

SUSTAINABLE UM 2030: Definition, programme and organisation

Summary

The ambition of Maastricht University (UM) is to be an inclusive, innovative and sustainable university. By doing so, UM acts on the needs and expectations of society, including those of the Millennials, and practices what it teaches and preaches.

Even though UM puts more emphasis on sustainability, it remains a challenge to maintain a top position amongst Dutch universities and to decrease UM's carbon footprint. In 2016 UM dropped in the sustainability ranking of Dutch Higher Educational Institutes ([SustainaBul](#)). In order to become more visible and competitive in sustainability nationally and internationally, UM started a project supported by external consultants to strengthen the position and inclusion of sustainability in the broadest sense in education, research and operations. The participation of UM in the Worldwide Universities Network (WUN), which is dedicated to sustainability and SDGs, can support the international visibility of UM's efforts. An important aspect is strengthening the awareness and adoption of the broad, inclusive definition of sustainability as the balance between people, planet, and profit. To date, most fields of expertise within education and research of UM are mainly connected to people.

To become an inclusive, innovative and sustainable university, a programmatic approach with an adaptive strategy is needed. The updated sustainability vision can be further specified into a sustainability ambition on both research, education as well as operations. For research and education, UM should become leading in the respective fields and for operations UM should have a sustainability consideration and should follow the main trends and best practices. The mentioned ambition levels are used as guidelines for specific actions within the programme. The overarching updated Sustainability Vision 2030 will define the framework for all sustainability actions of UM. The UN Sustainable Development Goals (SDGs) will be used as guiding framework to connect UM to pressing problems in the world. The updated roadmap 2030 will define more detailed targets in the upcoming years to guide the transition.

The programme will be divided into three project-groups (Education, Research, Operations) in which portfolio-specific topics are covered. Overall UM topics will be covered by a Taskforce, reporting to the Executive Board that also coordinates the sustainability projects of the three different project-groups on education, research and operations, respectively. Each project-group will be guided by a project-owner who is supported by a sustainability coordinator and the Maastricht University Green Office (UMGO). Every three years an action plan based on the roadmap will define concrete projects and actions for the Now/How/Wow prioritisation. This iterative way towards sustainability enables UM to adapt to technical, economic and social developments.

With this programme, sustainability will be included in the "DNA" of UM by a number of actions:

- Embedding sustainability in the roles / functions of the organisation.
- Sharing, addressing and facilitating ideas and initiatives on sustainability over and between faculties, services and other bodies at UM.
- Taking leadership in all daily operations and activities.

Introduction

- According to the Strategic programme 2017 – 2021, “Community at the Core”, UM’s mission and strategy for the future are built on four core values:
 - To be an innovator in education and research by introducing the CORE philosophy at our university.
 - To adopt an inclusive approach and to open doors to all students and staff who fit with our profile and subscribe our values.
 - To take our social responsibility seriously by linking the university to society, from the local to the global level.
 - To be a sustainable institution in the broadest sense.

These four core values will be reflected in all our activities.

- The general approach of sustainability is commonly based on people, planet and profit and by being sustainable in the local, regional and global community.
- On September 25th 2015, countries of the United Nations (UN) adopted a set of goals to end poverty, protect the planet and ensure prosperity for all as part of a new sustainable development agenda. Each sustainable development goal (SDG) has specific targets to be achieved over the next 15 years. UNU-MERIT was involved in the formulation of these SDGs.
- UM intends to be a globally networked university, and therefore should through its global networks (like WUN) and international cooperation consistently contribute to global sustainable development (goals) as well as strive to integrate best practices of its network partners.
- Current actions on sustainability at UM are aligned around the UM Sustainability Vision 2030 and underlying roadmap, which were prepared by UM Green Office (UMGO) in an interactive process and consecutively were adopted by the UM Executive Board in 2012.
- Although UM was leading amongst Dutch higher educational institutes in 2010 – 2012 with the first green office and the vision and roadmap UM was lagging behind on other institutes as was confirmed by the results of the Transparency benchmark and SustainaBul.
- A new and vibrant definition, programme and organisation for sustainability are needed to realise the ambition of the Strategic Programme.
- Thus, based on an inclusive approach with more than 40 cross-sectional interviews and several interactive sessions with staff and students of UM, input was collected to update the definition of Sustainable UM 2030. Also this input set the outline for embedding sustainability in the veins of the organisation in the Sustainability Programme UM. Both the definition of Sustainable UM 2030 and the Sustainability Programme are described below.

Definition of Sustainable UM 2030

- To update the definition of Sustainable UM 2030 and to give direction to the programme, the basic question “Why does UM want to be sustainable?” is answered by:
 - Overall, UM has to act on the needs of society, needs to stimulate the implementation and realisation of the SDGs, and has to comply to the ambition of the Strategic Programme 2017 – 2021.
 - Within education, sustainability not only adds value to the student’s education and personal development, but the Millennials ask and expect UM to be sustainable;
 - Within research, UM needs to apply what it teaches, as society expects UM to research pressing problems within society.

- Within operations, UM must practice what it teaches and preaches, and need to comply with the expectations and demands of students and staff and other relevant stakeholders.
- Based on the input of the interviews and sustainability meetings in 2017, UM states that sustainability:
 - Must become integrated in the veins of the organisation, in all faculties, research- and service centres.
 - Requires a balance between top-down and bottom-up approaches in university policy and its implementation.
 - Needs a focus on inclusion of UM in the community and vice versa in education, research and operations to:
 - Connect education and research to topics of UM's operations (living labs).
 - Integrate knowledge from education and research into sustainable solutions within operations.
 - Engage in international university networks and partnerships dedicated to the implementation of SDGs.
- Based on above-mentioned statements, the existing vision is adjusted and the following ambitions are defined:

Sustainability vision UM

Maastricht University wants to become a sustainable university by 2030 by

- ✓ being a driver for sustainability development by making important contributions towards a sustainable future through education and research;
- ✓ creating multiple shared added value on pressing problems in the world;
- ✓ being aware of its social, economic as well as environmental impact (today = SDGs);
- ✓ being open and transparent on these impacts;
- ✓ integrating sustainability in the veins of the organisation giving and stimulating leadership amongst community members, and taking sustainability into account in all decision making.

Sustainable LEADING ambition in Education & Research, by

- ✓ being a differentiator for UM by focussing on, with possible extrapolation to other SDGs¹:
 - Health
 - Food
 - Education
 - Understanding cultures/migration/human rights
 - Connecting theme: climate change and natural resources.
- ✓ addressing pressing problems in society;
- ✓ taking leadership in the knowledge value chain (from primary school to alumni);
- ✓ addressing core values UM: being an innovator, adopting inclusive approach, taking social responsibility, being a sustainable institution in the broadest sense.



¹ In alignment with the WUN goals: Public Health, Global Higher Education & Research, Responding to Climate Change and Understanding Cultures.

Sustainable FOLLOWING ambition in Operations, by

- ✓ being social responsible by linking to society (internally and externally) and connect e.g. to other knowledge institutions, the municipality and the region;
- ✓ following - and if relevant implementing - trends and 'best practices' from other organisations;
- ✓ focusing on proven technology;
- ✓ additionally being **LEADING** in operations as an innovator when inclusion, of e.g. knowledge from education & research, is possible.

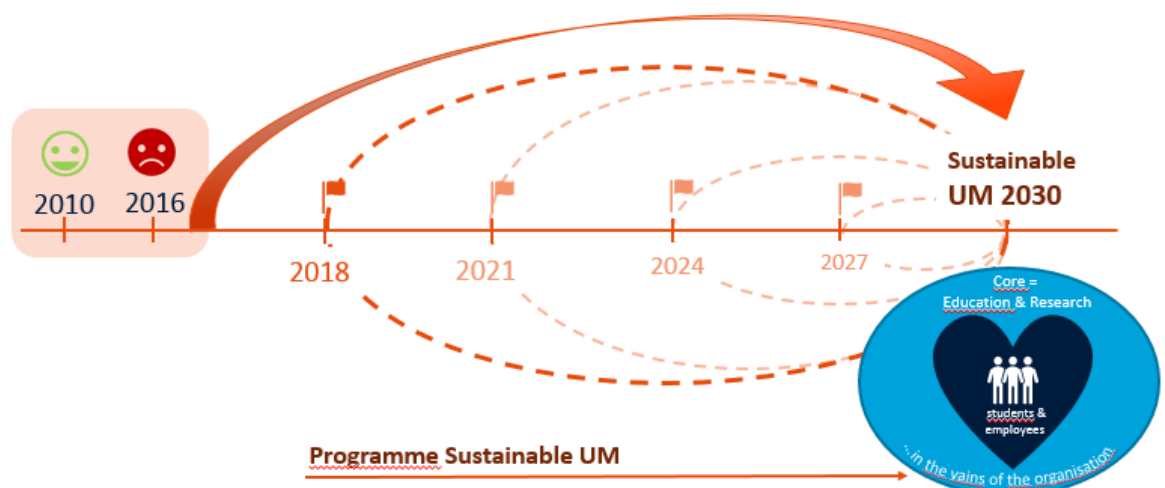
- It became clear that most fields of expertise within UM are currently connected to 'People'. From sustainability perspective, they are integrally linked to 'Planet', 'Profit' and the SDGs.
- The mentioned ambition for operations assumes that the basic requirements for sustainability are met at UM, such as:
 - Meeting hygienic factors by being regulatory compliant, including VSNU regulation, on environmental, social, economic, and governmental issues.
 - Striving for cost-reduction and operational effectiveness.

Programme of Sustainable UM 2030

- To become a sustainable university in the broadest sense, in which sustainability is in the veins of the organisation, a programmatic approach with an adaptive strategy is needed. With this programme the following results are obtained:
 - Embedding sustainability in the roles / functions of the organisation.
 - Addressing and facilitating ideas and initiatives.
 - Taking leadership in daily operation.
 - Sharing ideas and activities over and between faculties, services and other bodies at UM.
 - Linking itself to the outside world, locally and regionally.
 - Taking an active role in university networks dedicated to sustainability and SDGs such as WUN.

A programmatic approach

- The overarching updated Sustainability Vision defines the programmatic approach for all sustainability actions.
- An updated Roadmap contains the more detailed in between activities to reach the overall targets.
- Every three years a plan with projects and actions is formulated to realise the targets of the roadmap.
- The programme is divided into the three projects Education, Research and Operations, in which portfolio-specific topics are covered. Overall UM topics will be covered by a Taskforce.
- The ambition levels are used as guidelines for targets and specific activities in the programme and projects. They are the building blocks for the roadmap. The roadmap will be actualised every three years to keep track on developments in its surroundings concerning sustainability.
- This iterative way towards sustainability enables UM to adapt to technical, economic and social developments. Figure 1 shows the way towards a sustainable UM.



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Figure 1: The way towards Sustainable UM in 2030

... with subsequent organisation and responsibilities

- The implementation of the programme with the three projects demands a structural organisation in UM, see Figure 2.
- The structure is optimally connected to the existing organisational structure of UM. Next to the existing structure two additional bodies will be implemented.
- First a Taskforce, consisting of the portfolio-holder Sustainability of the Executive Board, the overall sustainability coordinator, the three project-owners, a member of the University Council, and two external parties (public and private) will function as central body to coordinate the programme, act on overall UM-topics, and monitor progress of the programme. The Taskforce is supported by a communication employee and two members of UMGO.
- The three projects consist of the project owner, a sustainability coordinator and is supported by two students of UMGO to guide activities in the respective portfolio.
- The tasks, responsibilities and authorities of all bodies presented in Figure 2 are listed in table 1.
- Basic idea of this structure is to connect top-down and bottom-up initiatives on sustainability, thus giving an expertise **platform** for staff and employees to bring in own ideas and initiatives and connecting them to the activities, projects and overall programme. Next, this structure connects to existing bodies within UM that are active in the field of SDG related topics (e.g. Brightlands campuses, EDLAB, FS, ICIS, UNU-MERIT, WUN working group).

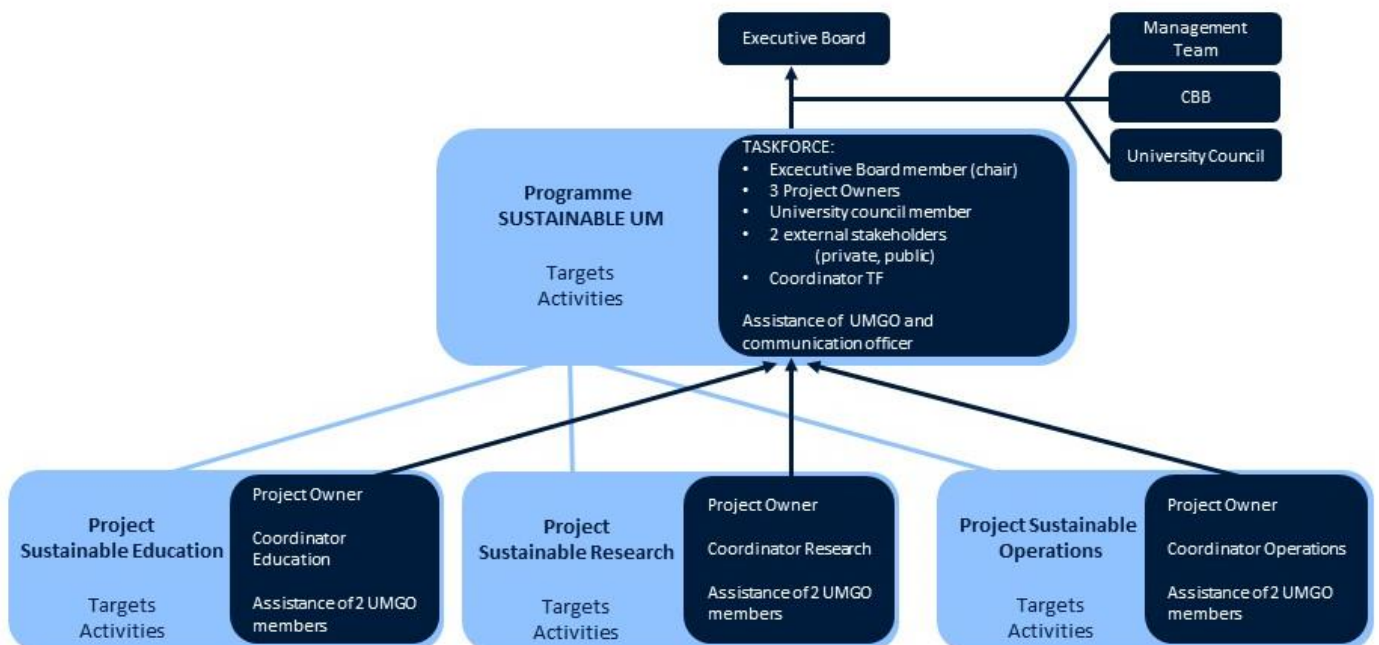


Figure 2: Organisation of Sustainable UM Programme 2030

Table 1: Tasks, Responsibilities and Authorisations (TRA) of the different bodies concerning sustainability

Body	Tasks	Responsibilities	Authorisations
Executive Board (EB)	2x/year meeting TF	Monitor programme (Check phase) and approve (future) course of the programme	Approve
Management Team	2x/year meeting EB	Reflect programme	Advise EB
CBB	2x/year meeting EB	Reflect programme	Advise EB
University Council	2x/year meeting EB Representative member in TF, see TRA Taskforce	Reflect programme	Advise EB
Taskforce (TF)¹	-Set programme targets and activities within ambition levels -Execute activities e.g. *Sustainability standard *Roadmap *Communication and activation *Reporting *Reflecting by benchmarks - 4x/year meeting TF - meetings with other bodies UM by chair and secretary of TF	Execute programme (Plan, Do, Act phases of Deming cycle ³) Monitor projects (Check phase)	Inform EB
Projects²	-Set project targets and activities within ambition levels -Execute corporate activities -Collect and stimulate activities at faculties, services, campuses -Deliver content for communication	Execute project (Plan, Do, Act phases)	Inform TF

¹ The chair of the Taskforce (member of the Executive Board) is accountable to the Executive Board and is assisted by:

- The secretary (coordinator TF) to execute activities, including the Check phase of the Deming cycle of the three Projects as well as to coordinate UMGO.
- The communication officer
- UMGO

² Each project owner is accountable to the chair of the Taskforce for the results of its project and is assisted by a coordinator.

³ The Deming cycle describes the four activities that apply to every improvement in organisations. The four activities ensure a better quality. The cyclical nature guarantees that quality improvement is continuously the focus of attention. The four activities of Deming are:

PLAN: Study the present-day work activities and devise a plan to improve the work activities. Establish specific goals to further improvements.

DO: Implement the improvement(s) as planned in a controlled test environment.

CHECK: Measure the result of the improvement and compare it to the original situation and test the results against the established goals.

ACT: Make adjustments on the basis of the results found during the CHECK.

UMGO

The Green Office is a driving force for sustainability efforts at UM. UMGO is a sustainability service provider that connects students, staff, and the community. As such, UMGO empowers bottom-up initiatives and facilitates cooperation between departments to achieve UM's sustainability targets. UMGO raises awareness, inspires critical, creative and collaborative thinking on sustainability challenges. As a result, UMGO harnesses energy, harvests ideas and delivers outcomes. UMGO believes that shared responsibility, transparency and accountability are inherent to these endeavours.

The Green Office team has found it necessary to re-examine and redefine its strategy, operations and activities. As a result, UMGO decided to take advantage of its unique position as a linking node between students, faculty and staff and focus on being a sustainability service provider. This strategy involves empowering bottom-up sustainability initiatives from students and staff while continuing to support top-down processes. UMGO thus functions as a criticaster, stimulator and connector between sustainable education, research & operations within UM.

UMGO is embedded into the proposed structure, aligned to the Taskforce and project-groups to ensure proper alignment of its (overall) projects and activities to the overall programme and projects. In this new structure UMGO is accountable to the (chair of the) Taskforce and will be managed by one of the sustainability coordinators of the Programme.

The proposed new strategy of UMGO and the Sustainable UM 2030 programme asks for an adjusted scope of work of UMGO, which will be implemented in 2018.

... with ways to Reflect and Improve

- To implement the PDCA cycle conform the Strategic Programme, every project reports on the progress to the Taskforce. The Taskforce collects all information in a progress report and checks the progress to the planning in the programme. Correcting actions that are the result of this check are reported back to the project owner to formulate (adjusted) targets and activities.
- Every year in January, before the new business plan cycle starts, the Taskforce will offer a short Progress report to the Management Team on the Sustainable UM programme with the status of progress and correcting actions to be taken.
- The Progress report forms the basis for all reporting on sustainability for UM: for My UM, for internet and for the Annual Report.
- UM will participate in benchmarks (e.g. SustainaBul, Transparency benchmark, Greenmetric) to monitor new trends, best practices and to reflect on UM's progress.
- UM is increasing its visibility and engagement in university networks dedicated to sustainability and SDGs.

... being Open and Transparent

- Openness and transparency ensures that people and (internal and external) community are aware of what UM stands for what sustainability is concerned, what is already achieved, which challenges and dilemmas lay ahead, what targets and activities are formulated and can be joined/supported. Internally, transparency ensures the necessary pride in achievements and a challenge with regard to the ambitions.
- A communication and activation strategy at programme level is needed to share the current status of sustainable UM, its targets and activities as well as to support and increase the group of sustainability ambassadors within UM:
 - First steps are targeted on My UM to inform the community of UM and on Roadshows to inform the community and collect information from students, employees and surrounding organisations/people for the roadmap and projects.

- Second steps will focus on information on internet and supporting events, symposia, lectures and courses.
- A Sustainability Standard is needed to express where UM stands for where sustainability is concerned. Meeting the SDGs and following ISO26000 means addressing e.g. responsible allocation of public money, diversity and equal opportunity, 'duurzame inzetbaarheid', emissions, responsible animal testing, integrity, responsible procurement, ethical conduct, responsible partnership, partnering in the public debate. A self-declaration is set at corporate level. Faculties can add their specific focus points so it can also be used for e.g. accreditation of education and submission for research calls.
- The annual reporting of UM is needed for the focus on *which* achievements are made, *why* and *how* e.g. choices are made, chances are identified, dilemmas and bottlenecks on operations and 'pressing problems in the region/world' are tackled. Using globally-recognised and accepted guidelines for reporting, like Global Reporting Initiative (GRI), the achievements on realising the sustainability ambitions are systematically measured and reported on and can be compared with other companies, including knowledge institutes.

...with Leadership

- Based on experiences from other companies and universities, important aspects for UM are:
 - Change in attitude and behaviour of people is needed.
 - Start small, expand by success, all with clear framework.
 - 'Facilitate' sustainable options, do not impose.
 - Support and exemplary behaviour of the Executive Board and management is crucial.
 - Leadership needs to be embedded in roles/functions.
- UM needs to get sustainability into the veins of the organisation meaning:
 - Always consider the sustainable alternative when choosing products and services and in all decision-making.
 - Focus first on targets and activities. Subsequently embed these into responsibilities of staff members and monitor the dealing with these responsibilities in performance reviews and assessment interviews.
- Create leadership in role/function within education/research/operations by stimulating to join forces over the three projects and contribute to e.g. green labs, living labs, or operations.
- Stimulate leadership in daily behaviour, e.g. commuting by bike, or separate waste.

Appendix 2 shows some examples of sustainable leadership based on what is expected from UM from the outside world, from best practices, and from the input of the interviews and meetings.

... with Budget

- Based on experiences from other companies, universities and networks, one can state that sustainability pays for itself (and more).
- UM chooses to support intrinsically motivated students and employees to be more sustainable by giving them a platform to bring in own ideas and initiatives and connecting them to the activities, projects and overall programme.
- This platform is organisationally and financially supported by four sustainability coordinators, a communication officer and UMGO (8 students), according to table 2.

- Next to this platform, the Taskforce can use allocated means for additional financial support of activities like living labs, symposia or events.
- Organisational and financial implications on central means are depicted in Table 2.

Table 2: Organisational implications on finances/ year

Current organisation	Budget	Proposed organisation	Budget
Sustainability Adviser (0,6 fte)	48k	Taskforce coordinator/advisor	50k
		3 project coordinators + UMGO coordination	150k
		Communication employee (embedded in marketing & communication)	
UMGO: 75k - 8 students, each 14 h 25k - 0,2 fte PhD 33k - 0,4 fte coordination 12k - housing 16,5k - out of pocket	161,5k	UMGO 45k - 8 students, each 8h 12k - housing 3k- out of pocket	60k
		Out of pocket TF	50k
Total	209,5k	Total	310k

... in Time

Table 3: Time, milestones and responsible bodies

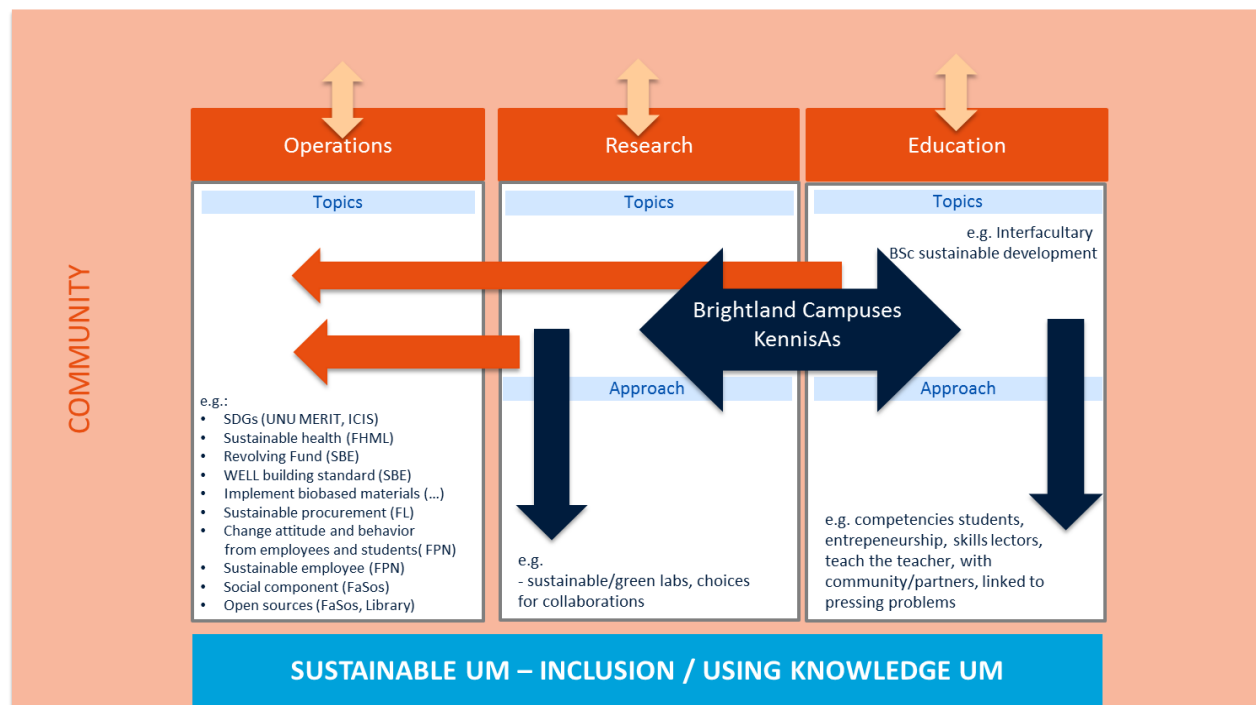
Timeline	Milestone	Responsible body at UM
Sep - Dec 2017	Set up final programme, including framework roadshows	Taskforce
Dec 2017 - March 2018	Roadshows (to collect targets and ideas with people from inside and outside UM)	Project owners
March 2018	Action Plan per Project and overall Programme with specific targets and activities	Project owners
Apr 2018	Final Roadmap	Taskforce
Jan 2020	Evaluation of the programme and organisation based on specific targets and moments of evaluation	Taskforce
2018-2021	Execute Targets and activities of Roadmap	Project owners and Taskforce
2021, 2024, 2027	Actualisation of Roadmap & PDCA cycles	Project owners and Taskforce

Appendices

1. Possibilities for inclusion at UM as mentioned by interviewed people of UM in 2017
2. Examples of sustainable leadership as mentioned by interviewed people of UM in 2017
3. Proposed next steps: 2017-2018

Appendix 1. Possibilities for Inclusion at UM as mentioned by interviewed people of UM in 2017

- The basis of Sustainable UM is focus on inclusion of UM in the community and vice versa, both in Operations and in Research and Education.
- The challenge is to connect topics from Education and Research in Operations. Apply the sustainable knowledge from different departments to strengthen the sustainability of Operations.
- The Brightlands Campuses are an important platform to connect knowledge and experience. Also use frontrunner knowledge from topics to inspire new approaches.



Appendix 2. Examples of sustainable leadership as mentioned by interviewed people of UM in 2017

Ambition level →	Defender = Being compliant (also VSNU) and strive for economic advantage	Follower = Sustainability consideration	Leader = Linked to community and strive for multiple shared added value		
Project		Sustainable criteria¹	Best Practices	Input from UM in 2017: > 40 interviews and 2 meetings	
EDUCATION -Content	NVAO accreditation criteria	-Integrate knowledge on sustainable development in courses and minors -Embed Sustainable development integrally in curricula -Contribution of sustainable development by alumni -Stimulate learning on the job (research, internships, thesis)	-AISHE certificate for Higher Education	-Collaborations (thematic) in BSc and MSc between faculties on sustainable development (FaSos, ICIS, SBE, FL) and/or health. -Develop second traject MSc with civil organizations -Interfaculty BSc sustainable development - -Sustainability supplement added to regular accreditation process -Connection community -Scale up ECCE interfaculty -Expand research agenda finance with health & 'indoor climate' -Expand 'biomedical science' -Implement Global Challenges / SDGs -Expand 'biobased materials' -Develop MSc complementary economics -Develop minor 'great thinkers' → critical and integral thinking and entrepreneurship -New imagine masters (FHML) -Co-operation with local region -Valorisation of knowledge developed by UM globally to support the achievement of the SDGs - Share best practises with international university network partners	-Original and inspiring education focused on one of the 5 UM 2030 Sustainability themes <ul style="list-style-type: none"> • Health • Food • Education • Understanding cultures /migration/human rights • Connecting theme: climate change and natural resources -Connect to pressing problems in the world, e.g. 2017 = refugees
EDUCATION -Operations	Performance indicators (Prestatie-afspraken) central government: Aspects of study success, excellence and measures Valorisation VSNU: Entrepreneurship, education, courses, training, post-academic education, commercial educational programmes	-Education offer to larger community -Communication at faculty level -Competences of staff to carry out the objectives on sustainable development (support and training of expertise staff) -(transparent) Capacity on sustainable development of staff	-Giving more people the chance to gain knowledge through Massively Open Online Courses (MOOC's) at the University of Nottingham and Wageningen University	-Increased engagement with students, related to personal goals. -Provide education to less fortunate (e.g. refugees) -Facilitate online education -Use and add new digital techniques for use PBL -Create successful interfaculty network PBL 2.0 or PBK hybride by using outcomes of education and research in operations -Education innovation via EDLAB 'engagement' -Focus on accreditation + standards -Use and embed open access datasets -International cooperation contributes to SDGs	

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18-2-2018

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Ambition level → Project	Defender = Being compliant (also VSNU) and strive for economic advantage	Follower = Sustainability consideration Sustainable criteria ¹	Best Practices	Input from UM in 2017: > 40 interviews and 2 meetings	Leader = Linked to community and strive for multiple shared added
sustainable RESEARCH -Content	Peer review/ External visitations by Standard Evaluation Protocol	-Sustainable research institutes -Research topics and approach to sustainable development -Social applicability	-Living labs as a way of integrating your knowledge in the environment of the Campus of Cambridge	-Address issues that require an innovative approach e.g. in healthcare, big data. - Have (more) focus on: migration for economic reasons, integration of refugees, distribution of economic wealth -Consider/ work on social protection in developing countries - Consider/work on fair trade and employment -Climate change transitions -Expand research agenda with health and internal climate (buildings and 250 schools) -Develop social sciences from human approach in sustainability -Expand/develop healthy living -Implement influence of attitude and behavior on health -Develop/expand IT i.c.w. health -Expand biomedical sciences + new sciences -Further increase expertise and attention for biobased materials. -Address SDGs through research projects in framework of WUN and other international networks	- Original and inspiring research, focused on one of the 5 UM 2030 Sustainability themes <ul style="list-style-type: none"> • Health • Food • Education • Understanding cultures /migration/human rights • Connecting theme: climate change and natural resources • being an example - Living labs: research 'tested' at UM / UM region / UM partners - Sustainability in labs: green labs show possibilities (sustainable materials, critical attitude towards rules), share knowledge and reward
sustainable RESEARCH -Operations	Performace agreements: 'profileringsthema's, onderzoeksbeleid, promoties, NWO en EU beurzen, Onderzoeksvisitatie's Valorisation VSNU: '3 ^e geldstroom, extern gefinancierde hoogleraren, vakpublicaties, patenten, licentie-overeenkomsten, spin-offs'	-Stimulate sustainable research -Communication of research and results -Funding for research dedicated to sustainable research -Responsible animal testing	-Green labs : lab use, reuse and recycling, freezer management, optimize freezer facilities, fume hood strategy – several universities	-Further integrate sustainability as one of the drivers for innovation (e.g. in reduction of animal testing, preventing intensive treatments of humans, etc.) -Improve connection of the research at Brightlands campuses with education -Strive for sustainable labs. -Address translational research and precision medicine. -Develop new equipment faster, more efficiently, more precise to improve specificity and reduce frequency of treatments. -Increase collaboration with banks -Give 'improving the world' a more central place in research -People find each other again to start new collaborations -Follow up of 'Kennisas': Regional knowledge development - Develop and execute sustainable research roadmap	

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		Sustainable criteria ¹	Best Practices	Input from UM in 2017: > 40 interviews and 2 meetings	
sustainable OPERATIONS -General	From interviews: Hygienic factors like energy, paper and travel are not 'hygienic' yet			<ul style="list-style-type: none"> -Move from 'what are the costs' to 'what is the added value' = total cost of ownership -Reward changes of attitude and behavior -Facilitate, lead by the hand and listen - give sustainable options, so students and employees can choose - Organize operations on corporate level, facilitate extra possibilities at faculty level -Total cost of ownership -Be aware with who we work (companies, countries) i.r.t. our integrity -Less animal use -Work globally with universities and other parties to achieve the SDGs. 	-Link knowledge, experience and research results to internal operations
sustainable OPERATIONS -Finance		<ul style="list-style-type: none"> -Wijze en mate van investeringen -Fossilfree investments -Keuze voor (duurzame) bank 	<ul style="list-style-type: none"> -Revolving University Campus Fund: Harvard University -Research Fund 'Food for Thought' and 'Anne van den Ban Fund' at Wageningen University 	<ul style="list-style-type: none"> -Reduce investments in fossil resources -Choose for sustainable banking -Examine ways of investments by SWOL, in favor of sustainability -Use incentives next to solidarity principles 	Revolving fund for sustainable operations
sustainable OPERATIONS -Emissions		<ul style="list-style-type: none"> -Prevent emissions -Carbon footprint: targets and actions to reduce, sustainalize, compensate -Climate mitigation and adaptation 			
sustainable OPERATIONS -Energy	<ul style="list-style-type: none"> -Monitoring energy use -MJAE 3: Energy Efficient Plan, % energy reduction, % renewable energy 			<ul style="list-style-type: none"> - Self control on lighting etc. is needed - Continu awareness activities like hot sweater day - Make energy transition with COOL Maastricht, Maastrichts Energy akkoord, windmill, warmtenet, solar energy 	
sustainable OPERATIONS -Catering		<ul style="list-style-type: none"> -Less/ no consumption animal (based) products -Food waste 	<ul style="list-style-type: none"> -University of Yale: Food waste collection and reuse -Healthy nutrition – Gardens with healthy food University of Yale -Arcadis: 'van beker tot bips' 	<ul style="list-style-type: none"> - Scale up sustainable catering, next to 'small' Banditos - Use sustainable (e.g. biobased) coffee cups 	

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		Sustainable criteria ¹	Best Practices	Input from UM in 2017: > 40 interviews and 2 meetings	
sustainable OPERATIONS -Campus		-Campus for water absorption -Campus covered in planted vegetation -Campus in form forest	-Creating a green and lively environment for the community in the Arboretum of UC Davis in California	-'Gorilla gardening' - use temporally open space for gardening / green spots -'Broedplaats' for interfaculty sustainable research with surrounding (partners) - Create possibility for outside lectures and relax spaces	
sustainable OPERATIONS -HRM	-'Duurzame inzetbaarheid' -% people 'met afstand tot de arbeidsmarkt'	e.g.: -Sustainable personnel -Study and working conditions -Fair operating practices -Anti corruption -Fair competition -Mobiliteit werkplekken	- Health & Vitality: programme for Committed Power at TenneT - Sustainable workforce – No exclusion! Implementation of senior workforce – Radboud University	-Sustainable employment policy, e.g. prevention of stress, reducing work load diversity in age, etc. Next planning, follow whole PDCA cycle -Address psychological issues that occur amongst students -Promote a healthy living style in general -Give employees more responsibilities in being and staying fit for the job -Provide additional (content) schooling for employees -Further develop expert centrum sustainable employment and increase participation of UM -Address fair employment -Stimulate employees being sustainable (people, planet and profit), including own education -Be aware of discrimination -Implement tenure track system -Gender equality and diversity	Living lab → HR policy
sustainable OPERATIONS -Housing		-Smart buildings -Green buildings: implementation as reflected in all construction and renovation policy	-BREEAM/LEED certifications for new buildings and renovations on campus – Multiple Uni's -University of Eindhoven: retain previous space, reuse of materials and implement own technical innovations (living lab) in Atlas Building -University of Nottingham: partnering with private sector for carbon neutral laboratories	- Need of new policy for e.g. less space (m ²), shared and flexible interfaculty housing. Make sustainability a key (budget) driver for renovation, building and maintenance -Co-operate with municipality to make the monumental buildings in the inner city of Maastricht sustainable. - Apply stringent sustainability standards to buildings, e.g. WELL building standard -Sustainable buildings (more comfort and efficiency) with clear and visible sustainable components -Buildings connected to healthy environment -Implement/test biobased materials	WELL building standard

Ambition level → Project	Defender = Being compliant (also VSNU) and strive for economic advantage	Follower = Sustainability consideration			Leader = Linked to community and strive for multiple shared added value
		Sustainable criteria ¹	Best Practices	Input from UM in 2017: > 40 interviews and 2 meetings	
OPERATIONS -Travel		-‘woonwerk’ mobility -Business travelling, -Parking (area and policy), -Public transport, -Bicycles and pedestrian friendly, -Mobility: based on prevention, reduction, preserving and compensation	University of Oxford: Parking fee to promote sustainable P+R University of Eindhoven: Demotivation of motorized transportation by Green Strip	-Improve and facilitate sustainable travel options and behavior -Compensate and reduce, continue awareness efforts -Increase accessibility of Venlo Venue / Brightland Campuses -Develop incentives to make commuting more sustainable (e.g. recharging of bikes and cars and reduction of parking spaces) -Reduce parking spaces. If needed, make it water permeable -Improve sustainable travel options to Belgium and Aachen -Strive to limit the travelling by plane in EU -Compensate extra costs of travelling by train instead of by plane in EU - Have attention for student transportation	
OPERATIONS Procurement	-Pianoo criteria	-Sustainable procurement		-Improve knowledge and skills on sustainable procurement -More/better involvement of users is needed in whole process. -Manage contracts: monitor, judge and act	
OPERATIONS -Water		-Reduction water use -Use of tap water	UC Davis: Recycled water use for Campus Cooling University of Oxford: Rainwater harvesting		
OPERATIONS Waste			University of Cambridge: Resource sharing tool University of Groningen: PV waste compactors Wageningen University: Cultivate food on coffee waste	-Work on waste prevention (e.g. during study weeks) -Use of our developed biobased materials in UM	Living lab → Green lab
OPERATIONS -ICT				-Increase the use of digital solutions to prevent extra travel and to provide access to education (e.g. online courses) -Expand video conferencing -Build new sustainable data centre	

Ambition level →	Defender = Being compliant (also VSNU) and strive for economic advantage	Follower = Sustainability consideration	Leader = Linked to community and strive for multiple shared added value
Project	Sustainable criteria¹	Best Practices	Input from UM in 2017: > 40 interviews and 2 meetings
OVERALL UM -General		-'Maatschappelijke toepasbaarheid' -'Maatschappelijke betrokkenheid' -Aanspreekpunt dzh	<i>Community engagement:</i> University of Utrecht: Supporting the community by providing urban institutes with the research and knowledge needed to improve Healthy Urban Living <i>University of Oxford:</i> Creating awareness and engagement in sustainability for the community of Oxford via Social Media on the University of Oxford Environmental Sus.
OVERALL UM -Strategy		-Lange termijnvisie op dzh	Facebook page <i>University of Groningen:</i> Engage the student community in coming up with new ideas to improve sustainability on campus, like the Green Mind Award of the University of Groningen with the winning idea of improving sustainability of the Bernouilleborg <i>Social media campaigns</i> for sustainable health – Multiple universities <i>the FAIR-principle</i> is an overarching example of sustainable leadership in operations, research, and education within UM.
OVERALL UM Communication		-Communication and transparency: website, social media	-Communication with and for sustainable UM -Define sustainability self declaration for being transparent + collecting all activities and standards. -Use integrated reporting based on international well accepted standards, like GRI guidelines. -External assessment is needed to improve
OVERALL UM -Participation		-Student participation -Employee participation -Sustainability events -Partnerships -University sustainability budget	-Value for society is important

¹ SustainaBul (benchmark), Greenmetric (benchmark), AISHE 2016

Way to Sustainable UM 2030

