

Maastricht University

GENERAL AND TECHNICAL SERVICES (FD)

FD u09.0263
Maastricht, 23-06-2009

Re: **Sustainability progress report dated 23 June 2009**

- Appendices:
1. Sustainability agenda 2008–2010, version 0.1, dated 12 March 2008
(updated in June 2009 with the UM Sustainability work group projects)
 2. Multi-year agreement 3
 3. Sustainable purchasing

In 2007 Maastricht University took stock of its ambitions and the state of affairs regarding sustainable development. The report 'Sustainable development at Maastricht University' (reference FD/MdB/MV 07.0946) provides information about, for example, the aspects at stake within the context of the Sustainable Development Framework in 2007 (see appendix).

In summer 2008 Maastricht University set out its sustainability mission and decided on the Sustainability Agenda 2008–2010.

This memo provides up-to-date information on the aspects included in particular in the Sustainability Agenda.

Maastricht University's sustainability statement is formulated as follows:

We, the Maastricht University community, affirm our commitment to protect and enhance the environment through our learning, research, service and administrative operations. We seek to foster a community that sustains ecological systems and provides education about environmental awareness, local action and global thinking. We seek to incorporate environmental principles and environmentally responsible practices as fundamental and integrated components of all Maastricht University operations and programmes.

Our fundamental principles are to:

- *incorporate environmental concerns as a significant priority in university decision making*
- *seek alternative practices and procedures to minimise negative impacts on the environment*
- *conserve natural resources and restore environmental quality in our region*
- *consider the social, economic and environmental impacts of Maastricht University's operational policies and foster a participatory process in developing these policies.*

Our decisions and actions will be guided by the university's mission statement, informed by our Strategic Programme, and reflect our resources. As a learning institution, we recognise that planning for sustainability will be an evolving practice.

This statement has been translated into a Sustainability Agenda, which has been put into action in several subfields. A work group has discussed the state of affairs regarding the Sustainability Agenda, and initiated further action in several subfields.

The UM Sustainability Policy work group consists of:

Maya de Bruijn, FD/EHS (chair)
Denis Ancion, MUO/Communication
Robert Coolen, FD/Purchase Department
Marc Fischer, FD/EHS
Martin Geurts, FD/Estates and Buildings
Cala Havenith, FD/secretariat (secretary)
Jolanda Kemp, FD/Estates and Buildings
Mitch Miller, student
Maarten Simonis, FL/M&C
Bart Verspagen, FEBA/Economics department
Annemarie van Zeijl, FHS/ICIS

1. Education

With the aid of a student assistant, the work group intends to prepare a survey questionnaire, which will be sent to all degree programme coordinators. Below is a list of what is currently known to the work group.

A new master's programme in Sustainable Development is awaiting accreditation by the NVAO. Due to the large number of applications at the NVAO and the priority given to existing programmes, it is unclear when this master's can start.

Maastricht University offers the following bachelor's courses:

- Introduction to Sustainable Development
- Globalisation, Environment and Society.

(Both these courses are offered at the University College Maastricht and are very popular, with more than 100 students each.)

- Hands-on Sustainability

The Maastricht Graduate School of Governance offers the Sustainable Development track (18 students) as part of the master's programme in Public Policy and Human Development, with the following courses:

- Introduction to Sustainable Development
- Governance for Sustainable Development: Concepts and Practice
- Sustainability in a Globalising World
- Integrated Assessment

Further, ICIS, MUNDO, IVM (VU, Amsterdam), and the Centre for Development Studies (CDS, Ghana) have developed the master's programme in Governance and Sustainable Development for the Cape Coast University in Ghana.

Finally, the university offers the PhD programme in Sustainability Science, Policy and Practice (SSPP).

2. Research

The work group must gain insight into the sustainable development initiatives in the field of research. The student assistant will analyse the research data and send a questionnaire to the research schools. The following initiatives are known to us.

In line with the university's strategic programme, a plan has been written for a Maastricht University graduate school of Sustainability Science (MUST), which is awaiting approval by the Executive Board. Combined with the university's current and future research basis for sustainable development (e.g. the current research field at ICIS) and the development of an interdisciplinary and international master's programme in Sustainable Development and the PhD programme in Sustainability Science, Policy and Practice (SSPP), MUST could potentially develop into a school which contributes significantly to the university's education and research strategy for sustainable development, at regional, Euregional and international level.

3. Emissions and energy

Together with all other Dutch universities, Maastricht University has entered into the MJA3 agreement (see Appendix 1). This is a multiyear agreement with the governments that aims to reduce CO₂ levels in 2020 by 30% compared to reference year 2005. A maximum of 10% of this percentage can be obtained from the *verbredingthema's* (broadening themes).

Further, the energy efficiency plan (EEP) is a tool for the internal planning process to take energy efficiency improvement measures. This compulsory element from the multiyear energy efficiency agreement (MJA) sets down which measures that must be implemented when. A new EEP must be drawn up each year.

An external adviser funded by the Ministry of Education, Culture and Science has assessed the EEP submitted by Maastricht University and issued advice for improvement.

The EEP was formally submitted in early April 2009. After being assessed by SenterNovem, it was recently approved by the Maastricht city council. Once approved, an EEP replaces explicit regulations in the licence under the Environmental Management Act (Wet Milieubeheer).

From 2009 to 2012, one aspect of Maastricht University's EEP will concentrate on application of the cost-effective measures in various UM buildings:

- high-efficiency lights
- revolution meters in ventilation units
- high-efficiency boilers.

These measures are expected to reduce CO₂ by around 100 tons, i.e. a **reduction of 1.19% instead of the 8%** to be met by UM in accordance with the objectives included in the covenant (see Appendix 2).

In addition to the cost-effective measures, the EEP also sets out measures whose cost-effectiveness is uncertain. Their application at UM is currently being investigated.

Outside the MJA, optimisations are continually being implemented. For example, the following measures were rolled out in 2008:

- high-efficiency heat recovery (BOU 1–3 Statenzaal, DEB1, UNS40, UNS60 and TS49A)
- use of excess heat generated by the computer room cooling system for classrooms (TS49A)
- optimisation of building management system settings (GL17, KAP2)
- optimisation of air flow, and 35% reduction and resetting of inflow temperature (GL17).

These measures are expected to lead to a reduction of 0.8%.

Maastricht University is currently installing an electronic gauge system for gas and electricity use (Erbis), which allows for analysis of deviant use and accelerated introduction of measures to correct this. This system is expected to be active for all UM-owned buildings before summer 2009.

For 2009 and 2010, the Housing Fund has earmarked €250,000 per year for energy-saving measures. The following measures are being taken:

- installation of light sensors in toilets
- installation of low-energy light bulbs
- development of methods to increase energy awareness in each administrative unit
- examination of use of grey-water circuits when renovating buildings
- use of residual heat when renovating existing and constructing new buildings.

Overall, it is clear to the work group that, to fulfil the ambition of the MJA3, drastic measures must be taken. UM will not succeed if it continues to implement optimisations as it has done in the past. The MJA3 objectives should also be taken into account in the politically sensitive debate on opening hours in the evening and weekends.

In addition, within the context of sustainability and the field of real estate, the 'Sustainable building action list' has been available since 2007.

On 8 June 2009, the CBB issued positive advice on:

- implementing energy-reduction measures with a payoff time which is shorter than each specific measure's life
- using energy generated by sustainable cogeneration technology when research shows that this is feasible and desirable.

The aforementioned action list will need to be adjusted accordingly.

Within the context of the 'broadening themes', two measures have already been taken:

1. the postal services are handled on a CO₂-neutral basis
2. the moving company works on a CO₂-neutral basis.

The Executive Board has requested a feasibility study on the use of Plugwise, an intelligent plug on equipment used to save energy.

4. Sustainable purchasing

The Dutch universities have engaged in a joint project on sustainable purchasing (see appendix 2). On 3 December 2008, environment minister Cramer signed the sustainability purchasing covenant with representatives of higher education institutes. With this, higher education institutes oblige themselves to work actively towards sustainable purchasing procedures. The aim is for all higher education institutes to make at least 50% of their purchases sustainable in 2012. UM has set itself a higher goal: from late 2008, all sustainability criteria (insofar as they have been worked out by

SenterNovem) have been taken into account in European tenders unless this leads to disturbed market processes and/or substantial concessions in terms of quality.

The Executive Board has approved plans for around 20 European tenders. The following tenders have been completed.

Food and beverage

In accordance with the requirements set out in the SenterNovem criteria.

Removals

In this tender, the sustainability aspect is part of the plan of approach. The parties had to include a description of their measures. The SenterNovem criteria have not been considered. Applicants, however, are requested to describe the energy- and environment-saving measures they will take.

Catering

In accordance with the requirements set out in the SenterNovem criteria.

Furniture

In accordance with the requirements set out in the SenterNovem criteria.

Office supplies

The requirements set out in the SenterNovem criteria have been partly adopted.

Postal and transport services

This tender has taken into account the following criteria.

- Applicants oblige themselves to submit an annual written report to the tendering service's management about their policy, plans and performance regarding all applicable sustainability criteria.
- SenterNovem's sustainability requirements and wishes regarding vehicles.

Lab supplies

As SenterNovem has not set out specific criteria for these supplies, the following has been included in the tender.

- UM intends to use environmentally friendly and sustainable products as far as possible. The university wishes to control and minimise its environmental load. Applicants are requested to briefly indicate whether they have an environment care system in place and how they intend to implement it in practice.
- UM values sustainable purchasing and takes social responsibility in all its undertakings. Applicants are requested to briefly describe their vision of this and how they intend to implement it in practice.

A Maastricht University representative, Robert Coolen from the FD/Purchasing Department, participates in the interuniversity Sustainability Strategic Work Group coordinated by the VNSU.

5. Broadening the sustainability principle within the university

To broaden the sustainability principle within UM, staff and students should be able, according to the work group, to follow progress in the field of sustainability via the website.

In addition, it is desirable, in consultation with Student Services, to look into the establishment of a suitable space where students can exchange ideas about sustainability in order to guarantee continuity. In the work group's view this, too, would involve the support of a student assistant.

ICIS has set out sustainability house rules in its own unit aimed to strengthen awareness of sustainability. It would like to undertake initiatives to further promote sustainability awareness within UM. To do so, however, additional funding must be made available. A realistic lead time for the first project of this kind is estimated at three years.

Various sustainability-related initiatives are ongoing in student circles. Marc Fischer/FD-EHS keeps stock of the various initiatives and acts as the work group's contact point. In this way, via the UM Sustainability Policy work group, these initiatives are given a 'status', formalised and can be dealt with as projects under the work group's direction.

6. Classificatie Universitaire Panden op Sustainability (Classification of University Buildings on the Basis of Sustainability)

Maastricht University is looking for a relatively simple instrument which allows its buildings to be assessed for sustainability. The Dutch Government Building Department (Rijksgebouwendienst) and the Ministry of Housing, Spatial Planning and the Environment have developed 'GreenCalc', an instrument which assesses buildings' sustainability based on the use of energy, materials and water.

This integrated approach allows for the balancing of the environmental impact of constructional and installation-technical measures in buildings, and, thus, for decisions on an optimal set of measures for a specific building. In doing so, a building's environmental friendliness is expressed as the 'Milieu-Index Gebouw' (MIG, or building environmental index). The MIG is presented in the form of a label also used, for example, for washing machines and cars.

In addition to the MIG, the 'Milieu-Index-Bedrijfsvoering' (MIB, or operational management environment index) indicates how users of a building deal with the environment. This may include, for example, saving energy, buying green electricity, using low-energy computers, and using buildings intensively.

Together with the university's EHS advisers, FD/Estates and Buildings is currently studying whether GreenCalc is a suitable instrument to measure the sustainable initiatives to be taken per building. To this end, pilots are being prepared for the new Oxfordlaan 55 building under development and the Tongersestraat 6 building to be upgraded.

The Lenculenstraat 14 building is being used to examine the sustainability possibilities for smaller university buildings.

7. List of projects

Several initiatives are included on the Sustainability Agenda for which a project proposal must be prepared by the end of 2009 (see Appendix 1).