple actors needed / needs time)

Background on climate justice:

a. **UT Contributes to Avoiding Hot-House Earth Scenario in all research**: Evaluate UT Research in line with "Widespread, rapid, and fundamental transformations ... required to reduce the risk of ... locking in the Hothouse Earth pathway." (Steffen et al., 2018)
b. **Need to act in accordance with climate justice when implementing any strategy**
    - US and EU contribute to more than half of global CO2 emissions.
    - The ones most vulnerable to climate change are the ones who contributed to the causes of it the least.
    - Top 10% of income earners contribute to 48% of emissions, also within countries.
    - Hence, there is a duty and responsibility held by the biggest emitters to tackle radical inequality; at national and international levels and per capita emissions.
c. Apart from global measurements: personal choices to reduce your contribution to climate change.
    i. More and more scientific philosophers are pointing to this duty to contribute, globally as well as personally.
    ii. There is still a safe operating space for humanity, but: we need radical social, political and economic reforms and substantial changes in our lifestyles if we want to follow a more safe, just and habitable operating space

Institutionalize structural changes in UT governance structure to speed up the process:

d. Develop a UT wide framework that incorporates criticism towards the SDGs.
    - Keep SDGs for comparison with others who use them.
e. Balancing different stakes: actions, budgets, willingness, solidarity.
f. Need to align governance, culture, social, environmental, economic drivers, and bottom-up initiative
g. Develop political will to do necessary changes
h. Develop a student and staff assembly with decision-making power to make the necessary changes.
    i. Need a broad, open, scientific dialogue.
i. Use societal weight in political discourseUse societal weight in political discourse
    i. Pressure pension funds and financial institutions to decarbonize
j. Need to involve people from all walks of life

<u>Focus research according to the urgent crisis:</u>

k. Address research from a **holistic perspective** to determine if it is desirable (ex. Hydrogen)
    i. Do not do research that is only or predominantly beneficial for the rich 1-10%.
l. Become **independent from private funding**
    i. Collaboration for co-funding
m. Need for research to primarily address questions about how to do the **needed radical reforms** asked for by science.
n. No research partnerships with those actors who contribute to the injustices outlined by Environmental Ethicists or are preventing realizing SDGs
    i. **Stick to UT code of ethics**: *In light of its pursuit of a sustainable development of prosperity and well-being, the University of Twente values the careful interaction with nature and the living environment*.... t also mandates that UT "**only works with suppliers and parties that act in accordance with this Code of Ethics**." (p.2)
    ii. Academic freedom is an ethical concern, and it needs to be checked by other ethical concerns.
    iii. Need for **transparency** from partners
    iv. Need to **develop** further **criteria** for collaborations. Ex. Tesla
    v. Which **companies that do it right** have the expertise and scale UT needs to contribute with high impact to the transformation?

<u>Change hiring procedures:</u>

o. Adjust selection procedures to hire **people who can contribute to the sustainability transformation** (ex. in terms of SDGs, or awareness of sustainability and climate justice issues), while deemphasizing *where* people studied. Thus, make hiring more just.
    - Develop relevant metrics as far as possible

<u>Increase technological impact on society:</u>

p. **Technology transfer** sensitive to local cultures and circumstances to facilitate global change

<u>Critically reevaluate ties with the fossil fuel industry:</u>

q. Background on partnerships:
    i. 'Energy' crucial from a Climate perspective: **Energy sector** contributes to **emissions 73%**. Within that: energy use in industry as biggest chunk.
r. Scientific background:

i. **fossil fuel financing** of research leads to outcome **bias**, research direction bias, and transition bias.
ii. **fossil fuel companies** fostered – and still foster – **science denialism** and divisiveness in science.
iii. **fossil fuel companies** are **not committed** in word or in deed to a **just transition**
iv. **Shell** officially states that it is **not willing to reduce its Scope 3 emissions**

s. Societal background:
   i. Naturalis, UvA, UU, and **VU decided to 'cut the ties'**

t. Shell professor: **Do not look at companies in the past, look at what they are doing now** in the current transformation. Shell is committed to Paris agreement and has targets for Scope 3 emission reductions. Shell wants to move if society wants to move with it. **Show where our investments and contributions are going to**. Not necessarily cut research ties. Shell has know-how and money.

u. Climate activists: **Past actions do matter**! No more collaboration with the fossil fuel industry, as they **knowingly caused destruction of our climate,** exploited people in the Global South and destroyed their ecosystems, and deliberately spread **misinformation about climate science**. As a committed academic community, we **need to wield pressure** differently after thirty years of failure. We **cannot allow them to green wash** via our institution. **Shell** has only know-how that tells us how to run a **neo-colonial enterprise on the back of communities in the Global South**.

v. **Possible Compromise: one-year moratorium** on research partnerships with the fossil fuel industry. For each company, determine what they are doing now and if they **align with the Paris Climate Agreement** in policy and practice. If not, they are not welcome. If they do, they are welcome. If they fail to be aligned, stay in dialogue with them about how to align them via VU national platform.

Topic #3: Societal Impact & Behavioural change

Summary:

How can we behave so that we contribute not only to our own sustainability goals, but also to those of the society we serve? How do we want our actions to impact society?

1) Small actions (few decisions needed, few actors needed, can be done fast)

a. *CCC Proposal I: An entity at the UT should plant edible trees within the next year.*

b. *CCC Proposal II: A third party should ask citizens in Enschede what they want from the UT and how they perceive the UT.* Think in which way UT can open the doors for the people who are from outside UT

c. *CCC Proposal III: A third party should organize a general assembly within the next three months including the government, companies, and individuals at the UT*

d. Solar panel charging points on campus (we already have these → SEE-Programme-CFM)

e. Two positive examples: Billie Cup (we were an example for Saxion regarding this). Train map (it is an example for many organizations)

f. UT/Enschede was the 'textile city'. Invite these kinds of workers onto campus for talks.

g. Make sustainable choices more visible to the general public

h. Providing opportunities for the richer families to contribute to the education of the less fortunate

E.g. The concept of getting free food sustained by donations of people who can afford it.

2) Big picture action strategy (many decisions, or/and multiple actors needed, or/and needs time)

a. All employees get incentivized to use public transport

b. Understand what the impact of sustainability is and what kind of impact we can have as UT.

c. Allocate more time to students and staff and equip them with tools and the opportunities to act: E.g. 'Global climate justice' Time to reflect, plan and co-create with our partners and members of the Global South. In this way we make sure we are also helping most vulnerable communities to impacts of the climate crisis

d. **Enschede is a textile city. Hemp and eucalyptus-based clothes. A lot of chances to think how we can do it differently. Collaborate on this in the region and with Saxion's smart textile lab.**

e. **Employ behavioural change group's approaches to behavioural change in U**T: Socio-technical, Participatory & Transdisciplinary, Multi-level. Perform behavioural action research on UT itself to understand the mindset/s required for change; unpack what behaviours are we changing and how to encourage people to make the change.

E.g. *Use the precedent of how we became a smoke-free campus* – what can we learn about the successful behavioural changes there? Overcome stereotypes. Convince people of the advantages.

Topic #4: Campus Metabolism

Summary:

How do we foster a (more) sustainable future with regards to our own facilities on Campus?

1) Small actions (few decisions needed, few actors needed, can be done fast)

SEE-Programme policies – Carbon negative, Circular campus

a. Operational definition of circular campus
b. Include sustainability more in procurement
c. Consider energy efficiency during operations and purchase
d. Manage existing waste streams
e. Reduce footprint of incinerated waste and energy loss therein

Tools and Sustainability Data:

f. Encourage more reliable sustainability data. **Green Hub Sustainability intelligence platform is underway** to set up a 'Sustainability Detective' function where people can report with pictures in real time what needs improving and how to a central digital place.
g. We need the **data/information to be put in front of students and staff about the products they buy**. Not just factually but let people know that they have options. **Faculty Green Teams** can also support here

Campus testbed/experimentalism:

h. *Sustainable production and energy systems - solar energy* → **why not just use UT campus as a case study**
i. There are more flexible energy sources. Load the energy production. **Revive the Tiny Houses project - 'Twente Green Village'.**

Prizes, Funds, and Accreditation:

j. **Entrepreneurial prize for social and environmental impact** → Idea/Solution: lobby/encourage the UT alumni network to donate € to alma mater.
k. Prizes and funds for e.g. women in research.
l. **Prizes for the most sustainable thesis** [addition/connection: this was also a key action formulated by the SEG for Sustainability in 2022. include sustainability criteria in how these prizes are awarded.
m. **Green Certificate Tool from Green Hub** (*in progress*) to guide users – events managers – at various associations
n. **Implementation of Green Pass** (*in progress)* gives access to go through and reduce environmental impact of every attendee at events
o. Sustainability Fund to help support students become more green – a bit of funding to help them make the transition - clothing, promotional material and catering.

2) Big picture action strategy (many decisions, or/and multiple actors needed, or/and needs time)

SEE-Programme policies – Carbon negative, Circular campus

a. Implement Strategy for becoming a Carbon negative & circular campus.
b. Reduce CO2 emissions from business travel
c. Make it easier for people to make the more sustainable option (e.g. Train map)

Biodiversity, Plant-based food on campus:

d. **Food forest on campus**.
e. **Increasing/safeguarding corridors for pollinators to increase biodiversity**.
f. Show the city biodiverse spaces on our campus. Show them what the future looks like.
g. **Hold meetings about the community garden for vegan kitchen. Grow our own food**

Campus testbed/experimentalism:

h. **Bring research into the campus as a living lab. Share an open invitation**: 'if you have ideas, come to us for a Living Lab'.
- E.g. Combine our new ambitions with the things we're already doing for 6 years – researchers working on carbon capture tech and smart grids. **Treat the campus as a playground to put these researchers to work**

i. Define **campus ecological boundaries:** Efficiency alone cannot do the trick to reduce back within planetary boundaries. Thus, the UT needs to **supplement its efficiency policies with sufficiency policies**.
j**. Refurbish other abandoned building**s instead of those that are already there *rather than building new ones*. **Use materials that are not fossil-based** such as wood (if sourced sustainably).
k. Give students more input on goals and how to achieve them [we see a link to e.g. SEE-Programme goals here]. E.g. Give them more info on **Single-Use Plastic legislation**

Prizes, Funds, and Accreditation:

l. Allocation of 5ECTS to experiment with climate and sustainability socio-technical solutions

Work Space & Wellbeing:

m. **Create space for 'wellbeing' by reducing the workload** on students. **The TOM model needs critical re-evaluation.** Reduce the pressure on students in order to make space for them to work/learn and research about sustainability.

- E.g**. student-led course on self-constructed solar energy plants** deployed in areas that are hard to reach in the Global South.

n. **Your Sustainability Journey workshop** – to show people what they can actually do to become more sustainable. To empower anyone.

Governance & reporting:

o. Integrate all these goals with one person who is the point of focus that connects all of this. responsibility is sustainability – at the Director level.
p. ESG (Environmental Social Governance) and CSRD (Corporate Social Responsibility Directive – new EU Legislation), we have two people (in Strategy & Policy Dept)
q. Sounding Board that works on solutions in the SEE-Programme, and there will be a Panel set up (open governance and democratic representation)

Topic #5: UT System Transformation

Summary:

How do we change our own 'university system' to be able to take the lead in the Sustainability Transformation? How do we lead that change, and how do we change our behaviors accordingly?

1) Small actions (few decisions needed, few actors needed, can be done fast)

Enabling students and staff to become transformative agents:

a. Stop buying new screens and spend the money on scholarships for students from the Global South instead
b. Develop a climate justice and sustainability transformation course.
c. Establish a community kitchen that serves vegan food on donation basis
d. Establish a Language Café for sustainability and climate

Develop conditions for transformative change:

e. Define sustainability for UT
    i. Give the required mandate to the working group
f. Establish a sustainability fund and invite alumni to contribute to it.
    i. Make funds available for people to contribute what they would like
g. Allocate more funding to the central-sustainability intelligence platform by GH
h. Develop workshops for participatory and student activities
i. Host a symposium on big ideas

Improve campus metabolism and UT footprints:

j. Make UT a biodiversity food forest with pollinator corridors
k. Free the soil from the ugly grey space next to Vrijhof
l. Forbid selling plastic on campus (at least with each new contract)
m. Gross zero flight policy for 2030
n. Turn down electricity in buildings (coffee machines, printers, etc.) at night

Become a politically active civic institution:

o. Call out the climate, crisis, biodiversity, and social crisis
p. Publicly acknowledge the injustices committed by the fossil fuel industry
q. Cut the ties with the fossil fuel industry
r. Change UT motto to "high-tech nature touch"

2) Big picture action strategy (many decisions, or/and multiple actors needed, or/and needs time)

Knowledge production and distribution:

a. Produce actionable knowledge
b. Knowledge sharing cooperations with universities from the Global South

Develop conditions for transformative change:

c. Develop a UT code of conduct aligned with the sustainability transformation
d. Facilitate mindset change along the lines of the code of conduct and a "we can do this" mindset
e. Develop comprehensive policy that involves veto powers that follow from the biodiversity, climate, ecological, and social crisis and the sustainability definition
f. Develop KPIs
g. Identify who prevents the desired change and direct political power accordingly
h. Establish a student and staff assembly to take the lead and make decisions on the sustainability transformation
i. Establish well-being hours students and staff are able to use as they please
- Make time available for participating in the sustainability transformation for all that want to
j. Redesign UT education model, as TOM model burns out everyone involved
k. Attribute ECs for efforts on the sustainability transformation

Improve campus metabolism and UT footprints:

l. Make the food offer on campus plant-based and affordable