Inspiration List

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Evaluation case: Renovation of Building B, City Campus

- How do (students and) staff members experience the changes in space use, comfort, accessibility, and spatial functions in Building B (before and) after renovation? An evaluation of critical factors in the renovation process (before, during, after) from a user perspective.
- Under what conditions can (qualitative and quantitative) findings be extrapolated to other contexts across the university?
  (→ more in the direction of general policy recommendations)

Space use & flexible working in general

- What barriers, needs, and concerns do different university profiles (status, discipline) experience during a shift toward office space reduction and flexible working? Categorization of barriers, needs, concerns + proposing and testing ways to address/overcome them.
- What are different methods to quantify/objectify the use of spaces (e.g. offices/classrooms/large auditoria/labs), what are the main considerations for each method, and what relevant data is available at UAntwerp? (Likely needs to focus empirically on one type of space / one campus / or one building.)

ICT management and extending lifespan

- What are the main potentials, obstacles, and organizational prerequisites for a policy focused on extending the lifespan of ICT equipment at UAntwerp?
- Which ICT management interventions actually increase functional lifespan, and how can these be effectively implemented in both central and decentralized procurement and management processes?
- How are (existing and potential) guidelines around ICT procurement, management, and disposal perceived by ICT managers and end-users?

Furniture circularity

- Inventory perspective: Which quantitative and qualitative tools/methods are most suitable for mapping existing furniture stock (+ application of the most suitable method)?
- Mapping barriers: What (administrative, operational, spatial, logistical, psychosocial, …) obstacles exist when implementing circular policy on office furniture? How do they relate to one another in weight and importance, and how can they be addressed?
- Identifying suitable models (e.g. platforms, internal marketplaces, centralized management, cooperation with external refurbishers): which factors determine the most appropriate approach for UAntwerp's specific context?
- Impact assessment: What is the potential reduction in waste, CO_2 emissions, and costs of a circular furniture policy?

Water management (Focus on CDE and CGB)

- Consumption profiles and supply analysis: How do current water consumption profiles of buildings and activities on CDE and CGB compare with available supply options, and what

optimizations are possible?
(sub-questions: What water quality requirements apply for different uses—laboratories, sanitation, irrigation, cooling, etc.? Which alternative sources (rainwater, greywater, recycled water) are technically and economically feasible on both campuses? What is the rainwater harvesting potential given roof areas and rainfall patterns?)

- Quality requirements and matching: To what extent can different water qualities be matched with specific applications on CDE and CGB?
  (sub-questions: For which current drinking water applications could lower-quality water be used without loss of function? Which (treatment) technologies are needed to make alternative sources suitable? What are the costs and benefits of water quality matching compared with the current uniform drinking water system?)
- Potential calculation: What is the quantitative potential of sustainable water management on CDE and CGB, and how can existing and new initiatives achieve this?
  (sub-questions: What annual water savings could be realized through circular water management? How can experiments such as the Mesocosmos greenhouse and fish farm in basement G.U. contribute to a closed water system? What are the investment costs and payback times of different water-saving and reuse systems?)
- Implementation and organizational aspects: What technical infrastructure must be adapted or added for circular water management? How can users be involved in saving and reusing water? What monitoring and measurement systems are needed for effective water management?

UAntwerp carbon footprint: methodology refinements for category 'inputs'

- How can the methodology for measuring the CO_2 footprint of 'inputs' be refined to better identify dominant subcategories?
- Which new (accounting or life cycle) indicators are needed to better distinguish and manage high-impact purchasing categories?

Processes and determinants of non-contaminated lab waste streams

- What reduction is achievable in the volume of non-contaminated lab waste through improved sorting, devolving of waste steps, or revised instructions for lab staff?
- What experiences, motivations, and barriers do lab workers report when implementing new sorting guidelines, and how do experiments with separate waste streams affect logistics and costs?
- To what extent can good practices in lab waste management from other universities be integrated into UAntwerp policy?

Energy and temperature management of ultra-low temperature freezers

- What energy and financial savings potential exists in optimizing energy, temperature, and usage patterns of ULT freezers at UAntwerp?

Green roofs, rainwater harvesting and PV panels: decision framework

- How can a decision matrix or protocol be developed to guide investment policy regarding various rooftop options (green roofs, PV panels, rainwater harvesting) at UAntwerp?
- What is the potential for rainwater harvesting, reuse, and/or enhancement of green-blue infrastructure on [campus TBD]? (Mapping of potential + cost/benefit analysis + policy recommendations)

Biodiversity and campus greenery

- How can green space management contribute to climate adaptation, cooling, wellbeing, and biodiversity?

Mobility

- Is there a relationship between absenteeism and transport choices in commuting among UAntwerp staff? (Replication of Finnish study)
- Barriers to cycling to the different UAntwerp campuses (or more specifically: what is the impact of bicycle accidents?)

CO_2 compensation: quantitative multi-criteria evaluation

- What is a suitable evaluation framework for assessing possible applications of CO_2 contributions collected by UAntwerp (internal/external, land use, technical, social projects)? (Quantitative multi-criteria analysis including CO_2 impact, cost, additionality, risk, local co-benefits, scalability, …)

Comparative study: understanding 'climate neutrality'

- How do different organizations, companies, and universities (inside/outside Flanders) operationalize the concept of 'climate neutrality'? Evaluation framework + policy recommendations.

Food/catering

- How do policy choices in catering approaches affect the CO_2 footprint and the experience of students and staff? (e.g. specifically in the policy decisions for the new restaurant on CDE)

Just transition

- How do students and staff perceive the fairness of sustainability measures? (Can be applied to a chosen policy measure, e.g. international travel policy, CO_2 contributions, campus mobility policy, flexible working)