Assessment report
Limited Framework Programme Assessment

Master Sustainability Science and Policy

Maastricht University

Contents of the report

1. Executive summary

In this executive summary, the panel presents the main considerations which led to the assessment of the quality of the Master Sustainability Science and Policy programme of Maastricht University. The programme was assessed according to the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands, as published on 20 December 2016 (Staatscourant nr. 69458).

The panel endorses the proposed change of the name of the programme to Master Sustainability Science, Policy and Society, as in this proposed name the importance of the societal dimension of the domain of the programme is acknowledged. The panel considers this dimension to be very relevant for this domain.

The panel considers the programme objectives to be sound and relevant. The programme distinguishes itself by educating students to be able to conduct environmental and sustainability assessments, involving various actors and stakeholders.

The programme objectives are within the boundaries of the domain-specific reference framework for academic programmes in Environment and Sustainability Sciences, this programme having a clear profile within this framework. The panel is very positive about the effort by the joint academic programmes in Environment and Sustainability Sciences in the Netherlands to draft this framework and regards this to be a sound and up-to-date description of this domain.

The objectives have been well translated into the intended learning outcomes of the programme. These reflect knowledge and understanding of the domain and include research skills and academic skills. The panel advises to include more explicitly the education of students to become bridge-builders. The natural sciences perspectives not being very strongly addressed, the panel advises to remain attentive in this respect, as this may be considered a relative weakness. The intended learning outcomes conform to the master level.

The panel appreciates students being prepared for positions as researchers and advisors in academia, in government or in private organisations. In the panel’s opinion, programme management and lecturers maintain contacts with the professional field adequately.

The panel regards the organisation of the programme to be appropriate.

The number of incoming students is looked upon favourably by the panel and the target figures of programme management of an influx of about 60 students is supported by the panel.

The panel very much appreciates the contents and coherence of the curriculum. The courses reflect the contents of the programme strongly and are appropriately related to the research in this domain. The skills which are relevant for the programme, are addressed adequately in courses which are nicely woven into the curriculum. Students are exposed to the relevant professional field. The coherence of the curriculum is strong. In the papers of the courses, the Sustainability Assessment Project and the Master Thesis, students are given the opportunity to tailor the curriculum to their preferences.

The core lecturers in the programme are practically all PhDs and they are intensively engaged in current, relevant research. Their educational capabilities are up to standard, as the proportion of BKO-certified lecturers of 87 % is very substantial. The panel encourages programme management to foster SKO-certification among lecturers. The regular staff meetings are a very positive feature. The lecturers are easily approachable for the students.

The panel approves of the entry requirements and the admission procedures of the programme. The panel appreciates the bridging programme, offering students tailor-made routes to remedy their deficiencies and to enter the programme.

The educational concept and the study methods of the programme are adequate, promoting small-scale, intensive and student-activating learning. The panel encourages programme management to investigate new, ICT-based study methods. The study guidance is intensive. Students experience the programme to be challenging, but doable. The student success rates are good.

The examinations and assessment policy of the programme are satisfactory. The composition, role and responsibilities of the Board of Examiners are adequate as well, but the panel noted the Board being in the earlier stages of the process of monitoring the quality of examinations and assessments. The panel advises to proceed with this process.

The examination methods applied in the programme are adequate and meet the course contents.

The panel is positive about the supervision and assessment procedures for the Sustainability Assessment Projects and the Master Thesis, the supervision being intensive and the assessments being conducted in a reliable way.

The panel considers the assessment forms for the Sustainability Assessment Projects and the Master Theses to be well-elaborated. Some of the assessment forms may be filled out more comprehensively, not so much in terms of marking the various assessment criteria but more in terms of written comments.

The quality of examinations and assessments are being adequately promoted. The panel advises to continue these efforts. The panel recommends to schedule calibrating sessions to synchronise assessments and grades among examiners.

The panel regards the course examinations, which were reviewed to be up to standard.

The Sustainability Assessment Projects and Master Theses the panel studied, in general address suitable subjects or topics. The subjects and topics addressed in the Master Theses are aligned with the domain of the programme, but the panel feels this relation could be strengthened. The panel regards both projects to be well-structured in terms of both theory and methodology and to be well-written. The panel agrees with the grades given by the programme examiners.

The panel feels the students completing the programme have reached the intended learning outcomes and considers the graduates of the programme to be well-equipped to obtain suitable positions.

The panel that conducted the assessment of the Master Sustainability Science and Policy programme of Maastricht University assesses this programme to meet the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands, judging the programme to be satisfactory. Therefore, the panel recommends NVAO to accredit this programme.

Rotterdam, 25 June 2018

Prof. dr. W.A. Hafkamp
(panel chair)

drs. W. Vercouteren
(panel secretary)

2. Assessment process

The evaluation agency Certiked VBI received the request by Maastricht University to support the limited framework programme assessment process for the Master Sustainability Science and Policy programme of this University. The objective of the programme assessment process was to assess whether the programme would conform to the standards of the limited framework, as laid down in the NVAO Assessment framework for the higher education accreditation system of the Netherlands, published on 20 December 2016 (Staatscourant nr. 69458).

Management of the programmes in the assessment cluster Environment and Sustainability Sciences convened to discuss the composition of the assessment panel and to draft the list of candidates.

Having conferred with management of the Master Sustainability Science and Policy programme of Maastricht University, Certiked invited candidate panel members to sit on the assessment panel. The panel members agreed to do so. The panel composition was as follows:

- Prof. dr. W.A. Hafkamp, full professor of Environmental Sciences, Erasmus University Rotterdam (panel chair);
- Prof. dr. M.C.E. van Dam-Mieras, emeritus professor Sustainable Development and Educational Innovation, Leiden University (panel member);
- Prof. dr. L. Hordijk, emeritus professor Environmental Systems Analysis, Wageningen University (panel member);
- P. Aarts BSc, student Master Biological Sciences, University of Amsterdam (student member).

On behalf of Certiked, drs. W. Vercouteren served as the process coordinator and secretary in the assessment process.

All panel members and the secretary confirmed in writing being impartial with regard to the programme to be assessed and observing the rules of confidentiality. Having obtained the authorisation by the University, Certiked requested the approval of NVAO of the proposed panel to conduct the assessment. NVAO have given their approval.

To prepare the assessment process, the process coordinator convened with management of the programme to discuss the outline of the self-assessment report, the subjects to be addressed in this report and the site visit schedule. In addition, the planning of the activities in preparation of the site visit were discussed. In the course of the process preparing for the site visit, programme management and the Certiked process coordinator regularly had contact to fine-tune the process. The activities prior to the site visit have been performed as planned. Programme management approved of the site visit schedule.

Well in advance of the site visit date, programme management sent the list of final projects of graduates of the programme of the most recent years. Acting on behalf of the assessment panel, the process coordinator selected 15 Master theses and 17 Sustainability Assessment Projects. the latter projects being all of the projects undertaken in the last two years. The grade distribution in the selection was ensured to conform to the grade distribution in the list, sent by programme management. No additional criteria applied.

The panel chair and the panel members were sent the self-assessment report of the programme, including appendices. In the self-assessment report, the student chapter was included. In addition, the expert panel members were forwarded a number of final projects of the programme graduates, these final projects being part of the selection made by the process coordinator.

A number of weeks before the site visit date, the assessment panel chair and the process coordinator met to discuss the self-assessment report provided by programme management, the procedures regarding the assessment process and the site visit schedule. In this meeting, the profile of panel chairs of NVAO was discussed as well. The panel chair was informed about the competencies, listed in the profile. Documents pertaining to a number of these competencies were presented to the panel chair. The meeting between the panel chair and the process coordinator served as the briefing for panel chairs, as meant in the NVAO profile of panel chairs.

Prior to the date of the site visit, all panel members sent in their preliminary findings, based on the self-assessment report and the final projects studied, and a number of questions to be put to the programme representatives on the day of the site visit. The panel secretary summarised this information, compiling a list of questions, which served as a starting point for the discussions with the programme representatives during the site visit.

Shortly before the site visit date, the complete panel met to go over the preliminary findings concerning the quality of the programme. During this preliminary meeting, the preliminary findings of the panel members, including those about the final projects were discussed. The procedures to be adopted during the site visit, including the questions to be put to the programme representatives on the basis of the list compiled, were discussed as well.

On 28 March 2018, the panel conducted the site visit on the Maastricht University campus. The site visit schedule was in accordance with the schedule as planned. In a number of separate sessions, the panel was given the opportunity to meet with Faculty Board representatives, programme management, members of the Board of Examiners, lecturers and final projects examiners, and students and alumni.

In a closed session at the end of the site visit, the panel considered every one of the findings, weighed the considerations and arrived at conclusions with regard to the quality of the programme. At the end of the site visit, the panel chair presented a broad outline of the considerations and conclusions to programme representatives.

Clearly separated from the process of the programme assessment, the assessment panel members and programme representatives met to conduct the development dialogue, with the objective to discuss future developments of the programme.

The assessment draft report was finalised by the secretary, having taken into account the findings and considerations of the panel. The draft report was sent to the panel members, who studied it and made a number of changes. Thereupon, the secretary edited the final report. This report was presented to programme management to be corrected for factual inaccuracies. Programme management were given two weeks to respond. Having been corrected for these factual inaccuracies, the Certiked bureau sent the report to the University Board to accompany their request for re-accreditation of this programme.

3. Programme administrative information

Name programme in CROHO:	M Sustainability Science and Policy
Orientation, level programme:	Academic Master
Grade:	MSc
Number of credits:	60 EC
Specialisations:	None
Location:	Maastricht
Mode of study:	Full-time (language of instruction: English)
Registration in CROHO:	21PJ-69315
Name of institution:	Maastricht University
Status of institution:	Government-funded University
Institution's quality assurance:	Approved

4. Findings, considerations and assessments per standard

4.1 Standard 1: Intended learning outcomes

The intended learning outcomes tie in with the level and orientation of the programme; they are geared to the expectations of the professional field, the discipline, and international requirements.

Findings
The Master Sustainability Science and Policy programme is a one year, research-based, interdisciplinary programme.

The objectives of the programme are to educate students to be able to analyse sustainable development issues, to apply research to this end, to contribute to sustainability assessment for policymaking and to society and to operate at the interface of science, policy and society. Students are educated to combine scientific and other knowledge to assess the environmental and sustainability effects of developments, projects or plans. These assessments are related to governance issues and policy issues and may be linked to innovation processes. Students are educated to become bridge-builders, knowing how to communicate with experts and stakeholders. The programme may be regarded to be primarily social sciences focused in the realm of sustainability science.

The programme objectives meet the domain-specific reference framework for academic programmes in Environment and Sustainability Sciences, which was drafted by the joint programmes in the Netherlands. In this domain-specific reference framework, reference has been made to international frameworks and benchmark statements. This Maastricht University programme may be regarded to be positioned in the *Sustainable Solutions Emphasis* part of the Environment and Sustainability Sciences domain.

Programme management has the intention to propose the name of the programme being changed to Master Sustainability Science, Policy and Society.

These objectives have been translated into the intended learning outcomes of the programme. These are quite numerous and can be summarised to include students being able to assess the relevance of environmental and sustainability issues, to conduct research in this field, to contribute to the transition to the sustainable society, to communicate to different groups about these subjects and to function as sustainability professionals.

Programme management drafted a table from which the correspondence of the intended learning outcomes to the Dublin descriptors for master programmes may be inferred.

In the programme, students are not only educated to address the scientific requirements in this domain, but also the professional requirements. They may be employed as researchers, but also as advisors in academic, governmental or private organisations. Programme management and lecturers build and maintain relations with the professional field through the Sustainability Assessment Projects, which are commissioned by external parties and through the Master theses, which often involve actors from the professional field. In addition, guest lecturers participate in the courses.

Considerations
The panel endorses the proposed change of the name of the programme to Master Sustainability Science, Policy and Society, as in this proposed name the importance of the societal dimension of the domain of the programme is acknowledged. The panel considers this dimension to be very relevant for this domain.

The panel considers the programme objectives to be sound and relevant. The programme distinguishes itself by educating students to be able to conduct environmental and sustainability assessments, involving various actors and stakeholders. These assessments clearly include governance, policies and innovative approaches to sustainable development. The programme may be regarded to have a rather broad focus. The panel regards this profile to be relevant, the programme having a position of its own among the academic programmes in Environment and Sustainability Sciences in the Netherlands.

The programme objectives are within the boundaries of the domain-specific reference framework for academic programmes in Environment and Sustainability Sciences, this programme having a clear profile within this framework. The panel is very positive about the effort by the joint academic programmes in Environment and Sustainability Sciences in the Netherlands to draft this framework and regards this to be a sound and up-to-date description of this domain.

The objectives have been well translated into the intended learning outcomes of the programme. These are well articulated and reflect knowledge and understanding of the domain and include research skills and academic skills. The panel advises to include more explicitly in the intended learning outcomes the education of students to become bridge-builders. The natural sciences perspectives not being very strongly addressed, the panel encourages programme management to remain attentive in this respect, as this may be considered a relative weakness.

The intended learning outcomes conform to the master level. This is exemplified by the Dublin descriptors criteria for master level programmes matching the intended learning outcomes.

The panel appreciates students being prepared for positions as researchers and advisors in academia, in government or in private organisations. In the panel’s opinion, programme management and lecturers maintain contacts with the professional field adequately.

Assessment of this standard
These considerations have led the assessment panel to assess standard 1, Intended learning outcomes, to be satisfactory.

4.2 Standard 2: Teaching-learning environment

The curriculum, the teaching-learning environment and the quality of the teaching staff enable the incoming students to achieve the intended learning outcomes.

Findings
The programme is part of the Faculty of Humanities and Sciences of Maastricht University. Within the Faculty, the programme is organised by the International Centre for Integrated assessment and Sustainable development (ICIS) and is part of the Graduate School for Sustainability Science. The day-to-day management of the programme is in the hands of the Programme Board, consisting of the programme director and the managing director. The Education Programme Committee, being composed of two lecturers and two students, advises the Programme Board on the quality of the programme. The Board of Examiners has the authority to ensure the programme examinations and assessments quality of this programme and two other programmes of the Faculty. The Board of Admissions is responsible for students' admissions to the programme.

The programme began in 2011 with 10 students. The number of incoming students gradually grew to reach the influx of 45 students in 2016. The programme management target figure is about 60 students. The number of applicants is twice as large, but many foreign students who have been admitted do not enrol for financial reasons. The student population is quite diverse. About 25 % of incoming students are from the Netherlands, about 55 % are from European countries and about 20 % are from non-European countries. Most students have backgrounds in social sciences or humanities. Not many students have natural sciences backgrounds.

Programme management presented a table to demonstrate the alignment of the intended learning outcomes and the curriculum. The curriculum consists of one year or a total of 60 EC. The curriculum has been divided in courses about specific themes, being *Understanding Sustainability* (two courses, 10 EC), *Policy for Sustainability* (two courses, 10 EC) and *Assessing Sustainability* (three courses, 15 EC). In these courses, students are introduced to theories and concepts about the interactions between society and environment, policies and governance structures to steer sustainable development, and sustainability assessment. In the first course, students are taught disciplinary subjects and themes to bring on them on comparable levels. One of the courses in the latter group is the *Sustainability Assessment Project* (5 EC). In this project, students work in small groups on a real-life assignment, analysing the problem, identifying and assessing solution options and making recommendations for the client. In the curriculum to the knowledge and understanding components of the curriculum, students are offered a number of skills courses. These are scheduled in parallel to the other courses and take the whole academic year to complete. The skills courses are the *Academic Skills* course (2 EC), introducing students to the educational concept of the programme and addressing presentation and writing skills, and the *Sustainability Assessment Skills* course (4 EC), going into basic modelling, participatory methods, scenarios and multi-criteria analysis. These skills are applied in the context of specific cases or problems. At completion of the curriculum, students write their *Master Thesis* (15 EC), being preceded by the *Thesis Research Proposal* course (3 EC). This course is meant to support student in drafting the research proposal for the Master Thesis. Students with whom the panel met, described the curriculum as being well-structured. The curriculum is regularly updated, as is evidenced by the plans for the new curriculum from 2019 onwards.

The lecturers in the programme are researchers at the International Centre for Integrated assessment and Sustainable development (ICIS). They introduce their research in the courses and offer topics for Master Theses, being aligned with their own, ongoing research. The core staff lecturing in the programme amount to 15 lecturers. In addition, about 20 teaching staff are marginally involved. About 87 % of the core lecturers have PhDs and equally about 87 % of them are BKO-certified. Guest lecturers are asked to highlight specific topics or to introduce different perspectives in the courses. There are plans to introduce permanent education for lecturers to promote their educational and assessment skills. Every month, core lecturers meet to discuss education and examination in the programme. Every year, the Education Day is scheduled. Students appreciate the lecturers and regard them to be very approachable.

Students with bachelor degrees in Science, Social Sciences or Humanities are eligible for admission. No specific admission requirements are imposed. All applications are subject to the approval of the Board of Admissions. Students who have deficiencies, are suggested to take courses of the bridging programme. The bridging programme is tailor-made and consists of online Open University modules. The majority of students fail to complete the bridging programme, this programme being a mechanism for selection of students.

The programme educational concept is problem-based learning, this being in line with the educational philosophy of Maastricht University. The problem-based learning concept implies classes being chaired by one or two students and members of the teaching staff being present as tutors. Education is constructive (active knowledge and skills acquisition), collaborative (learning with and from others) and contextual (using cases relevant in professional field). Within the problem-based learning concept, students are largely responsible for their learning processes. In the Sustainable Assessment Project, project-based learning is offered in combination with problem-based learning. The study methods adopted in the programme include lectures, tutorials, group discussions, assignments, debates and presentations. The average number of hours of face-to-face education is about 10 – 12 hours per week. The students-to-staff ratio is 15 : 1. In lectures, about 40 students tend to be in class, dependent upon the cohort size. In tutorials, about 12 students are in class. Students are content about study guidance. Programme management indicated to undertake no explicit e-learning initiatives. The study advisor monitors the students' study progress. In case students fail the first two courses, programme management intervenes and contacts students. Study schedules are made available in time. Students who experience study problems may turn to the Faculty or University support staff. Students are to submit the planning of the Master Thesis beforehand to avoid the problems in the holiday season, when supervisors may not be available. The students success rates of the programme are about 73 % of the students graduating within one year and about 85 % of the students graduating within two years (figures for the last two cohorts).

Considerations
The panel regards the organisation of the programme to be appropriate.

The number of incoming students is looked upon favourably by the panel and the target figures of programme management of an influx of about 60 students is supported by the panel.

The panel very much appreciates the contents and the coherence of the curriculum. The curriculum matches the intended learning outcomes of the programme. The courses reflect the contents of the programme strongly. The course contents are updated regularly to keep them in line with current trends in this field. Both the courses and the Master Thesis are appropriately related to the research in the programme domain, this research being introduced by the lecturers in the programme. The skills which are relevant for the programme, are addressed adequately in courses which are nicely woven into the curriculum. Students are exposed to the relevant professional field in the Sustainability Assessment Projects. These projects are assignments commissioned by real-life clients. Local projects are selected, because these allow students to interact directly with stakeholders. The knowledge gained in courses, such as *Methodology of Sustainability Assessment* and the skills acquired in courses, such as *Sustainable Assessment Skills* are put into practice in the *Sustainability Assessment Project*, strongly promoting the curriculum coherence. In the papers of the courses, the Sustainability Assessment Project and the Master Thesis, students are given the opportunity to tailor the curriculum to their preferences.

The core lecturers in the programme are practically all PhDs and they are intensively engaged in current, relevant research. Their educational capabilities are regarded by the panel to be up to standard, as the proportion of BKO-certified lecturers of 87 % is very substantial. The panel encourages programme management to foster SKO-certification among lecturers. The regular staff meetings are a very positive feature. The lecturers are easily approachable for the students.

The panel approves of the entry requirements and the admission procedures of the programme. The panel appreciates the bridging programme, offering students tailor-made routes to remedy their deficiencies and to enter the programme.

The panel finds the educational concept and the study methods of the programme adequate, promoting, among others, small-scale, intensive and student-activating learning. The panel encourages programme management to investigate new, ICT-based study methods. The study guidance by the lecturers and the study advisor is intensive and productive. Students experience the programme to be challenging, but doable. The student success rates are good.

Assessment of this standard
These considerations have led the assessment panel to assess standard 2, Teaching-learning environment, to be good.

4.3 Standard 3: Student assessment

The programme has an adequate system of student assessment in place.

Findings
The examination and assessment policy of the programme is to be in line with the Maastricht University Framework for Assessment Policy. Every one of the institutes within the Faculty of Humanities and Sciences, including the International Centre for Integrated assessment and Sustainable development (ICIS) is required to do so. As explained above, the Board of Examiners has been installed, being authorised to ensure the examination and assessment processes and outcomes of this programme and two other programmes of the Faculty. The Board may call upon the Faculty assessment expert for advice.

The courses in the programme are assessed by means of a range of examination methods, being written examinations, essays, project plans, presentations and reports. The skills courses are assessed on the basis of participation by the students in these courses. The final projects, being the Sustainability Assessment Project (group project) and the Master Thesis (individual project) are assessed by means of presentations and written reports.

The Sustainability Assessment Projects are group projects and are professional field-oriented. Students are required to do an assignment for specific organisations. One of the lecturers takes up the position of coach of the groups of students, these groups being composed of four or five students. The projects are assessed by two examiners, who use assessment forms with multiple assessment criteria. Representatives of the client organisations are supposed to guide students but are no examiners in a formal sense.

The Master Theses are individual academic research projects, being composed of the Thesis Research Proposal course and the Master Thesis itself. At the beginning of the process, programme management schedules the thesis market to allow lecturers to present research topics to students. Students may propose their own subjects as well, however. Programme management and lecturers try and accommodate students' suggestions. The research topic chosen, In the Thesis Research Proposal course, three tutorials are scheduled, addressing research questions and methodology. In the tutorials, students present their results. Parallel to the tutorials, students meet individually with their supervisor. At completion of the Thesis Research Proposal course, students are to submit the final research proposal. The proposal is to be approved by the two examiners. The Master Thesis itself is supervised by two supervisors. The number of hours for guidance is 40 hours. The two examiners assess and grade the thesis. Students are required to give the oral presentation of the thesis results. The assessments are discussed with the thesis coordinator, who is present at the thesis defences. The examiners use the thesis assessment form, complemented by the thesis rubrics form. In the students' view, the supervision during the Master Thesis is satisfactory. The Thesis Research Proposal course is welcomed by the students.

A number of measures have been taken in the programme to promote the quality of examinations and assessments. The Board of Examiners appoints the examiners, who are required to be BKO-certified. One of the supervisors of the thesis project has to be an ICIS staff member and one of the supervisors should have a PhD. The Board of Examiners requests the assessment and grading plans of the courses. These plans are to show the alignment of course goals and intended learning outcomes. These assessment and grading plans are in the process of completion, and has not for all of the courses been completed. In group projects, peer review among students is organised to prevent free-riding. If cases of free-riding come out of these peer reviews, grades may be downgraded. Students are informed about the examinations in the course guides. Fraud and plagiarism procedures are in place.

The Board of Examiners handles these cases. The number of cases in the programme is limited. The Board of Examiners does not review examinations or theses.

Considerations
The panel regards the examinations and assessment policy of the programme to be satisfactory. The panel found the composition, role and responsibilities of the Board of Examiners adequate, but noted the Board being in the earlier stages of the process of monitoring the quality of examinations and assessments of the programme. The panel advises to proceed with this process.

The examination methods applied in the programme are considered adequate by the panel, meeting the course contents.

The panel is positive about the supervision and assessment procedures for the Sustainability Assessment Projects and the Master Thesis, the supervision being intensive and the assessments being conducted in a reliable way.

The panel considers the assessment forms for the Sustainability Assessment Projects and the Master Theses to include relevant assessment criteria and to be well-structured and well-elaborated. Some of the assessment forms may be filled out more comprehensively, not so much in terms of marking the various assessment criteria but more in terms of written comments.

The panel considers the quality of examinations and assessments to be adequately fostered and advises to continue these efforts. The panel recommends to schedule calibrating sessions to synchronise assessments and grades among examiners.

Assessment of this standard
The considerations have led the assessment panel to assess standard 3, Student assessment, to be satisfactory

4.4 Standard 4: Achieved learning outcomes

The programme demonstrates that the intended learning outcomes are achieved.

Findings
The panel studied the examinations of a number of courses of the programme as well as a number of Sustainability Assessment Projects and Master Theses.

The average grade for the Sustainability Assessment Projects is 8.0 and the average grade for the Master Thesis is 7.4 (figures for all graduates from 2011 to 2017).

Management of the joint academic programmes in Environment and Sustainability Sciences in the Netherlands very recently conducted a survey among alumni of these programmes. This survey shows graduates of academic programmes in this domain to have at present appropriate job opportunities and career prospects. The survey explains students will continue to have favourable positions on the labour market in the foreseeable future. The survey also shows academic programmes in this domain to adequately prepare students for the professional field in this domain.

Programme management conducted a survey among alumni of the programme. The results of the survey show graduates to be employed mainly at private companies (39 %), but also at Universities or in education (15 %), in the public sector or in government positions (10 %) or in the non-profit sector (8 %). The graduates report positions, such as advisor, analyst, consultant, manager, researcher or PhD student. The alumni with whom the panel met, described the programme as being a broad programme and felt being well-prepared to work as bridge-builders in public and private organisations.

Considerations
The panel regards the course examinations, which the panel reviewed to be up to standard.

The Sustainability Assessment Projects and Master Theses the panel studied, in general address suitable subjects or topics. The subjects and topics addressed in the Master Theses are aligned with the domain of the programme, but the panel feels this relation could be strengthened. The panel regards both projects to be well-structured in terms of both theory and methodology and to be well-written. The panel agrees with the grades given by the programme examiners.

The panel feels the students completing the programme have reached the intended learning outcomes and considers the graduates of the programme to be well-equipped to obtain suitable position.

Assessment of this standard
The considerations have led the assessment panel to assess standard 4, Achieved learning outcomes, to be satisfactory.

5. Overview of assessments

Standard	Assessment
Standard 1. Intended learning outcomes	Satisfactory
Standard 2: Teaching-learning environment	Good
Standard 3: Student assessment	Satisfactory
Standard 4: Achieved learning outcomes	Satisfactory
Programme	Satisfactory

6. Recommendations

In this report, a number of recommendations by the panel have been listed. For the sake of clarity, these have been brought together below. These panel recommendations are the following.

- To include in the intended learning outcomes more explicitly educating students to become bridge-builders.
- To remain attentive to the natural sciences perspective of the programme domain, as this is not strongly represented and may be considered a relative weakness.
- To foster SKO-certification among lecturers.
- To investigate the possibilities of new, ICT-based study methods.
- To continue the process of the Board of Examiners monitoring the quality of the examinations and assessments of the programme.
- To include more extensive comments in the Master Theses and Sustainable Assessment Projects assessment forms.
- To continue the efforts by programme management to promote the quality of examinations and assessments.
- To schedule calibration sessions to synchronise assessments and grades among examiners.
- To strengthen the alignment of the subjects and topics addressed in the Master Theses with the domain of the programme.