Periodic Evaluation: Masters in Energy, Environment, and Society

Faculty of Social Sciences, Department of Media and Social Sciences. University of Stavanger

2024

Norwegian Title: Energi, Miljø og Samfunn

Type of Study Programme: Full-Time.

Location: Campus-Based Study (120 credits)

1

Evaluation Mandate and Summary of Findings

The evaluation committee was given the following mandate as their terms of reference.

- To evaluate whether the accreditation criteria of the Academic Supervision Regulations have been satisfactorily met, or in which areas the study programme does not satisfy the accreditation criteria.
- To evaluate whether the programme's results are satisfactory.
- To provide evaluations and recommendations of potential use for the further development of the programme

Following this mandate and completing the corresponding evaluation of all relevant documentation and inputs the committee concludes that the Masters in Energy, Environment and Society fulfills the expected outcome and standards of a master's degree in Norway, including Academic Supervision Regulations. In the judgement of the evaluation committee there is no doubt that the degree programme provides its candidates with high quality master's level education firmly positioned in the still nascent but growing fields of energy-social science and sustainability studies. With its emphasis on interdisciplinary theoretical and practical learning, the degree importantly prepares master's candidates to navigate and find solutions to the social and political challenges inherent in energy transition. In doing so it addresses a significant gap in the current market for master's degree programmes offered in Norway.

We recommend the following to further improve the content, management and visibility of the degree:

Presentation of the Programme

- We recommend more precise information is given to students regarding partner universities where a relevant combination of energy and sustainability studies are a specialisation.
- The social science orientation of the degree is largely hidden. A revision of the degree title and basic description text is necessary.
- The marketing of the programme should emphasize to a greater degree its exceptional character in Norway as a Masters in Energy Studies that bridges the gap between the social, technological and natural sciences.
- Information about further career possibilities should be updated to give potential applicants a better understanding of what the master's program entails and can lead to in terms of future employment.

- There is a need to express more clearly the intention of the programme to prepare students through practical training and real-world experience as well as classroom teaching.
- There is a need to express the global orientation of the programme more clearly in the description of the programme- and how this is connected to course work.
- There could be more clarity about how different elements and courses in the programme elements contribute to common goals.
- The description of the master's degree emphasises its empirical focus and course alternatives but does not give indication of any guiding theoretical framework/s for the critical learning it promises.
- There is a need for the University to better publicly document and communicate the research and active research partnerships of its academic staff.
- We recommend that information regarding the key partnerships and networks used by the programme are published as part of the package of information provided on its webpages.
- Express the significance of running such a programme in the city of Stavanger- a port city in the west of Norway economically oriented towards energy production.
- Whilst the interdisciplinarity of the degree is emphasised this could be enhanced by more clarity about why this is important in connection with the central themes of energy, environment and society.

Programme structure and contents

- There is a need for the role and the responsibilities of the programme leader to be communicated more clearly.
- Pensum with reading regarding the connection between the physics of energy technologies, resource availability and political viability should be introduced.
- Reading on relevant new orientations in social and political theory should be included.
- Whilst there is a good balance between obligatory and elective courses, students need advice
 on study pathways and the significance of course choices.
- We suggest that the MENPRA course is recast as a foundational obligatory course.
- The MENPRA course should be better institutionalized such that there is a broader departmental and staff engagement and sharing of responsibility in the formation of contracts and relationships with locations for work placement.
- The rationale for including elective courses such as BY655 New technologies and ideas for sustainable city development or GEN570 Global sexualities: Theories, Methodologies, Practices need better clarification.

Coordination, involvement, and internal communication

- There is need for an increased level of dialogue between teachers and students regarding course content, interdisciplinarity and the challenges of communicated both orally and written form in English.
- We recommend that academic staff at the department expand opportunities for students to actively join ongoing research projects where possible.
- Emphasis should be made both externally and internally to the student body of the educative value of having an international classroom with students and staff from multiple locations and backgrounds.
- The program could benefit greatly from an active alumni network.

Staff and future hiring processes

- We recommend that care is taken in the hiring process of new staff to identify highly qualified academics who are willing to actively engage in sharing the burden of programme coordination and teaching.
- We also recommend that consideration is made in the hiring process of the desired direction of the programme as a degree principally oriented towards the social sciences and to addressing the practical challenges of energy transition across the public and private sectors in Norway and abroad.
- Care should be taken to identify individuals that do not just duplicate existing competence but who sensibly complement and expand on existing expertise and fill necessary teaching and research gaps.
- The hiring process is an opportunity to reorient the programme, distribute workload and to further strengthen the coherence between its profile and learning content.
- We recommend that staff are actively assisted to update their pedagogic skills and continue to learn more about active and digital learning.
- An increase in the number of academic staff would assist the programme's long-term operation and sustainability.
- There is a clear need to hire at least one more member of staff at the level of Professor.
- We also recommend that details regarding the connection between the programme and PhD training are made publicly available.

Other recommendations

• Consideration should be made of appropriate strategies to respond to the drop in international student numbers caused by the introduction of fees for international students coming from non-EU countries.

- We think that practical elements of the programme could be marketed as EVU courses to people working professionally within the energy sector or public administration.
- Given the concerns of companies and institutions regarding sensitive data and patents the University should have clear guidelines for how students address these questions. Clear guidelines for how to respond to any eventuality of a breach of contract would also be helpful.

Introduction

The Norwegian authorities require the University of Stavanger to supervise study programmes in accordance with the provisions of the Act relating to Universities and University Colleges, the Regulations concerning Quality Assurance and Quality Development in Higher Education and Tertiary Vocational Education (Ministerial Regulations) and the Regulations concerning Supervision of the Educational Quality in Higher Education (Academic Supervision Regulations)¹.

Section 4-1(3) of the Academic Supervision Regulations states: "Institutions must systematically ensure that all study programmes meet the requirements set out in sections 3-1 to 3-4 of the Regulations concerning Quality Assurance and Quality Development in Higher Education and Tertiary Vocational Education and chapter 2 of the Regulations concerning Supervision of the Educational Quality in Higher Education."

The comments on the paragraph state: "This entails that the institution has satisfactory procedures and practices for the accreditation of programmes and the revision of accreditations. In this context, the term 'revision of accreditation' entails a review of whether the programme meets the requirements for accreditation and whether it produces satisfactory results."

The Ministerial Regulations include a requirement for periodic evaluations. Section 2-1(2) states: "The institutions shall carry out periodic evaluations of their study programmes. Representatives of employers or society at large, students and external experts, who are relevant to the study programme, shall contribute to the evaluations."

5

¹ In Norwegian: Studiekvalitetsforskriften and Studietilsynsforskriften.

At the University of Stavanger, revision of a study programme's accreditation pursuant to section 4-3(3) of the Academic Supervision Regulations must be based on periodic evaluations of the study programme in line with section 2-1(2) of the Ministerial Regulations.

The Dean must appoint an Evaluation Committee: The Committee must produce a report describing how the study programme satisfies the regulations' accreditation criteria and any additional requirements stipulated by the university. The report must also highlight areas where further development is desirable.

Reference is made to the following documents:

Accreditation of Study Programmes at the University of Stavanger and
Guidelines and Procedures for Periodic Evaluations and Reaccreditation of Study Programmes.

The report containing the Dean's recommendations and action plan must be submitted to the Director of Academic Affairs for further consideration.

Composition of the Evaluation Committee

- Professor John-Andrew McNeish. Department of International Environment and Development Studies. Norwegian University of Life Sciences (NMBU)
- Tor Håkon Jackson Inderberg. Research Professor. Fridtjof Nansen Institute (FNI)
- Oluf Langhelle. Institute Leader and Professor. Institute for Media and Social Sciences. University of Stavanger.
- Magda Hognestad. Administrator. Institute for Media and Social Sciences. University of Stavanger.
- Rakel Frøyen. Student Representative.

Overview of Background Information Consulted

- Programme description
- Matrix illustrating the programme's structure
- Course descriptions for all courses, with reading lists
- Template for Diploma and Diploma Supplement
- Titles of all master's theses submitted by the students who have graduated in the past three years
- Schedules of all three cohorts for the academic year 2023-2024

- Overview of the academic year's scope of 1,500-1,800 hours distributed by self-study, organised learning activities, the examination and preparation for examinations
- The academic environment's publications registered in Cristin 2019-2023
- Any other publications from the academic environment that are relevant to the programme 2019-2023
- Overview of the academic environment 31 December 2023 (table)
- CVs of everyone included in the academic environment
- Student exchange agreements quality assured by the academic environment
- Supervised professional training agreements (if relevant)
- Note from Staff on "What we would like to get out of the assessment".
- Overview of existing arrangements for cooperating with hosts for the supervised professional training (if relevant)
- Interview with key staff members of the programme
- The following student data and results data (the faculty can supplement as needed):

| Data | Source |
|--|---|
| No. of admissions places 2024 | The board's decision |
| Applications and admissions 2019-2023 | Tableau |
| Admission quality 2019-2023 - Numbers of qualified applicants - Average admission points - Admission points limits | Tableau |
| Number of starting students 2019-2023 | Tableau |
| Number of students 2019-2023 | Tableau, Database for Statistics on Higher Education (DBH) |
| Throughput cohort 2018-2020 | Tableau |
| Drop-out rate cohort 2018-2020 | Tableau |
| Qualifications and student exchange 2020-2023 | Tableau |
| Outgoing exchange students 2019-2023 | Tableau |
| Passed credits per student 2019-2023 | Tableau |
| Internal mobility - Internal recruitment - Change study programme from/to | Tableau |
| Evaluation data | Studiebarometeret, UiS Quality Kiosk, internal data |
| Examination data, time series 2020-2023 Grade distribution Fail rate Passed/registered | Tableau, Database for Statistics on Higher Education (DBH) |

The Committee's Evaluations and Recommendations

The study programme is evaluated in relation to the accreditation criteria specified in NOKUT's Academic Supervision Regulations (ASR) and the Ministerial Regulations (MR)² laid down by the Ministry of Education:

1.0 Information provided about the programme must be correct and show the programme's content, structure, and progress of study, as well as opportunities for student exchanges. ASR, section 2-1(2)

In this context, the term 'information' refers to what is indicated in the programme description and associated information about the programme.

Committee's evaluation:

Information regarding the contents of the programme and its structure and ideal progression is presented clearly on the webpage for the programme. We consider the information provided to be sufficient in terms of providing candidates with a good overview of the degree, its possibilities and expectations. Some small adjustments are recommended.

Committee's recommendations:

- A link to more specific information regarding student exchange within the specific field of study should be added to the programme webpage.
- A list of possible candidate universities for exchange is also provided at the foot of
 the webpage. General information regarding student exchange at the University of
 Stavanger can be found following a web link from the programme webpage. It
 would help if there were some indications as to which of these institutions is most
 relevant to this field.
- Information about further career possibilities should be updated to give potential applicants a better understanding of what the master's program entails and can lead to in terms of future employment.

1.1 The learning outcomes for the programme must be in accordance with the National Qualifications Framework for Lifelong Learning, and the programme must have an appropriate title. ASR, section 2-2(1)

Learning outcomes must be described as what a candidate shall have achieved upon completion of the programme. The learning outcomes for programmes subject to professional requirements, for example programmes subject to national curriculum regulations must meet both the professional requirements and the requirements of the National Qualifications Framework for Lifelong Learning (NQF).

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² In this section, the text from the regulations is highlighted in bold font and the comments are in ordinary font (generally taken from the comments on the regulations and NOKUT's guidance). The evaluations and any recommendations must be written in the text boxes.

The programme's learning outcomes are stated on its webpage. A clear emphasis is made on "learning for sustainability". The programme description clearly formulates its intentions to focus on the controversies surrounding the formulation of sustainable energy policy and what low-carbon energy transition might be, seen from different perspectives. Its learning goals are formulated in response to these intentions, claiming that studies will gain an overview into specific environmental and social challenges and actors associated with energy development.

Committee's recommendations:

- The intention of the programme is to not only prepare students through classroom teaching, but through practical training and real-world experience. This could be expressed more clearly. This would make the introduction of the topic of work placement more logical.
- Although the UN SDGs are used as part of the programme's initial description, the global emphasis of the programme is only clearly revealed through course contents and publications produced by academic staff. The fact that students will learn about global challenges both within and outside of the classroom could be made clearer in programme description. Interestingly, this global orientation was more transparent in earlier versions of the programme description.

1.2 The programme must be academically up-to-date and have clear academic relevance for further studies and/or employment. ASR, section 2-2(2)

The requirement that the programme must be academically up to date entails that it must be up to date in relation to knowledge development in both academic and professional arenas, society, and the labour market. Relevance and updated knowledge in academic and professional arenas, society, and the labour market, are ensured through schemes for interaction with the labour market and/or society adapted to the programme's content and level. The institution is expected to have assessed the recruitment base based on expected demand/need and overall capacity related to the same or similar programmes at its own and other institutions.

Committee's evaluation:

The programme is highly relevant with regards to the current social and environmental challenges of low carbon energy transition. Its emphasis on sustainable energy transition was remarkably forward thinking at the time the programme was established. It is likely that the relevance of the programme will only grow in the coming years, but that it will also receive increasing competition from degree programmes in other Universities who recognize the significance of the social sciences in navigating the interdisciplinary challenges and politics of transitions. The course portfolio provides a strong foundation for the programme and its relevance allowing students to not only critically learn about energy and sustainability in the classroom but to encourage their learning through practical research and direct work experience in and beyond Norway. It is clear from the course descriptions that relevant pensum and teaching methodologies are applied in teaching and that the core staff of the programme contribute strongly to research-based teaching. The programme unusually prepares students to cross the disciplinary boundaries between the natural and social sciences, and between the analytical and technical. It also encourages

students to learn through direct interaction and real-world experience of energy projects and the energy industry. The programme has formed a series of important alliances with institutions in the public sector and with significant actors in the private sector, as well as with exchange programmes with universities abroad.

Committee's recommendations:

- The marketing of the programme should emphasize to a greater degree its exceptional character in Norway as a Masters in Energy Studies that bridges the gap between the social, technological and natural sciences. Its emphasis on social science stands out and is unique in Norway. This should also stand out in the title of the programme.
- Whereas other degree programmes on Energy Studies or on Renewable Energy exist- and are likely to grow in number- they are currently oriented towards technology and finance. They are also uncritically supportive of the energy industry and its expansion and contain little discussion of the governance and planning challenges of energy development, a unique feature that should be communicated more clearly for this programme.
- The global character of the programme both in content and in opportunities for learning should also be stressed more in the marketing of the programme.
- Consideration should be made of appropriate strategies to respond to the drop in international student numbers caused by the introduction of fees for international students coming from non-EU countries.
- We think that practical elements of the programme could be marketed as EVU courses to people working professionally within the energy sector or public administration.
- Students feel that there is a lack of practical orientation in the current courses. Adding the course IND570 Green Transitions as an elective in the Autumn could make students more attractive to employers.

1.3 The total workload of the programme must be between 1,500 and 1,800 hours per year for full-time students. ASR, section 2-2(3)

Workload is a calculation of how much time the typical student will take to complete the various academic activities required to achieve the learning outcomes. Such a calculation must include self-study, preparation for examinations and organised learning activities. The learning activities a study programme contains will vary but could include lectures, seminar teaching, laboratory work, academic supervision, and supervised professional training. The amount of self-study included in a programme will vary based on the profile of the study programme. The study programme must achieve a balance between self-study and organised learning activities that enables students to achieve the learning outcomes within the normal length of study.

Committee's evaluation:

The programme is clearly structured and is formulated such that a correct workload is calculated per semester. The expected credit production per semester matches the workload normally expected in a Norwegian master's degree. Responses from the annual Studiebarometeret demonstrate that the students are satisfied with the required workload for the degree. The documents provided to the evaluation committee regarding the course details also demonstrate that this calculation includes the required balance between selfstudy, preparation for examination and organized learning activities. Academic activities are spread out through the week and throughout the semester, leaving time for self-study and working on assignments in between academic activities. In addition to standard classroom teaching methods the programme importantly creates space for candidates to gain on the job training through the course work placement in private companies and public institutions. Where there is perhaps some strain on students without a natural science background is with regards to the workload and expectations of PET515 Energy, Energy Technologies and Energy System Integration. We acknowledge the significance of this course not only as obligatory but central to the learning outcomes of the degree. There may also be some workload stress amongst students with regards to their decisions regarding elective courses, their timing and relevance of fit together as a package of study.

- Overall, the programme meets and positively surpasses the required standards for workload and teaching methods. A significant effort has been made by the course leader for PET515 to find a way to tailor make the natural science content of PET515 to the social science students from the Energy, Environment and Society Programme. It is however evident that further work and experimentation is needed for these students to fully gain a mastery of the course content and its value in their degree. Further connection needs to be made between the course content and the other elements of their degree.
- A newer pensum and perhaps reading regarding the connection between the physics
 of energy technologies, resource availability and political viability might help in this
 regard. Some reading on new orientations in social theory might also help bridge the
 gap i.e. Science and Technology Studies, on the post-humanist turn, or on futures
 and socio-technical imaginaries.
- Whilst students from the MEES Masters are the majority there are also students
 from engineering in the class. Further action should be taken to harness the distinct
 interests and abilities of this multi-disciplinary student body in the teaching of the
 course.
- It might furthermore assist students to make choices regarding their electives by
 providing examples of study pathways (packages of courses that fit well together).
 This might reduce the stress of some students in making choices about course and
 completing their degree on time. Following up on this with a series of conversations
 with study advisers would also strengthen this process.

1.4 The programme's content, structure and infrastructure must be adapted to the programme's learning outcomes. ASR, section 2-2(4)

The study programme's learning outcomes are achieved through the courses. A course is the smallest credit providing unit. The content and structure of the study programme must show how the courses in the study programme, as well as the progression from semester to semester, leads to the learning outcomes.

The study programme must have adequate access to suitable premises, equipment, library services, administrative and technical services, adequate and suitable ICT services, network support, suitable learning platforms, etc., that support the student's learning and learning environment, as well as the academic staff's teaching, research and/or artistic development work and academic development work.

Committee's evaluation:

Overall, we agree that the claimed learning outcomes of the programme (to promote the knowledge, skills, and competencies required to contribute to the strategies and solutions for a sustainable society) are being delivered on. The degree is founded on the provision of five obligatory courses (three thematic courses in the first semester, followed by methods in the second, and the master's thesis course in the fourth semester). In addition to the obligatory courses, a further total of 8 thematic elective courses are listed as part of the degree structure. In our view this provides a flexible yet sufficiently targeted structure for securing the overarching learning outcomes, while allowing flexibility for the students to follow their interests. We recognise that the MENPRA Work Placement 30 credit elective course is an innovative and important asset to the programme in terms of delivering the promised outcomes of: "knowledge of energy markets, resource economics and innovation", "work in teams", "contribute to problem-solving, both in a practical and a theoretical sense", "design and implement sustainability measures." We also recognize that the programme's exchange opportunities are significant. While several of the destinations' prime focal areas are not necessarily relevant to the M-EES programme, some of the options represent universities with programmes aligned well with the learning outcome of the programme.

- Given its significance in terms of the delivery of the learning outcomes, but also contribution to the overall identity of the programme we suggest that the MENPRA course is considered recast as a foundational obligatory course.
- Whilst there is a good balance between obligatory and elective courses, we observe
 that further thought could be made regarding the provision and advice given to
 students on study pathways and the significance of course choices.
- Whilst there is undoubtedly a rationale for all courses given as part of the degree, the rationale for including elective courses such as BY655 New technologies and ideas for sustainable city development or GEN570 Global sexualities: Theories, Methodologies, Practices are not obvious from the outset.

 The programme would also do well to consider establishing and specifying targeted exchange opportunities with universities that run energy and environment programmes.

1.5 The teaching, learning, and assessment methods must be adapted to the programme's learning outcomes. The programme must facilitate students taking an active role in the learning process. ASR, section 2-2(5)

The different teaching and learning methods must be adapted to the programme's content and structure. This means that teaching, learning, and assessment methods must be adapted to a digital society.

Teaching and learning methods must be structured such that students achieve the study programme's described learning outcomes. Assessment methods must be suitable for measuring whether the student has achieved the learning outcomes.

How the academic environment facilitates students taking an active role will depend on the study programme's profile and relates to ensuring and safeguarding a good learning environment.

Committee's evaluation:

It is evident from the programme's portfolio of courses and course descriptions that teaching, learning and assessment methods have been adapted to the programme's learning methods. Student representatives report on the use of a varied set of assessment methods (home exam, school exam, portfolio and term paper) and that these are regularly changed. Teaching and learning methods are reported to be interactive and to positively contribute to students actively achieving learning outcomes as part of a digital society. Student satisfaction with the teaching, learning and assessment methods is supported by the results of the Studiebarometeret.

- Course evaluations show that some students feel that there should be more dialogue with teachers regarding course content, interdisciplinarity and the challenges of communicating both orally and written form in English. We recommend that teachers continue to do their best to provide such dialogue and adjust where necessary and possible. This is, however, also a matter of student democracy.
- Although we have access to course evaluations and yearly programme evaluations, we have not seen from the documents provided how students are involved in programme level discussion and decision making.
- Our interviews and the programme evaluations also make it evident that there is a possibility of an increased level of course coordination such that both the timing and linkage of content between is improved.
- Currently, a significant share of master's theses supervision in the programme is left in the hands of one member of staff. This is not an optimal solution if students are to

be satisfied or to be given the support needed to gain strong master's level research results and we recommend broadening the staff basis in this area.

1.6 The programme must have relevant links to research and academic development work and/or artistic research. ASR, section 2-2(6)

The academic environment must be able to point to an adequately relevant mutual connection between R&D/artistic development activities and the programmes and how the students are introduced to R&D/artistic development during the programme.

The academic environment can ensure this connection using its own research results, but also by using other research results in the education.

Committee's evaluation:

As well as work placement some students have been given the opportunity to join active research projects connected to the university. Such experience provides students with the opportunity to gain insight into the practical and intellectual requirements of work within research and education. Teachers also actively refer to and make use of their research results in teaching.

Committee's recommendations:

• We recommend that academic staff at the department expand these opportunities for students where possible.

1.7 The programme must have internationalisation schemes adapted to the programme's level, scope, and other characteristics. ASR, section 2-2(7)

This requirement entails that the study programme must be placed in an international context and students thusly exposed to a variety of perspectives. Students at different levels in the study programme will experience the international dimension differently and it will also vary from subject area to subject area.

In this case, the programme is the central point for the internationalisation and the arrangements can include activities such as the use of international literature, international guest lecturers, incoming international students on exchanges, or the students' participation in international conferences or workshops, etc.

Committee's evaluation:

The programme contains a series of courses that are clearly oriented towards the international study of energy, environment and society. This is however something that could be emphasized more greatly in the general description and outcomes of the degree programme. Students are not only being prepared to work within or in response to Norwegian energy production and governance, but to be aware of and contribute to the debate and sustainable governance of energy resources worldwide. They are being prepared as both researchers and practitioners.

- Although the programme claims to be internationally oriented this could be further emphasised as a distinctive element of its profile and learning outcomes.
- It might also be an idea to explain why Stavanger, as port city and the centre for Norwegian oil and energy industry, has a distinctive advantage in providing master's level international education on energy and sustainability.
- Emphasis should also be made on the educative value of having an international classroom with students and staff from multiple locations and backgrounds.
- Staff should also consider how this international classroom can be sustained given the changes to fees and hiring requirements recently introduced by the government.

1.8 Programmes that lead to a degree must have schemes for international student exchanges. The content of the exchange programme must be academically relevant. ASR, section 2-2(8)

This provision entails that the institution must ensure that students in all programmes that lead to a degree are offered an opportunity for academic student exchange through updated and binding agreements, and that the relevance of the student exchange is guaranteed by the programme's academic environment. The scheme must be visible and predictable for the students such that they improve the students' opportunities and motivation to take part in student exchanges. The agreements must describe the timing of the exchanges in the study programme (exchange semester) and, insofar as it is possible, describe preapproved courses (student exchange packages).

Committee's evaluation:

The degree programme actively encourages students to take part in student exchange with a list of foreign universities. This is suitably flagged, and all university alternatives described, on the front page of the degree webpages. Student exchange is listed an elective course (30 credits) that takes place in the third semester of their degree programme.

Committee's recommendations:

- We recommend that more precise information is given to students regarding partner universities where a relevant combination of energy and sustainability studies are a specialisation.
- Student exchange could be strengthened by broadening the basis of exchange opportunities to more universities with concrete study programmes aligned with the focus of the MEES programme.

1.9 Programmes that include supervised professional training must have formal agreements between the institution and the host for the supervised professional training. ASR, section 2-2(9)

Agreements with hosts of supervised professional training must be in place to ensure and regulate the academic implementation of the supervised professional training and makes it possible for the supervised professional training to be quality assured in the same way as that implemented at the institution.

Committee's evaluation:

The MENPRA Work Placement course is included as an elective course. The 30-credit course represents a 75% work burden for students taking the course over a 60-day period. Work placement is formalised through clear agreements between the University, host companies and institutions. These agreements include clear expectations from the host company, the student, and the University. It also includes termination of the contract if the student does not follow up their obligations.

Committee's recommendations:

- The MENPRA course is currently led by one senior member of staff at the department (the same member of staff with responsibility for the MEEMAS master's thesis course). The staff member has responsibility for the formation of all work placement agreements. As well as clearly overburdening a staff member, leaving such an important course in the hands of a single member of staff represents a clear long-term risk. The course should be better institutionalized such that there is a broader departmental and staff engagement and sharing of responsibility in the formation of contracts and relationships with locations for work placement.
- Given the concerns of corporations and institutions regarding sensitive data and
 patents the University should have clear guidelines for how students address these
 questions. Clear guidelines for how to respond to any eventuality of a breach of
 contract would also be helpful.

1.10 The master's degree programme must be defined, delineated, and have adequate academic breadth. ASR, section 3-2(1)

The delineation of the programme must be clear from the description of the subjects, disciplines, and areas of knowledge covered by the study programme. The study programme's profile and possible specialisations must be described in a way that ensures that the breadth of the study programme is clear.

Committee's evaluation:

A good overall outline of the programme has been provided online, describing at suitable depth the intention, areas of knowledge and study outcomes of the degree. The interdisciplinarity of the programme bridging the social and natural sciences is captured in the outline of the programme. The programme consists of a basic compulsory course portfolio for the first year, more elective courses for the second year, and a master thesis with standard social science requirements as the final part. There are options for further specialization with elective courses, work placement, and exchange with universities abroad. We consider the requirement of definition, delineation, and sufficient breadth to be fulfilled.

Committee's recommendations:

• Although a satisfactory outline of the degree programme is available there are certain aspects that should be given increased emphasis. The overwhelming social

science orientation of the degree is hidden, and a revision of the degree title and basic description text might help with this.

- Whilst the interdisciplinarity of the degree is emphasised this could be enhanced by more clarity about why this is important in connection with the central themes of energy, environment and society.
- There could be more clarity about how different elements and courses in the
 programme elements contribute to common goals. The description of the master's
 degree emphasises its empirical focus and course alternatives but does not give
 indication of any guiding theoretical framework/s for the critical learning it
 promises.
- The program could benefit greatly from an active alumni network.

Requirements for the academic environment

1.11 The programme must have a broad and stable academic environment that consists of an adequate number of staff with a high level of academic competence within education, research, or artistic development work, and academic development work within the programme. The academic environment must cover subjects and courses that make up the programme. The staff in the academic environment must have relevant competence. ASR, section 3-2(2)

The academic environment associated with the programme includes persons who directly and regularly contribute to the development, organisation, and implementation of the programme.

The academic environment must be broad and composed of staff with relevant competence within education, research or artistic development work, and academic development work in all parts of the programme. It is not sufficient for the competence to be relevant to the programme. Overall, the academic environment must have a high level of competence that covers the subject area. The academic environment must include persons with Associate Professor qualifications and senior qualifications, including Docent and Professor. This regulation introduces stronger and stricter rules, while it also it allows for flexibility in the composition of the academic environment.

Committee's evaluation:

The staff connected to the programme are well qualified and have a wealth of research and teaching experience relevant to such an inter-disciplinary programme. There is currently a good mix of both experienced professors and several newly established academics taking part in both teaching and related research (3 political scientists, two geographers, a sociologist, a business studies scholar and an engineer). Of these only three are connected to this specific programme full-time. At present there is a strong record of research and publication being produced by teaching staff- albeit that of the eight staff listed only five have an active record of publication directly on the themes related to energy social science. There appears to be a good record of project application acquisition amongst the staff. There is also positive sign of significant collaboration in teaching and research between staff members of the programme as well as with other researchers and institutions. Although current staffing of the programme enables teaching on a broad range of topics and perspectives, it is also evident from our interviews and the documents provided that the teaching capacity is often over stretched. Certain individuals appear to have had to take on most of the burden for key aspects of the programme's teaching and course coordination.

We have also been informed that there is a need for staff renewal connected to the programme due to people leaving their jobs. The department aims to hire two new members of senior staff with professor competence later this year.

Committee's recommendations:

- There is clearly a need for further highly qualified staff to replace staff that have left or will be leaving their positions this year. We have heard clear expression from full time staff of a desire for new colleagues who are willing to contribute actively and broadly to the success of the programme.
- We recommend that care is taken in the hiring process of new staff to identify
 highly qualified academics who are not only able to keep up a good personal
 publication record, but to actively engage in sharing the burden of programme
 coordination and teaching.
- We also recommend that consideration is made in the hiring process of the desired direction of the programme as a degree principally oriented towards the social sciences and to addressing the practical challenges of energy transition across the public and private sectors in Norway and abroad.
- Care should be taken to identify individuals that do not just duplicate existing competence but who sensibly complement and expand on existing expertise and fill necessary teaching and research gaps.
- This is an opportunity to reorient the programme, distribute workload and to further strengthen the coherence between its profile and learning content.

1.12 The academic environment must have relevant educational competence. ASR, section 2-3(2)

Educational competence includes University and University College Pedagogy and Didactics, as well as the competence necessary to use digital technology to promote learning. Universities Norway's guidelines for basic pedagogic competence specify minimum requirements for academic staff. In accordance with the guidelines, UiS assumes that it requires 150-200 hours of work to develop the desired basic competence and thus satisfy the requirement for educational competence.

Committee's evaluation:

The documentation provided to the evaluation committee demonstrates that all full-time teaching staff connected to the programme have formal pedagogic competence (University level pedagogic training). It is also evident from the mixed pedagogic methods and hybrid teaching models employed by teachers that they have the competence required to promote a good mix of classroom, practice based and digital learning.

Committee's recommendations:

• The competence of the staff more than meets the basic competence required. We recommend however that the department consider how staff can periodically update their pedagogic skills and continue to learn more about active and digital learning.

1.13 The programme must have a clear academic leadership with defined responsibilities for quality assurance and the development of the study programme. ASR, section 2-3(3)

The requirement all institutions must satisfy is that the academic leadership must consist of staff in teaching and research positions and bear formal responsibility for ensuring that the study programme is completed in accordance with the programme description and that the programme description is developed. Those who hold academic responsibility must have the competence necessary to carry out quality assurance and develop the study programme.

Committee's evaluation:

The programme leadership has been rotated and is currently led by an Associate Professor on a permanent contract. However, the programme responsibility structure is insufficiently communicated on the web site, and the responsibility structure could be clearer. This includes the delimitation of responsibilities of the surrounding institutional structures of the MEES and the programme leader.

Committee's recommendations:

• There is a need for the role and the responsibilities of the programme leader to be communicated more clearly on the web page of the Programme.

1.14 At least 50 % of the academic full-time equivalents affiliated to the programme must be staff with their primary employment at the institution. Of these, academic staff with at least Associate Professor qualifications must be represented among those who teach the core elements of the programme. In addition, the following requirements apply to the academic environment's level of competence:

For master's programmes, at least 50 p% of the members of the academic environment must hold at least Associate Professor qualifications. Within this 50 %, at least 10 % must hold Professor or Docent qualifications. ASR, section 2-3(4)

Academic environment includes the persons who directly and regularly contribute to developing, organising, and implementing the programme. Staff in primary employment are staff in at least 50 % full-time equivalent positions at UiS.

In other words, only the academic environment linked to the study programme in the form of man-year is evaluated under this point. Positions from and including 0.1 man-years are included in the calculation.

Committee's evaluation:

All the staff connected to the teaching of the programme are employed by the University of Stavanger. The core elements of the degree are taught by staff who hold the position of Associate Professor or Professor. More than 50% of the members of the academic environment hold Associate Professor qualifications or higher.

Committee's recommendations:

 The qualifications of the current staff connected to the programme more than satisfy formal requirements. This must of course continue when staff leave, and new staff are hired.

- Although current staff levels and qualification are enough, an increase in academic staff would assist the programme's long-term operation and sustainability.
- There is a clear need to hire at least one more member of staff at the level of Professor.

1.15 The academic environment must be able to document results of a high standard and results from partnerships with other national and international academic environments. The institution's assessments must be documented so it can be used in NOKUT's work. ASR, section 3-2(3)

The academic environment must be able to point to documented results of a high standard. What is considered a high standard must be assessed based on what is regarded as a high standard in the field of study, nationally and internationally.

In other words, what must be documented is not just the academic environment's results from its own institution, but also results from R&D/artistic development partnerships with other academic environments, both nationally and internationally. More research activity is required for a master's degree programme than a bachelor's degree programme. As part of its supervision, NOKUT will also require all activities in academic environments that run study programmes within a PhD degree platform to maintain a 'high international quality' at all levels of study.

Committee's evaluation:

We have not been provided with specific information regarding the results of partnerships with other national and international academic environments. There are a series of connections formed with other European and non-European universities for the purposes of student exchange. To what extent these same connections play a role in the academic staff's research partnerships and production is not documented. From the CVs provided and our personal knowledge of academic colleagues connected to the programme it is evident that they are research active and involved in projects that involve networks of several university and other institutional partners. The programme and its host department are for example connected Empowered Futures: A Global Research School Navigating Low Carbon Energy Transition and Controversy. This is a PhD level research school funded for eight years by the Norwegian Research Council's Programme Research Schools for Social Relevance. The research school is coordinated by colleagues at the Norwegian University of Life Science. It is possible that other partnerships like this one exist, but they are not documented clearly on the University of Stavanger website or in the documentation provided to the evaluation committee. The CVs of the academic staff connected to the programme attest to their active research output, but again this is something that is little visible in the webpages of the University and host department other than as individual news items. Although the University of Stavanger has an active PhD programme the connection of candidates to the programme and responsible academic department is also not visible.

Committee's recommendations:

• As is made evident from the comments above, there is a need for the University to better publicly document and communicate the research and active research partnerships of its academic staff.

• We also recommend that details regarding the connection between the programme and PhD training are made publicly available.

1.16 The academic environment for programmes that lead to a degree must actively participate in national and international partnerships and networks that are relevant for the programme. ASR, section 2-3(6)

Partnerships and networks must be relevant for the study programme and provide the academic environment with experience that can be used in the study programme, and that can contribute to the development of quality. This could be research cooperation, participation in international conferences, partnerships on educational quality, etc. The networks that the academic environment actively takes part in must be evaluated. How the partnerships contribute to the quality of the environment's R&D activities must also be evaluated.

Committee's evaluation:

The programme encourages students to take part in international exchange, and academic staff connected to the programme conduct research requiring national and international partnerships. However, specific information regarding the placement of the degree within specific partnerships and networks has not been provided and is not readily visible on the webpages connected to the programme.

Committee's recommendations:

- We recommend that information regarding the key partnerships and networks used by the programme are published as part of the package of information provided on its webpages.
- 1.17 For programmes involving mandatory supervised professional training, the members of the academic environment must have relevant and updated knowledge from the field of the professional training. The institution must ensure that professional training supervisors have relevant competence and experience in the field of the professional training. ASR, section 2-3(7)

The term 'professional training supervisors' refers to persons who facilitate and supervise students during the professional training period.

The term 'relevant competence' in the second sentence refers to relevant academic knowledge of and competence in supervision and support.

For programmes that include supervised professional training, institutions and academic environments are expected to ensure systematic contact with the professional field so that the programme and academic environments' own professional experience is up to date and in line with developments in the professional field. It is important for the quality of the programme that there is continuous interaction between competent individuals in the professional field and key individuals who have their principal position at the institutions. The academic environment at the institution must itself possess knowledge about supervised professional training so they can partner well with the supervised professional training field and integrate/build bridges between theory and supervised professional training in the education.

Committee's evaluation:

This point is not relevant for MEES.

Committee's recommendations:

N/A

The Committee's evaluation of the study programme's results

The study programme should have satisfactory outcomes:

Based on student and result data (according to the committee's mandate and template point 2), the committee is requested to assess:

- whether the study program has satisfactory outcomes relative to what is considered satisfactory within the field of study
- the trend in the outcome of the programme over the past three years

Committee's evaluation:

Based on the information we have been provided we conclude that the programme more than fulfills the expected outcome and standards of a master's degree in Norway. In our judgement there is no doubt that the degree programme provides its candidates with a master's level education firmly positioned in the still nascent but growing fields of energy-social science and sustainability studies. With its emphasis on interdisciplinary theoretical and practical learning, the degree importantly prepares master's candidates to navigate and find solutions to the social and political challenges inherent in energy transition. In doing so it addresses a significant gap in the current market of degree programmes offered in Norway. Although there have been a series of challenges to the programme over the last three years, most serious of which are the global pandemic and the introduction of fees for non-Europeans, the programme has been capable of retaining adequate numbers of students and the further improvement of its content and direction.

Committee's recommendations:

• We recommend that the degree is continued following the minor changes and recommendations we have highlighted above.

The Committee's overall evaluation

The Masters in Energy, Environment and Society at the University of Stavanger strongly fulfils all the formal requirements of a degree at this level. The master's programme fills an important gap in the Norwegian portfolio of education through its theoretical and practical preparation of candidates to understand and address the conjoined technical, social and political challenges of energy development and transition.

The Dean's evaluation, recommendations, and action plan

The Dean's evaluation and recommendations:

Sakkyndig komite for masterprogrammet i Energy, Environment and Society bestod av Professor JohnAndrew McNeish, Department of International Environment and Development Studies, Norwegian University of Life Sciences (NMBU); Tor Håkon Jackson Inderberg, Research Professor, Fridtjof Nansen Institute (FNI); Oluf Langhelle, head of departement and Professor, Institute for Media and Social Sciences, University of Stavanger; Rakel Frøyen, Student Representative, UiS; Magda Hognestad, Administrator, Institute for Media and Social Sciences, University of Stavanger. Komiteen konkluderer i sin rapport at alle forskriftens krav er oppfylt og at akkreditering av masterprogrammet bør videreføres.

Komiteen har gjort en omfattende gjennomgang av studieprogrammet, og kommer med veloverveide anbefalinger til kvalitetsforbedring. Komiteen anbefaler blant annet at informasjon om studieprogrammet kan kommuniseres bedre på nettsidene, samt at selve navnet på programmet bør reflektere den samfunnsvitenskapelige forankringen bedre. Det er i etterkant av den periodiske evalueringen sendt søknad om navneendring som ble behandlet av fakultetsstyret i juni 2024, navnet som i etterkant av fakultetsstyrebehandling ble foreslått og oversendt utdanningsutvalget er Master's in Sustainability Studies (MSUS) / Master i bærekraftstudier. Komiteen anbefaler videre at praksisemnet på 30 studiepoeng gjøres obligatorisk for studentene, som i tilsvaret blir problematisert i henhold til studentenes mulighet til å reise på utveksling. Videre gir komiteen noen anbefalinger i forbindelse med styrking av fagmiljøet, samt en problematisering av mangel på rekruttering av internasjonale studenter.

Studieprogramleder og kontorsjef (som stedfortreder for instituttleder siden han var del av den sakkyndige komiteen) har gitt tilsvar til rapporten og gjør rede for hvordan anbefalingene skal følges opp. Det kommer frem av tilsvaret at programmet per i dag er underbemannet og at det er behov for rekruttering av nyansatte (vedlegg).

Prioritised measures for further development:

- Endre navnet på programmet
- Gjøre grep for å øke rekruttering til studiet, kan ses i samsvar med informasjon om studiet på nettsidene
- Øvrige anbefalinger bør diskuteres videre i fagmiljøet

UiS, 27.09.24

Kolbjørn Kallesten Brønnick

Dean

Det samfunnsvitenskapelige fakultet

The document has been personally approved by the Dean in Public 360

Comments to the report on Periodic Evaluation: Master's in Energy, Environment, and Society, University of Stavanger

Stavanger 27 June

Live Sunnercrantz, Study Programme Leader Anne Helliesen, Head of Department Office

We would like to thank the Committee for an excellent report, with well-founded and good recommendations for the programme.

The Committee's overall evaluation reads as follows:

The Masters in Energy, Environment, and Society at the University of Stavanger strongly fulfils all the formal requirements of a degree at this level. The master's programme fills an important gap in the Norwegian portfolio of education through its theoretical and practical preparation of candidates to understand and address the conjoined technical, social, and political challenges of energy development and transition.

We support almost all the recommendations from the committee. Our response therefore only comments on the recommendations we find the most important, where we need to act, and where we already have taken some action. Our response is summarized in the table below:

| Recommendations | Our comments |
|--|---|
| Presentation of the Programme | |
| We recommend more precise information | There are several recommendations when it comes to information provided to students, which are to some extent linked to the UiS web page. There is definitively room for improvement here. Some we can do ourselves, some things need to be addressed at a higher level. Information about partner universities, career possibilities, research activities, key partnerships, and networks fall under the latter category. This is something that the programme will follow up. |
| The social science orientation of the degree is largely hidden. A revision of the degree title and basic description text is necessary. | Agree. We are therefore changing the name of the programme from <i>Master's in Energy, Environment, and Society</i> , to <i>Master's in Sustainability Studies</i> . We will also work on and revise the programme description. This connects to several of the recommendations from the Committee under the heading of Presentation of the Programme in the report. |
| There is a need to express the global orientation of the programme more clearly in the description of the programme and how this is connected to course work. | This is an important point for the programme, but also a challenge for us since we most likely will loose many students outside of the EU/EEA area. The NORSTIP will however be a helpful step on the way. |
| The description of the master's degree emphasises its empirical focus and course alternatives but does not give indication of any guiding theoretical framework/s for the critical learning it promises. | We have expanded the theoretical frameworks in some courses. We will however include more on this in the description of the master's degree. |

| Programme structure and contents | |
|---|--|
| We suggest that the MENPRA course is recast as a foundational obligatory course. | We think it would be very difficult to make the MENPRA compulsory for several reasons. It would exclude or at least make exchange much more difficult and make it difficult for students to choose other electives. |
| The MENPRA course should be better institutionalized such that there is a broader departmental and staff engagement and sharing of responsibility in the formation of contracts and relationships with locations for work placement. | We are however aware of the need to institutionalise MENPRA better. We will search for ways to do so. |
| Staff and future hiring processes | |
| We recommend that care is taken in the hiring process of new staff to identify highly qualified academics who are willing to actively engage in sharing the burden of programme coordination and teaching. An increase in the number of academic staff | We appreciate the recommendations on staff and the future hiring processes. We will use the hiring to move the programme in a desired direction oriented towards the social sciences, recruit people who complement and expand on existing expertise. |
| would assist the programme's long-term operation and sustainability. | The programme is currently highly understaffed with two full positions currently missing. |
| There is a clear need to hire at least one more member of staff at the level of Professor. | We are uncertain however if it is necessary to hire at least one more member of staff at the level of Professor. |
| Other recommendations | |
| Consideration should be made of appropriate strategies to respond to the drop in international student numbers caused by the introduction of fees for international students coming from non-EU countries. | This is a crucial point for the programme that has been heavily influenced by the introduction of fees for international students coming from non-EU countries. We are therefore working on strategies primarily aimed at EU/EEA students. This is a huge challenge, and a key point for securing the international orientation of the programme. UiS has also decided to grant the programme scholarships for students outside EU/EEA from academic year 2025/26. |
| We think that practical elements of the programme could be marketed as EVU courses to people working professionally within the energy sector or public administration. | We are a bit unsure what is meant here. We may (when we have recruited more staff) consider creating an EVU course. |