



# Sustainability Governance at Higher Education Institutions

BETA

SPONSORED BY THE



Federal Ministry  
of Education  
and Research



**FONA**  
Research for Sustainable  
Development  
BMBF

**Sustainability at Higher Education Institutions: develop – network – report (HOCH<sup>N</sup>)**

## **Sustainability Governance at Higher Education Institutions**



The contents of the "Sustainability Governance at Higher Education Institutions" guide were developed as part of the 'Governance' working package of the "Sustainability at Higher Education Institutions: develop – network – report" (HOCH<sup>N</sup>) project implemented jointly by the Free University of Berlin and the University of Vechta. This publication is a beta version, which will be integrated into an overall guide after a test phase.

The project is funded by the Federal Ministry of Education and Research (BMBF) under Ref. FKZ13NKE007 within the overall "Research for Sustainable Development" (FONA) programme.



Freie Universität Berlin

Prof. Inka Bormann, Benjamin Kummer,  
Sebastian Niedlich [with the support of  
Ann-Kathrin Hoffmann and Anna Krämer]

Department of Education and Psychology  
Division of General Education  
Habelschwerdter Allee 45  
14195 Berlin

Inka.Bormann@fu-berlin.de

University of Vechta

Prof. Marco Rieckmann,  
Mara Bauer

Faculty of Educational and Social Sciences  
Department of Education  
Driverstr. 22  
49377 Vechta

Marco.Rieckmann@uni-vechta.de



## Sustainability Governance at Higher Education Institutions

### Inhalt

<b>Welcoming address</b>	8
<b>Introduction</b>	12
Sustainability as a task for higher education institutions	12
HOCH <sup>N</sup> – the research project	12
The objectives of HOCH <sup>N</sup>	12
The HOCH <sup>N</sup> project structure	12
Fields of action	13
Guides	13
HOCH <sup>N</sup> – the university network	14
Next steps	14
Acknowledgements	15
<b>The underlying understanding of sustainability</b>	18
Background	18
The target group	18
The basic understanding of sustainability in the university context	18
<b>The significance of governance for university sustainability</b>	22
Governance: the coordination of those involved, their activities and decisions	22
Complex governance at universities	22
Transparent involvement of different stakeholders	22
Structures for long-term commitment	23
"Well intentioned" doesn't necessarily mean "well done"	23
Governance-regulating factors	23
<b>Prerequisites for successful university sustainability</b>	25
Framework conditions	25
Sustainability as a socio-political discourse	25
Conflicting sustainability objectives	26
The fields of policy and administration as relevant partners	26
Established academic rationales and new mission statements	27
University rationales and faculty cultures	27
University size	27
Regional anchoring and local integration	28
<b>Supporting factors</b>	28
Sustainability as a topic for creating a positive university profile	28
Support from the university management	29
Acting out of conviction	29
Networks for university sustainability	29
Sustainability requires resources, sustainability conserves resources	29
Personnel and expertise	30

Principles for action .....	30
Communication .....	30
Participation .....	31
Process orientation .....	31
Perseverance and long-term approach .....	31
<b>Measures</b> .....	33
<b>Networking</b> .....	34
General consultation .....	34
Theme-based consultation .....	35
<b>Sustainability coordination</b> .....	36
<b>Overall management</b> .....	38
Sustainability management .....	38
Observation and analysis .....	39
Orientation .....	40
Creating awareness .....	40
Transfer .....	41
Operational measures .....	42
<b>Self-appraisal tool for structures and processes: Governance-regulating factors</b> .....	44
Politics .....	45
Profession .....	46
Organisation .....	47
Knowledge .....	48
Visibility .....	49
<b>Appendices</b> .....	52
Thematic overview of the six guides .....	52
List of figures .....	53
List of abbreviations .....	53
List of references .....	54
List of tables .....	54
Internet links .....	55
<b>Imprint</b> .....	56



## Welcoming address

### Dear Reader,

Perhaps you are reading this guide because you are a member of a university and would like to support your institution in the implementation of sustainability in various areas of its operations. Are you perhaps a student, research assistant or professor? Do you work in the university administration, in technical operations or are you a member of the university management? Perhaps your university has already appointed a sustainability officer or coordinator, and it is precisely in this function that you deal with the structures and processes that can firmly establish sustainability at your university?

Whatever your specific reason for consulting this guide is, we greatly appreciate your interest and hope its contents will provide you with some structured information on the subject of sustainability governance at higher education institutions. Taking the diversity of higher education institutions into account, you will find that this guide aims to involve you and your institution at the specific stage in the sustainability process where you currently find yourself, and to provide you with options for further activities.

Sustainability affects all areas of higher education: research, teaching, operations and transfer. On each of these subjects we recommend reading the specific guides drawn up by our colleagues in the HOCH<sup>N</sup> collaboration. However, the many different projects and initiatives taking place at various universities must also be considered in their contexts. This is done by taking a cross-sectional perspective, as exemplified by sustainability reporting, for example, or as implemented in this guide to university governance. Such a perspective always involves looking at the entire institution and examining the connections between its individual areas. Accordingly communication, participation and the nature of university sustainability as a process play an important role in this guide to governance. In this respect we refer to the findings of an extensive survey which we conducted within the activities of the HOCH<sup>N</sup> collaboration. Representatives of the student body, administration, university management, research and teaching as well as sustainability coordination were interviewed at all eleven collaborating higher education institutions.

Our guide is divided into four sections:

1. Governance
2. Prerequisites for success
3. Measures
4. Self-appraisal

### Governance

Here we explain why the consideration and observance of university governance is an important step in the sustainability process, and how we understand the complex term of 'governance' in this context. At the end of this chapter, we present five dimensions of university sustainability: the so-called governance-regulating factors of politics, profession, organisation, knowledge and visibility.

### Prerequisites for success

The requirements and individual features of the university as an organisation are the subject of the second chapter. Here the factors which promote or hinder the development of university sustainability are discussed. This often involves the role of the various protagonists inside and outside the university who influence the process.

### Measures

In the 'Measures' chapter we focus specifically on the structures and instruments that have proven to be productive for the sustainability process at various universities. The common thread running through this chapter is the involvement and coordination of all conceivable stakeholders in the subject. Each of the groups of measures discussed is assigned to the governance-regulating factors which are presented in the 'Governance' section.

### Self-appraisal

Finally we provide a self-appraisal tool with which the sustainability governance of an individual institution can be appraised. The tool is based on the governance-regulating factors, which represent guidelines for assessing the university's sustainability activities. It also covers the activities described above and enables you to find out in which areas your university is already well positioned, and what further activities could enrich other fields.



The team of the governance working package wishes you every success and fulfillment on your journey of discovery through your own institution, and in shaping your own sustainability process.

With best wishes

Inka Bormann, Marco Rieckmann, Benjamin Kummer,  
Sebastian Niedlich, Mara Bauer







## Introduction

### Sustainability as a task for higher education institutions

Sustainability is an urgent developmental task for our society, and is attracting increasing attention. Higher education institutions like all other organisations within our society, are called upon to deal with the

An approach to the understanding of sustainability in terms of terminology within the HOCH<sup>N</sup> network can be found on Page 18.

associated challenges. How can complex organisations such as universities succeed in initiating and maintaining the process

of sustainable development within their own institutions and making it a permanent responsibility? How can as many protagonists as possible be persuaded to get involved in sustainable development? For these questions there is no patent recipe, no guidelines to action, no checklist that would be equally helpful for all universities or could be applied across the board by all. Institutions of higher education are too different, for example in terms of their legal form (private or public), their type (university, university of applied sciences), their location (rural or metropolitan) or size (small and specialised or a large university offering a full range of faculties). In addition, universities are influenced by external framework conditions that promote aspects of sustainability to varying degrees, depending on the federal state.

The HOCH<sup>N</sup> network looked at these questions in an initial two-year research phase. This guide is one of a total of six HOCH<sup>N</sup> guides which are available as beta versions and represent the initial results of the work which has been undertaken. The HOCH<sup>N</sup> project consists of research work carried out by eleven German universities and a growing sustainability network of German higher education institutions, in which so far partners from around 100 universities have been exchanging information.

The two-year cooperation and close nationwide dialogue at a wide range of events such as practical research sessions, collaboration meetings and conferences have revealed what is most valuable about HOCH<sup>N</sup>: the exchange of information and ideas with students, (emerging) academics and experienced sustainability practitioners. This can make it possible to

adopt new points of view, develop mutual appreciation independent of hierarchical levels, and create a forum for constructive discussions.

### HOCH<sup>N</sup> – the research project

#### The objectives of HOCH<sup>N</sup>

The overriding goal of the joint project "Sustainability at Higher Education Institutions: develop – network – report" (HOCH<sup>N</sup>) funded by the Federal Ministry of Education and Research (BMBF) is to promote the sustainable development of the German higher education landscape. Four sub-goals are derived from this:

1. Establishment and consolidation of a network for the exchange of experiences
2. Development and analysis of a common concept of sustainability
3. Promotion of sustainable university development through the implementation of appropriate activities and methods
4. Drafting of guidelines for sustainable university development, which are then tested and collated to form an integrated overall guide

By the end of October 2020 the goal of HOCH<sup>N</sup> is to create a **roadmap for the sustainable university of 2030** as a vision for the future of sustainable university development.

#### The HOCH<sup>N</sup> project structure

Eleven funded universities are networked in the working constellations shown in Figure 1.

The teams at the eleven HOCH<sup>N</sup> universities have a high proportion of emerging academics from a broad range of disciplines. The following universities are members of the network:

- Free University of Berlin
- University of Bremen
- Dresden Technical University
- University of Duisburg-Essen
- Eberswalde University for Sustainable Development

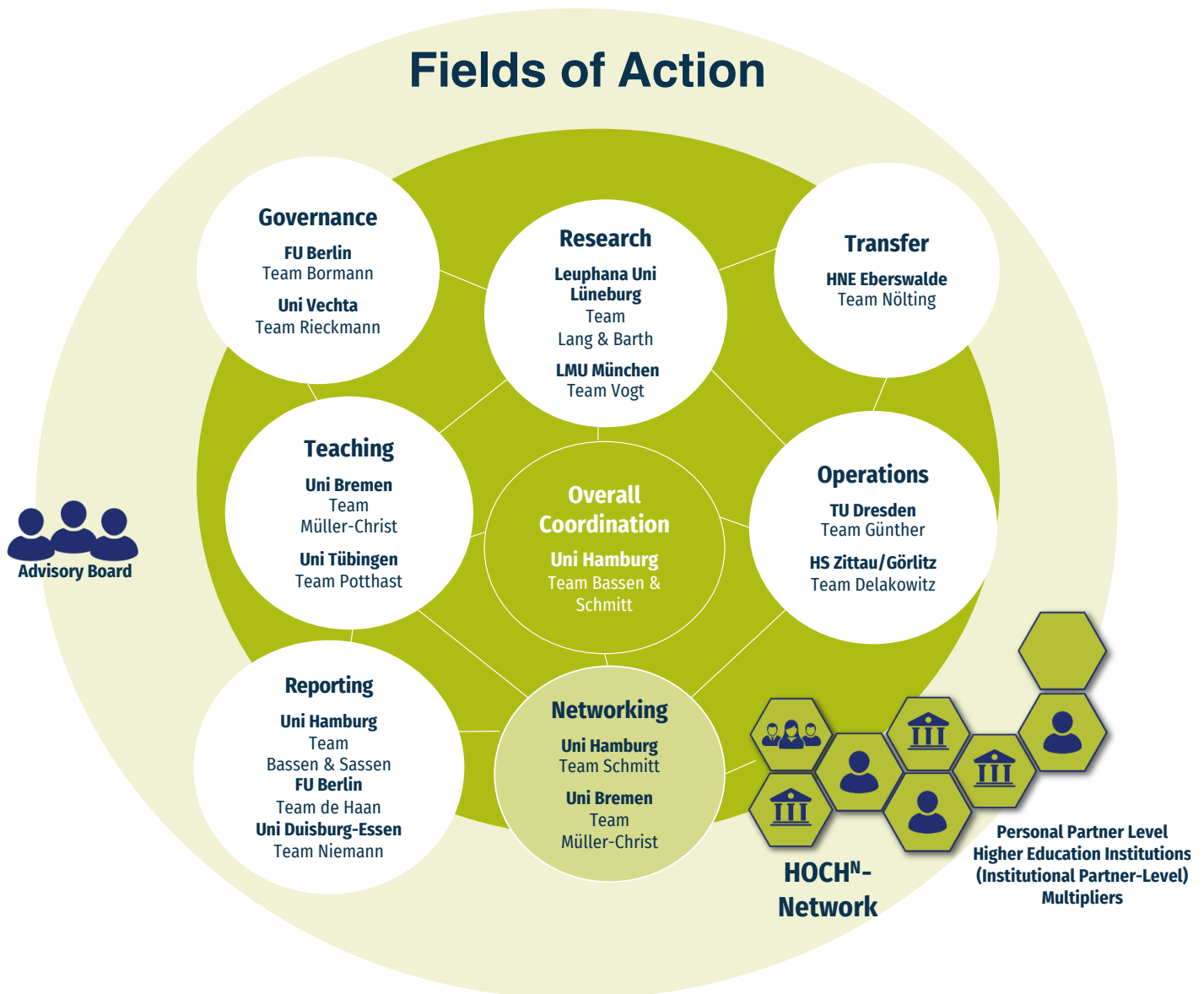


Fig. 1: Overall structure of HOCH<sup>N</sup> (University of Hamburg)

- University of Hamburg
- Leuphana University Lüneburg
- Ludwig-Maximilians-University Munich
- Eberhard Karls University Tübingen
- University of Vechta
- Zittau/Görlitz University of Applied Sciences

The HOCH<sup>N</sup> project is supported by an (inter-)national advisory board. In addition, HIS-HE, the Institute for Higher Education Development in Germany, is a cooperation partner in the operational field.

### Fields of action

In the sense of a "whole institution approach", which encompasses the entire higher education institution, the focus is not only on the core areas of teaching and research, but also on the operational management of higher education institutions. In addition, the project focuses on fields of action in sustainability reporting and governance as cross-disciplinary themes, as well as on transfer.

### Guides

Each of the work packages has dealt with a specific topic of university sustainability over the course of the project: research, teaching, operation and transfer, supplemented by the cross-disciplinary topics of sustainability reporting and governance. The six HOCH<sup>N</sup> guides are initially available as beta versions. They were prepared in parallel with the start-up, research

► HOCH<sup>N</sup> advisory board: <https://www.hochn.uni-hamburg.de/1-projekt/fachbeirat.html>

and networking activities of the first two funding years. They do not claim to cover the fields of action in full, but rather focus on specific topics and summarise the findings which have been collected and developed in a structured manner. They accordingly represent a prelude to follow-up discussions in the growing HOCH<sup>N</sup> network. They are living documents in which the process of shared creation and dialogue generates the real added value. They also make it clear that universities progress by taking many small, often unspectacular steps.

The target groups of the individual HOCH<sup>N</sup> guides are all those who wish to promote sustainable development at their own university, and obtain a low-threshold entry into the various fields of action. At the same time the varying basic conditions of Germany's highly diverse higher education landscape need to be taken into account, so that all universities can find useful ideas and suggestions. The HOCH<sup>N</sup> project aims to promote this important dialogue as a nationwide platform for sustainable university development. In addition, the guides are aimed at all stakeholders in institutions of higher education, since they create an overview of the framework conditions and actions which a sustainable university requires.

### HOCH<sup>N</sup> – the university network

Under the auspices of the universities of Hamburg and Bremen a constantly growing university network is being established. At the time the beta guides went to press, members of around 100 German universities were already part of this network. In this way, existing experiences and expertise can be made available

to the individual universities, stimulating a shared dialogue and enabling them to learn from one another. The HOCH<sup>N</sup> sustainability map shows the responsible persons, partner universities and sustainability initiatives throughout the German higher education sector.

### Next steps

It became clear to those involved in the collaboration relatively quickly that looking at the various fields of action individually represented only the first step. There are strong interdependencies between these fields of action. Building on the preliminary work it will take time to further elaborate on this finding, to enrich it with knowledge gained from experience, and to make it available on the basis of concrete practical examples – including those from the growing HOCH<sup>N</sup> network. The second project phase (11/2018–10/2020) will focus on validating the guides and converting them into an integrated overall format with a strong focus on their application in practice.

### Become part of HOCH<sup>N</sup>!

We are looking forward to further university partners who would like to join the HOCH<sup>N</sup> network. Participating in our events will provide you with the opportunity to get actively involved in important processes. Further information at:

► <https://www.hoch-n.uni-hamburg.de/en/5-mitmachen.html>  
[netzwerk@hoch-n.org](mailto:netzwerk@hoch-n.org)



Photo: Markus Scholz/scholzfoto.de

**In HOCH<sup>N</sup> I experience an inspiring collaboration making incredibly rapid progress: really exemplary, not only in terms of content, but also in terms of organisation and working methods.**

**Dipl.-Ing. Cornelia Reimoser**

**Headquarters of the Fraunhofer Society / Member of the Advisory Board of HOCH<sup>N</sup>**

It is therefore not just a question of showing what activities can be used to implement sustainability strategies which cover a number of different fields of action. In the further course of the project, the focus will in particular be on analysing why and through what processes some higher education institutions are particularly successful in transforming themselves and, above all, how the various findings can be passed on in order to actually bring about change.

## Acknowledgements

A project for sustainable university development in this form would not be feasible without the BMBF and its nationwide initial financial support. As a learning university network, we still face the task of building up permanent structures until the approach which universities take to the subject is transformed to such an extent that sustainability processes come to be valued as permanent operational tasks with appropriate staffing. We would like to thank in particular Dr. Karl Eugen Huthmacher, Eckart Lilienthal, Florian Frank and Cornelia Möller from the BMBF's Department 7: Zukunftsvorsorge – Forschung für Grundlagen und Nachhaltigkeit (Care for the Future – Research for Basic Principles and Sustainability). They are making a significant contribution to sustainable development at universities, both with their valuable support so far and with the possibility they offer in a second funding phase for the diverse findings and results to be condensed and tested in an application-oriented manner.

At this point we would also like to express our special thanks to our project sponsor, the VDI Technology Centre, in particular Svetlana Thaller-Honold and Christiane Ploetz. As reliable partners, they are making an essential contribution to a change of perspective in the world of higher education. Heinz Horsten deserves our thanks for always being ready to deal with our questions on the formalities of funding, which he answered with unfailing good humour, no matter how often our university network wished to reassure itself about important topics.

We look forward to our further cooperation during the next two years and invite all higher education institutions to join this process of development.

**If the programme didn't exist somebody would have to invent something like HOCH<sup>N</sup>.**

**Prof. Dr. (mult.) Dr. h.c. (mult.) Walter Leal**  
HAW Hamburg / Member of the Advisory Board of HOCH<sup>N</sup>



Photo: H. Thänitz









# The underlying understanding of sustainability

## Background

At higher education institutions in Germany many bodies and individuals deal with the topic of sustainability in research, teaching and practical operations. To date, however, there has been insufficient consensus on how the demands of sustainability arising from social responsibility should be understood, shaped and implemented in the university context. This can be seen, for example, in the current debate on the relationship between freedom and academic responsibility in terms of sustainability.

Within the framework of the joint project, the HOCH<sup>N</sup> collaboration has set itself the goal of developing further the shared, university-specific concept of sustainability which was conceived by the eleven universities in the collaboration between November 2016 and October 2018, in a joint process coordinated under the leadership of Prof. Markus Vogt (LMU Munich). It is based on the interim results of the HOCH<sup>N</sup> collaboration, the understanding of sustainability of the individual partner universities within the joint project, the basic concept of sustainability anchored in many international resolutions, and an evaluation of the relevant literature.

The understanding of sustainability is based on conceptual coherence and attempts to work out the normative implications of sustainability in the university context. At universities in Germany it offers an orientation framework for the overall institutional integration and implementation of sustainability as an ethical principle in the theory and practice of research, teaching, operations, governance and transfer. It by no means precludes individual universities from setting their own priorities and practices with their own individual focal points. On the contrary, since sustainability should ideally take into account the respective contexts, framework conditions and protagonists of the individual universities, the diversity provided by differ-

ent understandings of sustainability can be regarded as a positive factor. However, precisely because there are different approaches, conceptual clarification fulfils the important function of contextually clarifying the scope for interpretation, commonalities and open questions, and expressing them in concrete terms for the purpose of implementation.

The understanding of sustainability provides the basis for the effective implementation at universities of activities which are regarded as indispensable for any major social transformation and for the execution of the Federal Government's national action plan 'Education for Sustainable Development' (ESD). Since the development of the concept of sustainability needs to be continuously discussed and reflected on with regard to the respective context, we invite all interested parties to participate in its further development.

## The target group

This understanding of sustainability is primarily aimed at members of universities, especially those wishing to deal with the subject of sustainability and to shape change processes. Internal stakeholder groups include, for example, representatives of university management, academics, teachers, students, administrative staff and sustainability officers. The following are considered to be stakeholders external to the university: representatives of state and federal ministries, the conference of university rectors and ministers of education, political and social organisations.

## The basic understanding of sustainability in the university context

Sustainability is a normative principle that can be described as a yardstick for global and intergenerational justice in the face of the challenges posed by current changes in the earth's system. In ethical-political terms, sustainable development is not an externally defined and prescribed goal, but an open search process with heterogeneous target components, which is therefore pluralistic and culturally variable. Its object is long-term responsibility for ensuring environmental viability, social justice and economic performance. It aims to strengthen the competencies that are necessary for

► The long version of the understanding of sustainability with explanations on the fields of action of research, teaching, operation, governance and transfer as well as on the literature used can be found at: <http://www.hoch-n.org/2-handlungsfelder/04-forschung.html> (in German)

helping to shape social life. Its systemically integrated implementation is regarded as the need for comprehensive social transformation, the core of which is a change in the relationship between human beings and nature.

The task of the universities is to deal theoretically, conceptually, methodically, critically and reflectively with the processes and conditions of transformation, in order to contribute towards ensuring that sustainability is implemented in a specific context. Sustainability requires us to reflect on the importance of ethical perspectives in the context of scholarship, with ethics reflecting the grounds, goals and consequences of human action in moral terms. Ethics is not limited to prescribing ready-made solutions for the right way to act. Instead it first aims to inspire reflection and thus enable freedom of action.

The need for ethical reflection and orientation arises above all in situations of radical change. This is the case today in view of the profound change in values and the global, national and regional challenges posed by sustainable development. The principle of sustainability sees itself both as an eco-social and economic challenge, and as a cultural task in order to preserve the natural foundations of life for all people, including future generations (cf. Brundtland Commission; Art. 20a GG; SDGs), as well as to respect and protect the intrinsic value of nature with its biological diversity (cf. Federal Nature Conservation Act §1).

Due to their ethical and socio-political position, universities have an inherent task to occupy themselves with such a social transformation towards greater sustainability, and to provide the appropriate stimulus. As special strengths they can contribute empirical and theoretical knowledge, methodological expertise and the ability to analyse. To do justice to the normative content of sustainability means to think methodically about problems in societies, to pose relevant questions regarding the relationship between man and nature, and to learn to think in cross-sectoral contexts, to generate knowledge and to take action. It is a matter of determining how sustainable solutions for dealing with the great challenges of our time can be found globally, nationally and regionally, and then implemented on a long-term basis at the institutional level.

The long version of the understanding of sustainability, with detailed information relating to the fields of action

for universities, and the HOCH<sup>N</sup> guides can provide universities with an orientation framework for their own concrete implementation of sustainability.

Those involved in the HOCH<sup>N</sup> collaboration project are striving to implement sustainability in their own institutions as a whole in the fields of teaching, research, operations and transfer, as well as in the cross-sectional areas of governance and reporting.

In this respect sustainable development in the university context is regarded as an open, analytical process in which the independence of scholarship and its social responsibility are mutually dependent. Sustainability is seen as a guiding principle that creates the profile and connections which enable universities to make their own individual contribution to shaping society for the future and dealing responsibly with nature.

The universities thus contribute to the implementation of the 'Education for Sustainable Development' national action plan to which Germany is committed, and to the perception, further development and enhancement of both the United Nations 'Sustainable Development Goals' and Germany's sustainability strategy.





## The significance of governance for university sustainability

### Governance: the coordination of those involved, their activities and decisions

Precisely because universities differ so greatly from one another, the question of the institutionalisation of sustainable development must be answered individually at each university. Nevertheless, there are requirements that affect all universities in common. Ultimately, the aim is to implement concrete activities that, for example, enable sustainable campus management or anchor sustainable development issues as broadly as possible in research and teaching. In addition, with such a complex issue as sustainable development a clear framework is also essential. For example, different activities need to be coordinated and binding decisions made, e.g. on objectives, responsibilities or the support to be provided by different stakeholders. The task of coordinating these processes in an orderly manner is also referred to as "governance".

► The following working paper gives a more detailed insight into the underlying understanding of governance: <http://www.hoch-n.org/-downloads/governance-verstaendnis1.pdf> (in German)

### Complex governance at universities

When we talk about governance, we mean both organisational structures and the administrative apparatus and the management of complex processes. Governance is therefore diverse and demanding. This applies in particular to the governance of complex organisations such as universities: the tasks of a university range from research and education to quality management, innovation transfer and the provision of academic expertise for important social challenges.

Universities are on the one hand organised on a decentralised basis with division in terms of specialisations. Although hierarchical structures exist within the administration, research and teaching staff in particular can rely on legally guaranteed academic freedoms and a high degree of autonomy in decision-making and action. On the other hand, a strengthening of the role of the university management can currently be observed. This is being implemented by establishing central organisational units such as executive sections, by strengthening processes, mission statements and

guidelines throughout the university, and by reinforcing the central decision-making authority of the management board in relation to self-regulating academic bodies. Higher education institutions are also based on a large number of clearly defined areas for action (membership and affiliation, competencies and authorisations, administrative procedures etc.), as well as on a number of implicit rules and norms (self-concepts of various academic disciplines, administrative practices etc.).

Many groups and stakeholders with very different competencies, perspectives and interests play a role in the governance of sustainability processes at universities. These include above all the university management (in the person of the (vice-) president or chancellor as head of the administration), students in the various departments, research and teaching staff as well as employees in administration and technology. The coordination of these various positions is one of the central governance tasks on a university's path to sustainable development, because the individual protagonists often have very different points of view, for example on how urgent the challenge of sustainable development is, what individual goals can or should be pursued and implemented at their own university, and in whose area of responsibility sustainability should be anchored.

### Transparent involvement of different stakeholders

Regardless of the starting point from which a university embarks on its course: as with any change process, in connection with the central idea of sustainable development too, it can be assumed that there will be proponents and supporters as well as sceptics and opponents. It is also true that examples of good practice that have worked at a different university cannot simply be transferred in unchanged form to a different institution. On the contrary, it is always the particular situation of a university, its internal structure and its relationships with institutions outside the university that determine what is perceived as 'exemplary' or 'worth transferring' in the first place.

In order for an impulse for change such as the idea of sustainable development to unfold, it must therefore be discussed and its significance for the individual university examined. It is important to involve as many

different groups of people as possible in order to implement mutually supported activities. Just as student initiatives, for example, will not succeed in developing a mission statement for the entire university without the support of the university management, it will also not be effective if a university management 'prescribes' a mission statement for sustainable development without consultation and participation with decisive bodies such as the academic senate, faculty committees etc.. Instead it makes sense to listen to and include the views, interests, wishes, but also fears and resistance of those who are not yet involved. Otherwise it can easily happen that sustainable development fails to gain general acceptance. These processes of exploration, communication and consideration represent an important component of governance.

## Structures for long-term commitment

Equally important for the governance processes relating to university sustainability are the structures and responsibilities that support the university members actively involved in committing themselves to the process in the long term. The experience of a large number of universities shows that these structures can look very different. For example, offices with volunteer students or green offices with employed students can drive the sustainability process forward. At the same time, sustainability units appointed by the university management and staffed by permanent employees can play an important role, in that they form contact points and initiate, collate and/or communicate activities in individual fields of action such as teaching, administration and research, or even throughout the university. Supporting structures such as dedicated units or sustainability officers are increasingly being set up to develop sustainability strategies and initiate, implement or support operational activities on selected topics. Alternatively or additionally, there are decision-making or preparatory bodies such as steering committees, round tables or working groups which deal with the selection of issues and identifying and involving other stakeholders.

### "Well intentioned" doesn't necessarily mean "well done"

Even if university sustainability processes develop highly independently in individual cases, it is possible to identify overarching characteristics which are of great importance for the development of the rel-

evant processes. For example, the way the university regards its role in the social environment, its understanding of sustainability and structural approach to achieving sustainability are all influential in determining how responsibility for the sustainability process is distributed within the university. If a university is firmly anchored in the region and beyond through social contacts, and if sustainability is regarded as a task that needs to be tackled in an interdisciplinary and transdisciplinary manner, it will be easier to initiate comprehensive sustainability processes, then maintain them and finally to anchor them permanently. Last but not least, the commitment of the university's management is decisive in determining how quickly, intensively and comprehensively the sustainability process can be driven forward. If resources are available to coordinate activities, for example, or if the university's management initiates a mission statement process, this can have a very positive effect on the commitment of the university members.

In view of these challenges and others, emphasis is often placed on the fundamental principles of "good governance" which need to be observed in connection with efforts to achieve sustainable development at universities. For example, a university's governance activities are measured in terms of whether the interests of the various stakeholders are taken into account and whether transparency and participation are made possible. On questions of sustainable development in particular, such ideas of "good governance" play an important role.

However, good intentions and the consideration of these principles alone do not guarantee that university sustainability processes will actually be successful. Governance must also be implemented well. It is possible to identify five dimensions which are of decisive importance for a successful implementation process within universities. These are discussed here as "governance-regulating factors".

## Governance-regulating factors

Five dimensions have a decisive influence on the chances of success on the part of university sustainability: politics, profession, organisation, knowledge and visibility. The analysis of their characteristics can therefore play a decisive role in the understanding and success of university sustainability processes. The five Governance equalizer dimensions presented here are



based on a theoretical examination of the research literature on university governance. In addition, they have been enriched and further developed with own empirical findings.

The following table, which poses a guiding question for each area and is followed by a brief characterisation, can be used to understand these factors.

- The exact procedure and the findings derived from it can be found in the following article: Bauer, M. et al. (2018): Sustainability Governance at Universities: using a Governance Equalizer as a Research Heuristic. In: Higher Education Policy 31 (4), 491-511. DOI: 10.1057/s41307-018-0104-x. <https://rdcu.be/baycb>; <https://link.springer.com/article/10.1057%2Fs41307-018-0104-x>

## Politics

### **How is sustainability anchored and legitimised within the university?**

The question here is how to ensure that sustainability activities are not only supported in selective cases, but that sustainable development is firmly established on the long-term agenda of the university.

## Profession

### **To what extent and how are professional perspectives and competencies linked?**

This involves the gradual development of an interdisciplinary and cross-departmental understanding of sustainability at the university.

## Organisation

### **How are cooperative work and task performance made possible?**

At some universities, sustainability is supported by the commitment of individual activists without any organisational support, while other universities follow a 'whole institution approach'.

## Knowledge

### **How is the necessary know-how developed and used competently?**

The realisation of sustainable development requires not only knowledge of the subject, but also of the relevant objectives, actions and processes, the availability of which at the university must be developed and used competently.

## Visibility

### **How is awareness of the need for sustainable university development achieved?**

Making university sustainability activities publicly visible and accessible can help create greater participation and awareness of sustainable development.

The governance of a university affects all five equalizer dimensions which have been identified. Although in everyday university life these are interwoven, a consideration of sustainability governance at universities can benefit from analysing their respective areas of reference: for example, the university's commitment to sustainability and the public impact of the relevant activities (visibility) are of decisive importance in strengthening the overall process. However, this alone does not lead to binding decisions (politics) or to the establishment of concrete working formats within the institution as a whole (organisation).

The interdisciplinary dialogue (profession) and the establishment of organisational forms of knowledge transfer (knowledge) are also decisive. The consideration of these five dimensions enables an expanded view of the analysis of sustainability governance at the individual university.

- The scientific derivation of the governance equalizer is outlined in the following working paper: <http://www.hoch-n.org/-downloads/ap2-governance-regler.pdf> (in German)



## Prerequisites for successful university sustainability

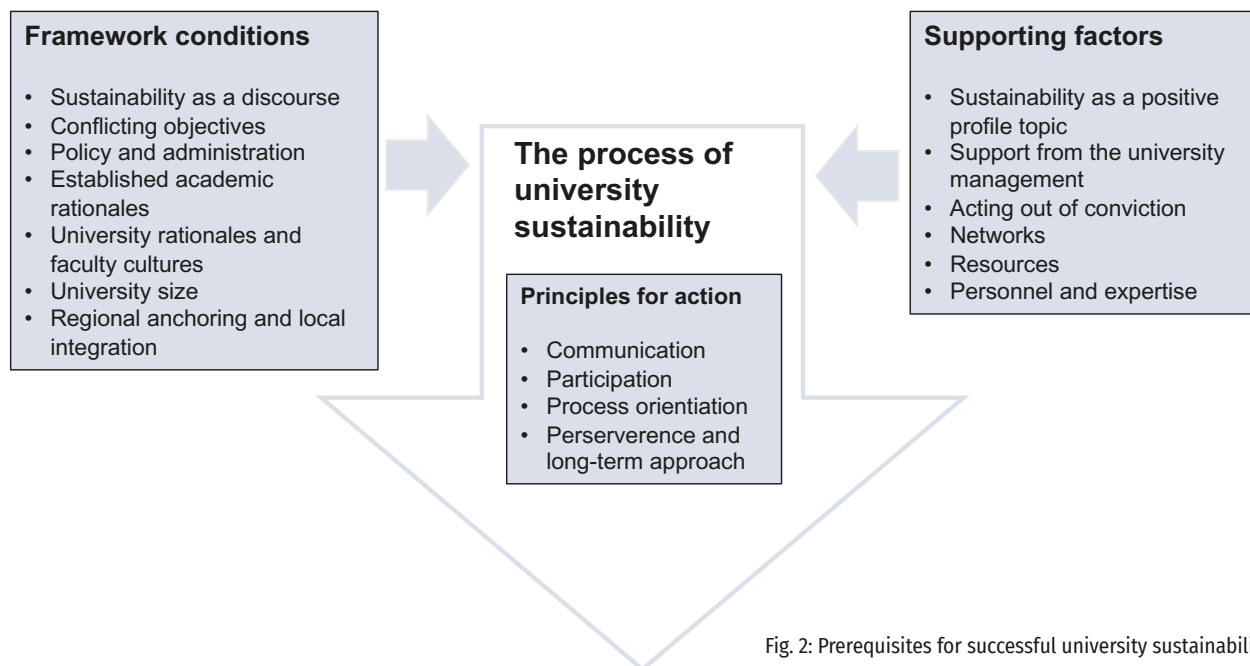


Fig. 2: Prerequisites for successful university sustainability

What influences university sustainability? Where can a university influence events, where does it have to deal with external conditions, and what principles support sustainability processes at universities? These were the central questions of empirical research on which this guide is based. Building on these considerations, this chapter discusses framework conditions and supporting factors relating to university sustainability, and outlines the necessary principles for action. The quotations listed in some of the boxes offer concise insights into the extensive empiric material provided by 61 interviews.

On the road to sustainability, universities have to deal with regulations and specifications as framework conditions. The academic policies operated by the federal states provide decisive impetus; established academic approaches can lead to conflicting goals. The size of the university and its regional integration influence the development potential of university sustainability. Some of these variables are fixed. Others are in the process of being developed – promoted especially by the individual commitment and activities of the universities. Supporting factors, on the other hand, can be actively shaped by the university itself. This concerns the question of the importance and prioritisation attached to sustainability within the individual institution, as well as the resulting resources and incentive systems which are provided. Finally, it is necessary to take into account organisational principles of action that are consistent with the sustainability concept.

### Framework conditions

#### Sustainability as a socio-political discourse

Sustainability with all its facets has developed into an important socio-political debate in recent years and is becoming increasingly important for universities at the institutional level as a whole. Universities are increasingly being regarded as responsible social protagonists, and have the corresponding demands imposed on them. The sustainability discourse offers universities a decisive frame of reference, the goals and normative references of which can provide a high degree of orientation for their own profile and development – both in terms of organisational structure and with regard to the setting of priorities for the content of individual disciplines.

The UN Decade of "Education for Sustainable Development" (2005-2014), the subsequent Global Action Programme (GAP) "Education for Sustainable Development" (2014-2019), the Sustainable Development Goals (SDGs) and projects such as LeNa on sustainability management in non-university research organisations are important drivers for the development of university sustainability.

In this respect the UN Decade has achieved far more than just addressing a sustainability perspective within the educational debate. In fact the discourses within the framework of the UN Decade have led to an expansion of the concept of education itself. LeNa project website: <https://nachhaltig-forschen.de> BNE Portal: [www.bne-portal.de/en](http://www.bne-portal.de/en) (in German)

### Conflicting sustainability objectives

In many cases, dealing with sustainability means addressing the various – and sometimes contradictory – interests and perspectives at a university. For example, how does the academic policy requirement of the greater internationalisation of universities fit in with the model of a sustainable university that minimises its ecological footprint? What is the relationship between the goal of an overall university sustainability process and autonomy in teaching and research? What incentives, for example, can make it attractive for professors to become actively involved in their own university's development process? Such issues bring together the positions and interests of different groups of people, which need to be balanced and taken into account.

### Should a sustainability report be printed or 'only' published online?

A conflict of goals arises when a sustainability report is drawn up (as with the present publication of this guide). Should the report be printed or only appear as an online version? There are good arguments for online publication only. For example, it consumes fewer resources, there are no transport-related costs and emissions, and the document is potentially accessible online for everyone via the Internet. At the same time, however, the report is appreciated more and receives more attention if it is also available in printed form and can be handed directly to interested parties.

► [www.greenpeace-magazin.ch/2015/11/13/online-vs-papier-zahlen-und-fakten/](http://www.greenpeace-magazin.ch/2015/11/13/online-vs-papier-zahlen-und-fakten/) (in German)

### The fields of policy and administration as relevant partners

#### Example: property management

The building stock of universities is subject to very different ownership conditions. This has a fundamental impact on the influence which can be exerted by the universities. While some universities, as owners, can largely decide for themselves how to deal with their buildings, many universities are centrally dependent on cooperation and the "good will" of (mostly) state-owned organisations when it comes to renovation, new construction or energy issues.

#### ► Operational guidelines



#### Examples: Germany's Conference of Rectors and UNESCO Commission

In 2007 the discussion of sustainability issues at universities led to a joint declaration by Germany's Conference of Rectors (HRK) and UNESCO Commission (DUK) on sustainability as a guiding concept for universities. Within many universities, this declaration was of great importance for the initiation and development of sustainability activities. However, it can't be taken for granted that any declarations which were made will have lasting validity. Instead they are subject to continuous discussion processes.

► <https://www.hrk.de/resolutions-publications/resolutions/beschluss/detail/towards-a-culture-of-sustainability/>

As the bodies centrally responsible for university development, the science ministries of the individual federal states have a strong influence on universities and their potential for sustainable development. At the formal level, laws and ordinances can be used to establish sustainability-relevant criteria such as environmental and social standards (e.g. procurement guidelines). In direct negotiations between the universities and the state governments, such criteria are also included in the university contracts or target agreements which are concluded between the state governments and the

universities in order to define basic development goals. Tenders at the level of the federal states, the federal government and the EU offer funding opportunities for sustainability-related research and development projects (e.g. FONA, SISI, HOCH<sup>N</sup>).

"This was also the reason, for example, why the students' union decided to promote reusable cups, because last year the authorities published a binding guideline in which every municipality is urged to keep waste as low as possible, especially in the food sector. This is not a law, but it is a binding directive and the university and, accordingly, the students' union, too, must adhere to it."

**A student who is committed to a reusable cup system in university cafeterias**

### Established academic rationales and new mission statements

The established academic rationale, its success criteria and reward systems are aimed primarily at top-level disciplinary research. In most academic fields, a departmental rationale still dominates. The guiding concept of sustainable development calls into question an academic understanding often based on mono-disciplinary research and focuses on the interfaces between disciplines. Furthermore, sustainability research makes scholarship itself an object of research when it critically discusses the causal relationships of established scholarship and reflects on the social significance of research against the background of sustainable development.



#### Research guidelines



In addition to the consideration of the content of individual subjects, knowledge of the objective and transformation needs to be taken into consideration. This means that on the one hand researchers should clearly define the desired state through targeted questions (target knowledge) and on the other hand describe and initiate a possible way to achieve it through the necessary changes in behaviour and action (transformation knowledge).

"It's an obstacle that there are other recognition mechanisms in the academic system than those that would be useful for enforcing sustainability. For example, if we now think of anchoring it in teaching operations: "How can there be at least a possibility of dealing with the topic in all subjects? That very quickly fails because of

the framework examination regulations. If you try – and I have been doing this for three years – to develop framework examination regulations in which this is structurally possible, it fails, for example, because the relevant specialist association only recognises a certain number of credit points." **A student who advocates the institutionalisation of sustainability via university bodies**

### University rationales and faculty cultures

Universities are complex organisations: the larger the university, the more diverse the processes, structures and inherent rationales of the various disciplines and sub-areas are. This applies to the individual subjects and their organisational units as well as to the university's fields of action such as research and teaching or campus management. Within the organisation, each area has developed in its own way and built up its own specific organisational and disciplinary rationale. These must be taken into account when developing and designing an overall sustainability process for universities. This concerns both the process of understanding the contents of a sustainability concept and its objectives, and the mediation between the different organisational cultures and the protagonists involved (e.g. in joint work between administrative staff and researchers).

"If you see the university as a business, then sustainability quickly concerns everyone, in many different contexts. That's why I think it is so important to stress that a real cultural change is taking place here. It has something to do with attitude. It is also always a very long-term process and often it's a matter of making more effort." **Member of the executive committee of a university**

### University size

The size of a university has a significant influence on how quickly sustainability can be anchored step by step within the institution. Since at small universities people often know each other personally, it is generally easier for them to jointly develop and shape an overall university sustainability process. Decisive for this are the dialogue among and coordination of all university members as well as a close connection to the university management.

Small universities are often characterised by departmental specialisation, which makes it easier to deal with and agree on an issue. Finally, the contact between the university fields of action (research and teaching,

operations, campus management) is easier to establish if everything is close at hand, and joint projects can be set in motion more easily – for example, the determination of the ecological footprint. On the other hand, it is often the case that small universities in particular are highly specialised in a narrowly defined subject area.

Large universities are complex organisations. Thanks to their strong staffing levels, they have a broader range of disciplinary expertise at their disposal. Often, however, the protagonists within the organisation lack any knowledge and overview of the institution's diverse, often decentralised activities. In large organisations in particular, there is therefore a need for suitable instruments to establish a dialogue at the university level, and working processes in order to network protagonists with one another.

"We're a small university where a lot of things work on the basis of personal communication. The communication channels are much shorter than in a larger university. By the way, this is also an important issue with regard to sustainability." **Professor at a small university**

"We have a very large organisation here. It's clear that things don't always move so fast. Inertia is a major factor and I think there is room for improvement here. My fear is that afterwards there will be far too many different groups doing something with sustainability. Sooner or later the right hand no longer knows what the left hand is doing. I hope it's not like that, but I'd prefer everything a little more concentrated." **A student at a large university**

### Regional anchoring and local integration

The guiding concept of sustainability relies to a large extent on inter- and transdisciplinary formats and on leaving one's own ivory tower to cooperate with local protagonists such as SMEs and researchers from various disciplines. Working on sustainability in the university context requires social significance and practical relevance.

In addition to size, the regional integration of universities therefore also plays an important role. Universities in rural areas in particular are often involved in local innovation and regional development processes. They have often been in close contact with representatives from business, local society and politics for a long time and are thus closely intertwined with the regional structure. On the other hand, universities in

metropolitan regions have the opportunity to collaborate with other scientific and non-scientific partners over short distances.



### Transfer guidelines



"I regard the sustainability process here as an interlinking between local stakeholders and university members. Here in the university there are so many contacts with local people and organisations that I believe they stimulate each other and it also advances the process here." **Sustainability researcher at a university**

## Supporting factors

### Sustainability as a topic for creating a positive university profile

An important supporting factor for the sustainability-related profiling of the university is the increasing attention which is paid to the contribution a university makes to sustainable development, and how credible it is in doing so. Many universities in which sustainability processes and structures are well established have a wide range of faculty relationships with the concept of sustainability. Environmental science courses, for example, already have a fundamental proximity to the ecological dimension of sustainability. Such existing focal points make it easier for universities to establish connections with sustainability matters. In addition, questions arising from the social or economic debate, such as those relating to the national economy, tourism or the social science perspective, offer numerous points for linking with sustainability.

Sustainability can also function as a feature of a university's overall presentation to the public. While at some small universities sustainability has sometimes developed into an identity-forming feature for the entire university, at large universities it is usually associated with a whole range of profile-related topics. Internally, a profile in terms of sustainability offers all university members a common orientation. Outwardly, enhancing a profile enables better visibility of the theme of sustainability. This can affect both potential future students and interested researchers or future employees. Furthermore, in contact with other protagonists or funding bodies from politics, society or business, a university's sustainability profile can improve the perception of the organisation.



In the case of conflicting goals in profile building, universities sometimes have the opportunity to build on previous experience with such coordination processes. Many universities in the HOCH<sup>N</sup> network have gained experience with management procedures, for example in connection with the EMAS environmental management system, and use this as a starting point for dealing with resource protection issues. Others have made a name for themselves as family-friendly and/or health-promoting universities in connection with the integration of refugee students or cooperation initiatives with countries of the Global South, and have taken up further challenges of ecological, social and economic sustainability on the basis of these activities.

---

"A clearly defined profile helps you to be successful. You will probably be less successful with a range of offerings that can be found everywhere else, too. The topic of sustainability is firmly anchored in our philosophy and that's why it's right to clearly position the university in this way". **Statement from an administrative employee at a small university**

---

### **Support from the university management**

A decisive precondition for the success of university sustainability is the supportive attitude of the university's management. Support can take very different forms, ranging from public commitment to sustainability via the establishment of funding instruments for sustainability-related projects and initiatives, to the institutionalisation of the relevant competence centres or staff positions. The more concrete such a commitment is, the lower the risk that the support will be limited to lip service at management level. At best, members of the executive committee themselves play an active role in shaping the sustainability process.

---

"The essential stakeholder is the rectorate, preferably with all its members [...]. For all members of the rectorate sustainability takes top priority, and has done for many years." **Policy statement by the management of a large university**

---

### **Acting out of conviction**

Sustainability at universities is not conceivable without the personal commitment of many individual activists. The vast majority of university sustainability processes have always been initiated by individual key figures from the university or student groups. These are often people who – from their place in the administration, as students or as university teachers – see a need for

action in matters of sustainability and take action on their own initiative.

Although such commitment cannot be prescribed centrally, it can be encouraged and stimulated – possibilities include invitations to tender, competitions or further training for all members of the university. In the long run, however, this commitment also needs to be transformed into sustainable structures.

---

"But it also depends very much on individual personalities, which should not be underestimated. In other words the institution itself can adopt 'mission statements', but nothing will come of these if they aren't supported by individual personalities who are prepared to take on a work load going well beyond the normal 40 hour week." **From an interview with the representative of the management of a large university**

---

### **Networks for university sustainability**

Sustainability oriented networks are another relevant influencing factor for sustainability in higher education. They serve the cooperation, networking and exchange of knowledge beyond their own institution. Such networks now exist at various levels, at federal state level (e.g. in Bavaria: [www.nachhaltigehochschule.de](http://www.nachhaltigehochschule.de)) as well as within a European framework (e.g. the COPERNICUS Alliance, [www.copernicus-alliance.org](http://www.copernicus-alliance.org)). Within the HOCH<sup>N</sup> framework a sustainability network that all interested German-speaking universities can join is being established (<https://www.hochn.uni-hamburg.de/en/5-mitmachen.html>). Especially for student initiatives there is the 'netzwerk n' ([netzwerk-n.org](http://netzwerk-n.org)) network, which is dedicated to the transformation of the German higher education landscape on the basis of a sustainability model.

---

"We use the networks to exchange ideas with other universities to look at: What works? What's not working? Where can we work together?" HOCH<sup>N</sup> too, in particular, is now regarded by us as such a network, in other words as an important influencer which has now been formed." **Employee in sustainability coordination**

---

### **Sustainability requires resources, sustainability conserves resources**

The following finding, which has been confirmed by the research within the HOCH<sup>N</sup> network, will not be surprising: namely that the resources available for the development of university sustainability are of decisive importance. Researchers benefit from the university

support structures that accompany them, for example, in the application of interdisciplinary research applications. Lecturers benefit from being able to try out and offer innovative formats (project workshops, real-life laboratories etc.) within their teaching work. Administrative staff may wish to exchange information on environmental management with colleagues in a working group at the university.

In order to establish sustainability as a permanent task for universities, it is necessary to secure financial, human and infrastructural resources in the long term – initially in order to establish sustainability as a (university) development task in research, teaching and campus management, but also in order to work on and further develop sustainability within the university as an ongoing coordination task. This requires permanent staff and, if necessary, the establishment of an institutional staff unit.

It is true that the consideration of sustainability-relevant criteria and activities of the university initially causes higher costs. These, however, are offset by potential savings that can be achieved on the operational side through the principle of resource conservation.

### Operational guidelines



"We have a combined heat and power plant [...], so sustainability has always played a role when it comes to energy savings, for example. A holiday between Christmas and New Year means that a lot of electricity is saved if the university is simply closed for ten days – heating costs, too, of course." **Statement from an administrative employee of a small university**

### Personnel and expertise

In addition to its content and technical reference, the functional rationale of our universities as centres of knowledge is scrutinised in connection with sustainability. This requires individual competencies on the part of all those involved and places new demands on all staff. This is because when sustainability processes at the university are understood and developed more actively as an overall system, this often leads to the formation of forms of exchange and coordination that rely on the broad participation of as many different status groups as possible.

During personnel planning and development it is therefore essential to attach appropriate importance not only to technical knowledge but also to mediation and communication skills as well as transformation and transfer knowledge.

For the development of university sustainability, employees with such skills are just as decisive as the establishment of mechanisms for knowledge transfer.

The reason for this is that decisive knowledge often lies with particular individuals, and is lost when they leave the organisation. For this reason, sustainability in higher education institutions is also about developing and establishing forms of knowledge exchange and documentation that minimise the loss of empirical knowledge and secure and document existing knowledge.

"The fact that we are also safeguarding skills for this university is a particular challenge today, in times of full employment. You have to offer people perspectives and development opportunities, because otherwise competitors on the market will take them. And this means the loss of skills that are absolutely necessary for a sustainability process or for sustainable processes." **From an interview with the chancellor of a large university**

### Principles for action

In addition to the framework conditions and supporting factors, specific principles for action can be identified. These can be understood as basic attitudes that become important within the framework of all sustainability activities.

#### Communication

On the way to university sustainability, cooperation between people from different disciplines and professions is necessary. Low-threshold communication formats and the greatest possible transparency should help to arrive at a common understanding of sustainability and its objectives for the individual organisation.

"I have the feeling that there won't be an imposed sustainability strategy, but that there really are different bodies setting and working on priority topics. Good networking nevertheless enables us to work towards a common goal." **Member of the administration of a large university**

### Participation

In the sense of a 'whole institution approach' sustainability cannot be prescribed, but must be shaped and developed by all university stakeholders. Decisive for this are meetings at a level of equality independent of hierarchical levels, the exchange of knowledge and joint work within the formats established for this purpose for operations, and the exchange of information.

---

"We should always try to make participation and involvement possible. And of course honest, appreciative participation. The university is not just anybody, we are the university. The university is there for people. You can really benefit if you create possibilities for getting into contact with one another as equals and exchanging experiences in order to then think together about how to transform the know-how gained from experience into expert action". **Statement from a professor at a small university**

---

### Process orientation

The development of sustainability in higher education institutions continues to require a high degree of openness with regard to the course to be taken, readiness to accept uncertainty, and the recognition of complexity and conflict potential. Sustainability is a continuous development process, not a development goal achieved at a particular point in time. This openness requires the courage and motivation to become involved in such a way, to bring the topic as a strategic orientation into areas of the university, and to make the necessary resources permanently available. This goes hand in hand with the need to make compromises and to enter into fruitful communication with the other participants.

---

"Sometimes I get the impression that the problem is that sustainability is perceived as a state rather than as a process – that the aim is to achieve something which merely means the stabilisation or maintenance of a specific status. There's less consideration of the way to get there." **Assessment by the manager of a sustainability coordinating body**

---

### Perseverance and long-term approach

Steering universities towards a sustainability-oriented path of change will not be an easy process. Long-term commitment and great perseverance are therefore required from all those involved. Activities that accompany and promote the long-term development process at a specific university are particularly important for this – e.g. the establishment of a coordination unit

that introduces different stakeholders to one another, provides impulses, encourages joint activities and accompanies them.

---

"To implement sustainability in such a large institution – on the one hand a public service, on the other hand an organisation – is hard work. Making the change to sustainability doesn't just happen overnight." **Statement by the sustainability coordinator of a large university**

---

### Summary: Framework conditions, supporting factors and principles for action

University sustainability processes take place under more or less conducive contexts and framework conditions that are, however, usually difficult to influence directly, e.g:

- social and academic policy discourses
- conflicting objectives at the stakeholder's own university
- political and administrative protagonists with different possibilities of influencing the agenda setting
- the established functional rationales of the academic system
- parallels between different specialist cultures
- university size and location
- regional anchoring and local integration

University sustainability processes are supported by the following aspects:

- sustainability is recognised as a topic for raising the profile of the own university
- the university management supports the sustainability process
- there are individual participants who initiate sustainability activities
- the activities of a university are integrated and promoted through networking and dialogue within sustainability networks at various levels
- resources are available in terms of personnel, finance and/or time
- people with a knowledge of the objectives and transformation are involved

University sustainability processes are particularly successful if important principles of action are taken into account:

- low-threshold communication in different formats and with many different stakeholders
- participation by different status groups, professions and disciplines
- willingness to engage in processes in which goals can be corrected
- perseverance on the long-term path to more sustainability at the stakeholder's own university



## Measures

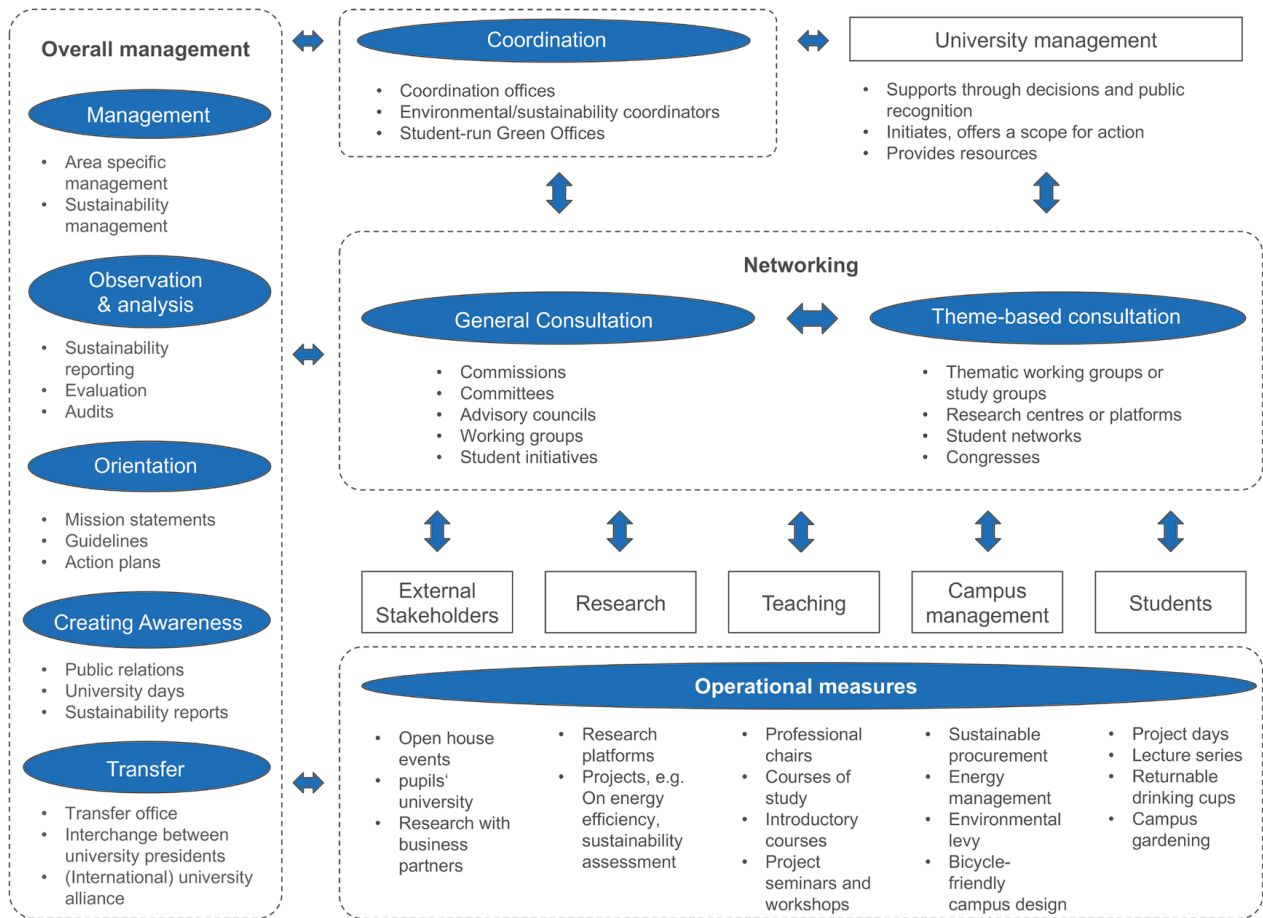


Fig. 3: Measures to shape the sustainability process at universities

The concrete sustainability strategy of a university is conceptually developed and operationally shaped on the basis of individual measures. The requirements for success, external influences and internal factors – as discussed in the previous chapter – set the framework for how well the development and implementation of such measures can succeed. Even if there are already reports of successful activities from many universities – they cannot simply be transferred to every other university. Instead, each measure must be examined to see to what extent it is not only relevant to a particular university, but is also compatible with that university's structures, development goals and principles of action. This is because it can be assumed that university sustainability processes will be particularly successful if they are adapted to the existing framework conditions. Descriptions of measures that have been successful at other universities can be helpful in developing one's own projects or provide suggestions on how one's own goals can be achieved. However, since sustainability governance in higher educa-

tion institutions is influenced by many factors and is therefore highly demanding, there is no single measure that could ensure "good governance" of the sustainability process on its own. Instead a whole package of measures is needed.

Figure 3 gives an overview of the measures described by the participants in the interviews at the eleven HOCH<sup>N</sup> partner universities. To provide a better overview, the measures have been grouped and allocated to the individual areas.

The different types of measure are highlighted in blue in the illustration. Examples of the respective type of measure are listed underneath. At the superordinate level four groups of measures (broken-line boxes) can be distinguished:

- Firstly, networking within and outside the university is fundamental to the governance of the sustainability process. This can relate to the overall coordination of the sustainability process as well as to individual topics and activities.
- Secondly, the basis for the sustainability process is

targeted coordination. This can be implemented by coordinators or a separate organisational unit.

- Thirdly, the sustainability process requires measures aimed at cross-departmental and cross-faculty management. This includes targeted management, observation and analysis of the current situation, development of sustainability activities, measures for orientation and creating awareness as well as transfer.
- Fourthly, operational measures must be taken in order to achieve sustainability effects.

Various protagonists are involved in the governance of the university sustainability process. Depending on the measure, university management, coordinators, students, university employees and stakeholders from outside the university play different roles. In the following, possible measures for establishing university sustainability processes and structures are presented and classified in relation to the following five areas:



## Networking

At the heart of the governance of sustainability processes in higher education institutions is the task of bringing the various stakeholders at the respective institutions into contact with one another, and facilitating joint development processes. The reason for this is that the comprehensive aim of sustainable development can only be achieved in this way. Two aspects are central to successful networking:

1. The stakeholders at the superordinate level agree on the basic orientation of the sustainability process (goals, fields of action and concepts).
2. The stakeholders exchange information on specific problems and approaches and develop measures.

## General consultation

Consultation at this level involves the entire university or certain sub-areas (e.g. campus management) or aspects of sustainability (e.g. the environment). Existing structures can be linked, for example by setting up a senate commission, or by setting up independent committees. Such committees meet regularly, usually quarterly or every six months, and are composed in such a way that all higher education status groups are taken into account. In addition to the university management, they usually include representatives from research and teaching, administration and students. Where available, it makes sense to include sustainability coordinators or representatives of corresponding organisational units in this group and to delegate the coordination of committee work to them. If the committees work on topics that are also important beyond the campus, it makes sense to invite external stakeholders such as representatives of the municipalities, the state, society and business to participate regularly. In addition, external experts can offer support on specific issues as required. Student initiatives aimed at developing common positions and coordinating activities are also important for overall coordination. Where such initiatives exist, it has proved successful to integrate their representatives into the superordinate consulting bodies.

These bodies are referred to as committees, advisory councils, working groups or circles. Thus there are overlaps with the names of the committees for topic-related consultation.

### A regular dialogue should take place within bodies covering a range of status groups involving

- the university's management
- researchers
- lecturers
- students
- administration

### ...and depending on the objective: representatives of

- the municipalities
- society
- business.

Different procedures are conceivable for filling the superordinate committees: selection can be left to the status groups themselves or left completely open (self-selection). Alternatively the university management (or a representative commissioned by it) can identify specific potential candidates, who are then invited to participate or even appointed.

The committees can fulfil different functions.

- **Information:** They ensure that the various university stakeholders take note of each other and begin to exchange information and experiences. They provide an opportunity to regularly inform those involved about the progress and status of the sustainability process. By involving representatives of the various faculties and university departments in the committees, they can also function as contact persons for sustainability issues.
- **Agreement:** They enable the participants to agree on the basic orientation of the sustainability process – goals, fields of action and concepts. The work of the committees may focus, for example, on developing a common understanding of sustainability or on guiding principles, guidelines or orientation aids (e.g. handbooks) for sustainability.
- **Multiplication:** They promote the visibility of the sustainability process at the university. For example, the establishment of the committees in itself can increase the attention of the university public. In addition, one of the tasks of the committees may be to regularly inform the public about the sustainability process.
- **Coordination and management:** It is also conceivable that the committees themselves could take on or contribute to coordination and steering functions, for example by
  - implementing stocktaking or analyses and formulating recommendations,
  - initiating measures, projects or structural changes (e.g. establishment of coordinators or staff units for sustainability) at the university,
  - supporting existing initiatives at the university,
  - pointing out common interests in the development and application of inter-disciplinary or transdisciplinary projects, establishing contacts and organising the cooperation process.

Even though the committees may not formally have decision-making powers for overall coordination, they can nevertheless offer far-reaching possibilities for shaping the process if sufficient human and financial resources

are made available and the results of the committee work are linked to higher education decision-making processes.

### Theme-based consultation

The superordinate coordination can at best form a framework that provides orientation for the sustainability process. However, not much can be achieved with this alone. On the contrary, ideas and approaches of sustainability must be carried into all areas of the university and taken up by as many stakeholders as possible. To this end, it is necessary to agree on concrete topics and questions so that approaches to solutions can be developed and their implementation coordinated. This can be achieved through:

- **Thematic working groups or study groups**
- These can be formed as sub-working groups or sub-committees by the superordinate bodies or independently of them. Like the superordinate bodies, they bring together representatives from different fields, with their exact composition depending on the topic in question. Regular meetings of the working groups are used to evaluate the situation at the university, to develop measures and to coordinate who assumes what tasks during their implementation. In such committees, for example, staff from different administrative departments can work together with students to develop starting points for a sustainable campus, or academics can develop interdisciplinary concepts for sustainability in teaching.
- **Research centres or platforms:** The aim is to pool and link approaches to sustainability-related research by providing information on existing research at the university (e.g. through databases and email distribution lists) or by bringing together interested researchers to exchange views at regular interdisciplinary meetings and public events. Research centres can also play an advisory role both within the university and beyond, providing expert opinions and know-how. For this purpose, as for the development of further research projects, they cooperate with local politicians, ministries, foundations, industrial partners and other stakeholders.
- **Student initiatives:** Here, too, the focus is on developing concrete sustainability initiatives. In addition to practical measures such as campus design, this may involve raising awareness among students and/or the university public of sustainable development issues (e.g. by publishing a sustain-

ability guide for students). One way of supporting the commitment of such student initiatives is, for example, to integrate development work into project-oriented courses or to take into account sustainability-related teaching provided by students when evaluating student performance. An important basis for the ongoing work of student initiatives also arises if the university finances student assistant positions for this purpose.

- Congresses, workshops and the like: In contrast to the measures mentioned above, which take place on an ongoing basis, congresses, workshops and similar events can only provide impetus in specific cases. Nevertheless, they can put sustainability issues on the agenda and develop proposals. In this way they can contribute to concretising abstract demands for sustainable university development and convincing important protagonists – not least the university management – of the importance of this issue.

#### Example: Participations structures at the Free University of Berlin

At the FU Berlin interdisciplinary and topic-related coordination are specifically linked by the involvement of committees at different levels.

- A steering committee with representatives from the executive board, administration, the faculties and university committees takes the lead in the entire sustainability process. Under the coordination of the sustainability unit it sets the priorities, monitors developments and regularly takes stock.
- Interdisciplinary and cross-departmental working groups on teaching, research, campus management and participation/communication initiate and implement programmes and instruments in their respective fields of activity.
- Decentralised sustainability teams work on specific sustainability-related topics, develop projects and implement them. This involves both improvements within individual faculties and cross-departmental activities.

► Further information: <https://www.fu-berlin.de/en/sites/nachhaltigkeit/index.html>

Measures in the networking area cover a number of activities.



#### Sustainability coordination

The further a university progresses in the sustainability process, the more extensive and diverse the associated tasks become and the greater the number of participants. To ensure that they all pull together and that the various activities are interlinked, coordination between the participants is an important prerequisite. At the same time, however, it cannot be assumed that such coordination will take place if the participants (can) only incidentally commit themselves to sustainability at their university and it is not clearly defined who is to assume responsibility for coordination. Experience with sustainability processes at universities has shown that their coordination requires additional effort, which should be planned on a permanent basis if possible. At the same time coordination needs to be institutionally anchored in order to create clear responsibilities and establish a contact point for sustainable development.

#### Coordination units have an extensive range of tasks.

- Acting as the link between the university management and other status groups or between different areas of the university
- Raising awareness of sustainability
- Stocktaking
- Identification of fields of action for the sustainability process
- Agenda setting
- Addressing stakeholders and ensuring participation



- Initiating and organising committees
- Coordinating and supporting sustainability initiatives
- Developing, implementing and accompanying measures

Solutions of varying scope are conceivable for this purpose. For example, the coordination function can relate to individual topics or sub-areas or extend to all fields of sustainability. It may also be linked to individual persons or involve larger teams or organisational units. Finally, coordination may be associated with the aim of organising other participants at the university, or may instead aim at communication and mediation between the various participants.

A frequently practised variant of coordination involves persons who act as representatives, coordinators or spokespersons for sustainability or for sustainability-relevant topics – e.g. the environment, family friendliness or diversity management. These functions are frequently performed by professors. This has the advantage that they can contribute their own specialist expertise and are more likely to be accepted by other academics. In this case, however, access to the technical and administrative areas of the university may be more difficult. It has proved to be useful to provide such representatives with assistance in order to be able to cope with day-to-day operations.

Another way of institutionalising the coordination of the sustainability process is to set up staff units or independent organisational units (competence centres). These usually have several employees. Establishing them can highlight the cross-sectional character of sustainability and establish a hub for all sustainability activities at a university. Sustainability officers and other representatives can also be involved here. In the most far-reaching variant, such organisational units represent the central body for the implementation of the university sustainability process. One advantage of staff units or competence centres is their close connection to the university management. At the same time, however, this means that contact with other areas of the university is initially relatively low. Close interaction and broad, continuous communication are therefore essential.

### The starting point for university sustainability coordination

Environmental management systems such as EMAS are often the starting point for creating networking structures within the university. They pave the way for a general exchange of ideas on sustainability aspects at the university and require coordination by environmental officers. EMAS and the like therefore often form a good starting position for the sustainability process at universities.

Finally, students at a university can play an important and active role in coordination. On the one hand, such activities on the part of students aim to coordinate and collate student initiatives; on the other hand, the resources and ideas of students need to be used for the sustainability process of the university as a whole. These tasks can be fulfilled by elected student representatives (students' union committee, student vice-president etc.). Green offices or sustainability offices, which are run jointly by students and university staff and for which the university provides financial resources and premises represent a further option.

### Example: The University of Hamburg's Sustainable University Competence Centre (KNU)

The aim of the Sustainable University Competence Centre (KNU) is to contribute to the development and design of the University of Hamburg as a "University for a Sustainable Future" and to help secure its future viability in research, teaching, education and university management. To achieve this, the KNU designs measures for the implementation of sustainable development, supports the university in the implementation of sustainable transformation, initiates and promotes projects for sustainable development, strengthens internal and external university networks in the field of sustainability, and functions as a think tank and experimental laboratory.

► Further information: <https://www.nachhaltige.uni-hamburg.de/en.html>

Measures of this kind affect a number of areas.



## Overall management

### Sustainability management

Of course, the entire sustainability process can be seen as a management task. When we talk about management, we mean a systematic process for the continuous improvement of sustainability aspects at universities. Such a procedure is based on the idea of a management cycle: based on an analysis of the current situation at the university, goals are determined and concrete measures defined. Responsibilities and procedures are then defined, the necessary organisational structures created and the agreed measures implemented. The success of the measures is monitored and reported on, using key figure-based controlling.

#### ▶ Reporting guidelines



On this basis decisions are made on how to proceed. Such a management process can be created in different ways.

- Environmental management: the "Eco-Management and Audit Scheme" – EMAS for short – has been in place for environmental issues since the 1990s. Its central elements are an environmental review and the development of an environmental programme and manual. In addition to internal controlling, external assessment (audit) and certification play an important role. Universities have had positive

experiences with EMAS. In addition to its guidance effect, EMAS also has an awareness-creating impact because it emphasises the importance of environmental issues.

- Sustainability management: Environmental management systems such as EMAS are a good starting point for the sustainability process at universities, but are limited to environmental issues and focus on operations and campus management.

#### ▶ Operational guidelines



Although EMAS was not developed specifically for universities, it is often used as a starting point for the sustainability process at universities. Such sustainability management often involves the fields of teaching and research in particular, and fits into an overall strategy for the sustainability process or works towards the development of such an overall strategy. In addition to environmental management systems, however, sustainability management can also be geared more strongly to economic or social sustainability (e.g. on the basis of the "DIN ISO 26000 Guidelines on the Social Responsibility of Organisations") and set up on this basis. The task of sustainability management is often assumed by sustainability coordinators or an appropriate coordinating body.

### Sustainability management...

- ... requires systematic information about all aspects and developments relevant to sustainability at the university
- ... creates awareness of the necessity of sustainability
- ... constantly expands the circle of participants

### Example: Sustainable Campus Modular System (Zittau-Görlitz University of Applied Sciences)

In cooperation with TU Dresden, Zittau-Görlitz University of Applied Sciences has developed a "Sustainable Campus Modular System" (BNC), which is intended to enable university-specific sustainability management. It comprises the modules of university management, education & transfer, real estate and operations as well as external cooperations & partnerships, for each of which objectives are defined and key figures established. The planning and implementation of measures in the four modules is participatory and involves students, employees of the university and external parties. A peer-to-peer review process is used to identify the progress made, in which institutions using the BNC review each other and make suggestions for improvement.

► Further information: [www.hszg.de/de/hochschule/managementsysteme/umweltmanagement/baukastensystem-nachhaltiger-campus.html](http://www.hszg.de/de/hochschule/managementsysteme/umweltmanagement/baukastensystem-nachhaltiger-campus.html) (in German)

### Observation and analysis

As indicated in the previous section, data collection and analysis play an important role in sustainability management. For example, key figures on energy and resource consumption are used for monitoring and controlling purposes. The collection and processing of the data is mainly carried out by the relevant technical services, at best with the participation of students and researchers. However, there are other opportunities to support the sustainability process:

- studies on the prerequisites and requirements for the introduction of university management systems
- criteria-based checks on compliance with legal regulations, e.g. in the area of occupational safety or hazardous substances
- surveying of university members on their perception of environmental and sustainability aspects

More comprehensive analyses can be carried out as part of environmental or sustainability reporting

A university-specific sustainability code, which contains 20 criteria within the areas of strategy, process management, environment and society that can be used as reporting standards, provides a guide in this respect.

► <https://www.deutscher-nachhaltigkeitskodex.de/en-gb/Home/DNK/Hochschul-DNK>

Practical experience shows that it is not always easy to obtain the required data,

- because it must first be clarified whether and where the data is available,
- the preparation and provision of data can be time-consuming,
- not everyone shares data willingly and
- the sense and purpose of the analyses must first be communicated and the willingness to participate must be established.

### Questions for reflection on sustainability reporting

- Who should be addressed by the sustainability report?
- What should statements be made about?
- What data is required for this? Does the data exist? Who has it? What data still has to be collected?
- Who should be responsible for the consolidation and evaluation of the data?
- Who should be involved in the interpretation of the data?
- How should the results be prepared?

Collecting and evaluating sustainability data is therefore not a purely "technical" process, but requires a lot of communication and cooperation. If this is taken into account, an important basis for targeted control experiments can be created – and even more: by creating transparency about the situation and the development process, analysis and reporting also promote the debate on sustainability issues at the university, help to prepare for decisions by the university management and therefore provide impetus for new sustainability-related initiatives.

► Reporting guidelines



### Example: The Sustainability Report of Leuphana University Lüneburg

Leuphana University of Lüneburg records in its regularly published sustainability report how the guiding principle of sustainability is implemented and developed further. The report, prepared by the university's sustainability officer, explains the university's objectives (guidelines) and describes the situation in the fields of activity of research, education, society and campus operations. The sustainability report also contains a magazine supplement that provides information on the main subjects of education and sustainability.

► Further information: <https://www.leuphana.de/en/university/history/sustainability/sustainability-report.html>

### Orientation

Sustainability requires a coordinated approach in the various areas of the university. It is important to provide orientation for the sustainability process so that all those involved can pull together and plan and implement targeted measures. This can be achieved in the form of mission statements or guidelines. These describe the overriding values and objectives of the university with regard to sustainability, and make these ideas concrete by breaking them down into specific fields of action or topics. Mission statements and guidelines can refer to sustainability as a whole or to individual sub-areas such as the environment. They make tangible what is to be achieved with the sustainability process, and show that sustainability plays a major role at the university. In this way they increase the pressure to ensure that something actually happens – because the specifications set out in the mission statements and guidelines demand implementation.

However, the mere adoption of mission statements and guidelines is not enough. On the contrary, their development is often already designed in such a way that as many university stakeholders as possible – including students – learn about them and have the opportunity to contribute. In this way, different perspectives and ideas are incorporated and the acceptance of the mission statements and guidelines is promoted. Last but not least, participation can motivate important stakeholders to participate in other activities as well. Mission statements and guidelines are only a first step:

Only when they can be translated into concrete goals and measures can they unfold their full effect.

### Example: The sustainability guidelines of the University of Vechta

The University of Vechta regards its sustainability process as a continuous development in the sense of a "learning organisation". This understanding was laid down in the university's sustainability guidelines. The guidelines were developed by the "Sustainable university" working group, in which all university stakeholders are represented, in consultation with the university's board and senate. They emphasise the importance of education and research for sustainable development and sustainable campus operations. In addition, the participatory culture at the university as well as networking and cooperation with relevant regional and national protagonists are emphasised. The "Sustainable university" working group is named as a driving force for the sustainability process.

► Further information: [www.uni-vechta.de/uni/nachhaltige-hochschule/home/nachhaltigkeitsleitlinien/](http://www.uni-vechta.de/uni/nachhaltige-hochschule/home/nachhaltigkeitsleitlinien/) (in German)

### Creating awareness

Awareness of the importance of sustainability is an important prerequisite for a successful sustainability process at universities. At the same time it is an important goal of the sustainability process to create such awareness, to highlight initiatives at the university and to motivate people to get involved. Among other things, sustainability reporting can contribute to this process.

#### Public relations measures

- Information on resource consumption and savings achieved
- Days or weeks of action
- Seminars, films, art activities, discussion events
- ... and much more

The discussion of sustainability within the framework of courses can turn students into multipliers who can promote the idea of sustainability both at the university and externally. In order to create the widest possible range of possibilities and to address a broad public, it is advisable to plan and implement awareness-raising



measures together with student initiatives and stakeholders from outside the university (e.g. the municipality, society).

**Example: An energy saving campaign at Eberswalde University of Applied Sciences for Sustainable Development (HNEE)**

The aim of the campaign is to achieve energy savings by changing the behaviour of office users at the university. With the help of flyers and other materials, various energy-saving tips (switching off all appliances and lighting completely, turning down the heating, ventilation) are conveyed, motivation for environmentally friendly behaviour is encouraged and the feeling of being able to make a difference individually and collectively is strengthened. The savings achieved are reported on the HNEE website.

► Further information: <http://www.hnee.de/Hochschule/Leitung/Nachhaltigkeitsmanagement/Klimafreundliche-Hochschule/ECHO-Projekt/ECHO-Projekt-K6132.htm> (in German)

statement process. It is therefore a matter of reaching agreement on the required goals, principles and activities and building a shared understanding of sustainability.

**Conditions and approaches for transfer**

- ... within the university, e.g.
  - networks within the university
  - further education events, lecture series
  - preparation and thematisation of sustainability-relevant contents in teaching
- ... outside the university, e.g.
  - regional, national, international exchange of experience by university management
  - collaborative research and development projects with partners from society
- ... through stimulus from the environment of the university, e.g.
  - funding announcements
  - entrepreneurship

However, this does not happen automatically – either within the university or outside it. Targeted transfer measures are therefore needed.

**Transfer**

In the course of the sustainability process, participants in all areas of the university gain valuable experience and develop concepts, services or technologies to shape sustainability at universities and in society. The results of the sustainability process must be discussed, communicated and developed further. This is done through a variety of interactions and cooperation between the universities and stakeholders from outside the university in the region and beyond.

Transfer, however, does not describe the simple transmission of the university's sustainability know-how; instead it is about active communication, adoption and joint co-productive work on the knowledge gained. This also leads to the adaptation of ideas, concepts and activities. The acceptance of concepts and measures within an organisation requires the adaptation of those concepts by participants in relation to their own institution.

In addition to the stimulus provided by examples from external third parties, transfer also means ensuring the diffusion and further development of sustainability at the own university, e.g. in teaching or via a mission

► Transfer guidelines



Transfer should not be understood as simply "passing on" knowledge or approaches to action. In order for them to be effective elsewhere – for example in another area of the university or in another university – the stakeholders there must actively deal with this issue. There are two things to consider here:

1. Transfer is complex, it does not succeed just by the way or on the basis of convincing arguments.
2. Transfer requires dialogue and understanding. The rule is that those who adopt an idea are not the only ones to learn something new. In addition, those providing the ideas themselves can receive new impulses in the transfer process.

### Example: Transfer at Eberswalde University for Sustainable Development (HNEE)

Transfer has been a strategic goal at the HNEE since 2016. The strategy is accompanied by a transfer advisory board with representatives from politics, science, business and society. A transfer centre aims to contribute to interaction between the university and its surroundings, the region and beyond. It serves as an interface between university and applications in the field, and unites the areas of know-how and technology transfer, third-party resource management and EU funding under one roof. Among other things, it initiates initial discussions, advises on funding opportunities and supports university staff on funding topics and applications. It also actively prepares topics and makes them available to stakeholders in research and teaching. A transfer catalogue provides information about the services offered by the university.

► Further information: <http://www.hnee.de/de/Forschung/Transferzentrum/Transfer-Foerderung-K4696.htm> (in German)

Measures in the field of overall management affect a number of areas in particular.



### Operational measures

Governance concerns questions of managing and coordinating action at universities, and forms a framework to facilitate concrete operational measures. These operational measures serve to achieve certain effects

in terms of sustainability. As indicated in the previous sections, operational measures can have an impact on the governance process itself, for example by raising awareness of sustainability issues or by taking the planning of operational measures as an opportunity to organise exchanges between different protagonists in higher education.

Operational measures tend to be assigned to individual university areas. However, this does not mean that these are only provided by protagonists from the respective field. Here, too, it is necessary for actors from different fields to work together.

- **Research:** On the one hand, projects can be directed inwards, i.e. towards the university itself, for example when it comes to analysing the position of the university in terms of energy consumption, establishing an appropriate reporting system and identifying possibilities for a CO<sub>2</sub>-neutral university. Central stakeholders in this case are scientists, together with representatives from (technical) operations. On the other hand, sustainability-related research can be directed to the outside world and, for example with the participation of students, municipal representatives and other interested parties, examine possibilities for extending urban green spaces.

#### ► Research guidelines



- **Teaching:** Measures in the area of teaching mainly consist of the establishment of sustainability-related professorial chairs (e.g. on sustainability economics) or courses of study (e.g. sustainability sciences). Individual sustainability-related modules are also possible, for example with an introductory character at the beginning of the course or as a project seminar. Sustainability-based teaching formats are often offered on an interdisciplinary basis. A successful approach has been to involve students as well as external partners (environmental departments, companies etc.) in their development and implementation. Participation can be voluntary or compulsory. Incentives for participation can be provided by awarding students a sustainability certificate in addition to credit points after they have successfully completed certain modules.



## Teaching guidelines



Measures in the operational field cover a number of activities.

- **Campus management:** Measures in the field of campus management can aim to establish sustainable procedures and structures in the field of procurement or energy management. In addition, various measures are conceivable, including the bicycle-friendly design of the university, the cultivation of ecological foodstuffs, the design of green areas or the use of returnable drinking cups etc. Such measures offer the possibility of involving external participants (possibly schools). They often emanate from or are supported by students, but also require cooperation and support from the university management and administration. This includes the possibility for students to apply to the university for financial support for the implementation of their own ideas.



## Operational guidelines



- **The environment of the university:** measures aimed at the university's environment have already been mentioned in part in relation to transfer. In addition to measures aimed at the general public, such as open days, there are offers for specific target groups, such as pupils and teachers. Such measures can be designed and implemented jointly by lecturers and students. They not only serve to impart knowledge relevant to sustainability, but also encourage reflection on existing teaching practice at the university.



## Transfer guidelines



## Self-appraisal tool for structures and processes: Governance-regulating factors

Higher education institutions follow different courses on their way to sustainability. Just as the initial conditions of the institutions differ greatly from one another, the institutions each deal in their own way with the influencing factors they are confronted by. The measures that a university finally develops and implements are an expression of this debate and the translation of the sustainability concept within its own organisation.

Although as a complex process of change sustainability can be approached in different ways, five areas can be identified as functional requirements in relation to every university's sustainability governance concept. These areas include the areas of politics, profession, organisation, knowledge and visibility.

The tables on the following pages are intended to serve as checklists. Five stages are defined for each of the above areas – from low (Stage 1) to high (Stage 5) fulfillment of the respective requirements. For each area there are examples of possible activities in terms of the requirements.

## Politics

How is sustainability anchored and legitimised within the university?

The question here is how to ensure that sustainability activities are not only supported in selective cases, but that sustainable development is firmly established on the long-term agenda of the university.

	Definition	Examples
5	The objectives of the sustainability process are broken down into concrete activities, bindingly defined and reviewed.	<ul style="list-style-type: none"> <li>• Target agreements have been agreed and are being implemented.</li> <li>• There are procurement guidelines.</li> <li>• Criteria for sustainability in research have been defined.</li> <li>• Staff units and steering committees have authority to issue directives.</li> <li>• There is evaluation/accountability, reporting and control.</li> <li>• Sustainability-related auditing/certification takes place.</li> </ul>
4	The goal of sustainability is defined in concrete terms and anchored in the various areas of the university.	<ul style="list-style-type: none"> <li>• (Partial) strategies and goals are defined.</li> <li>• Sustainability is enshrined in the basic regulations.</li> <li>• Sustainability guidelines have been established.</li> <li>• Sustainability can be found in the statutes.</li> <li>• There are defined responsibilities for sustainability-relevant issues/fields of work.</li> </ul>
3	Sustainability is bindingly defined as the university's goal.	<ul style="list-style-type: none"> <li>• There is a model/vision for sustainability.</li> <li>• Sustainability is anchored in the name of the university or individual organisational units.</li> <li>• Concepts and guidelines for sustainability have been developed.</li> </ul>
2	There is a public declaration of commitment to sustainability on the part of university decision-makers as a university objective.	<ul style="list-style-type: none"> <li>• There are public declarations/commitments in favour of sustainability.</li> <li>• The existing commitment is fundamentally supported by university decision-makers.</li> </ul>
1	There are informal, non-public declarations of commitment and support for sustainability activities on the part of individual university decision-makers.	<ul style="list-style-type: none"> <li>• There are informal, non-public declarations of intent and commitments to sustainability</li> </ul>

Table 1: The degree of governance in the area of politics (5 = high, 1 = low)

## Profession

To what extent and how are professional perspectives and competencies linked?

This involves the gradual development of an interdisciplinary and cross-departmental understanding of sustainability at the university.

	Definition	Examples
5	The common understanding of sustainability is reflected in inter-disciplinary and transdisciplinary or cross-sectoral activities and practices.	<ul style="list-style-type: none"> <li>• Sustainability is addressed in all sectors and disciplines.</li> <li>• Sustainability is an obligatory teaching content for all students (e.g. in the form of general studies).</li> <li>• Trans-disciplinary activities within and outside the university are carried out continuously (via project workshops, interdisciplinary qualifications and field tests).</li> <li>• Inter-disciplinary courses of study exist and are being further developed, there are interdisciplinary research projects.</li> <li>• Sustainability is a criterion in appointment procedures.</li> <li>• Sustainability is the 'umbrella' and integrative universal theme within the university.</li> </ul>
4	Stakeholders from different disciplines/sectors have developed or are developing a common understanding of sustainability. There is ongoing further development.	<ul style="list-style-type: none"> <li>• A common understanding of sustainability is developed for the entire university (e.g. through a mission statement process).</li> <li>• Processes of consultation on the university's understanding of sustainability are developed (via steering committees, round tables, etc.).</li> </ul>
3	There is a dialogue between sectors and disciplines on the understanding of sustainability. (This is done without necessarily seeking or achieving the development of a common position).	<ul style="list-style-type: none"> <li>• Various interaction formats (e.g. interdisciplinary research platforms) are established.</li> <li>• Conferences or symposia with a sustainability dimension are organised.</li> </ul>
2	Sustainability is discussed and dealt with decentrally and within individual sectors and disciplines.	<ul style="list-style-type: none"> <li>• There are different understandings of sustainability between the university stakeholders (management, administration, students, research and teaching) as well as between the disciplines.</li> <li>• Sustainability is dealt with in individual areas, often with a focus on environmental issues (e.g. EMAS, environmental management).</li> <li>• Courses of study with an environmental and/or sustainability reference are established in individual departments.</li> </ul>
1	Individual stakeholders at the university deal with sustainability.	<ul style="list-style-type: none"> <li>• Individual researchers or research projects address sustainability.</li> <li>• Individual teachers address sustainability in courses.</li> <li>• Individual representatives of university status groups work on sustainability issues.</li> </ul>

Table 2: The degree of governance in the area of profession (5 = high, 1 = low)

## Organisation

How are cooperative work and task performance made possible?

At some universities, sustainability is supported by the commitment of individual activists without any organisational support, while other universities follow a 'whole institution approach'.

	Definition	Examples
5	There are firmly established (and yet flexible) institutions and processes for the promotion, development and networking of sustainability as a permanent task.	<ul style="list-style-type: none"> <li>• Coordination, networking and performance of tasks via permanently employed staff is guaranteed.</li> <li>• Adjustment of resources and structures takes place as required: e.g. from environmental to sustainability management.</li> </ul>
4	The university has organisational resources at its disposal to deal with sustainability issues in a coordinated manner.	<ul style="list-style-type: none"> <li>• There is overall coordination as a central contact point for sustainability issues (e.g. staff unit).</li> <li>• Institutions such as green offices or similar contact points have been set up.</li> <li>• Temporary posts are available in the administration for the performance of sustainability-relevant tasks.</li> </ul>
3	There are structures and procedures in place for the networking of existing sustainability activities at the university.	<ul style="list-style-type: none"> <li>• There are institutionalised cross-sectoral and multi-disciplinary formats for networking and interaction between stakeholders, status groups and external stakeholders, e.g. round tables, working groups, commissions.</li> <li>• Procedures for decentralised coordination of sustainability-relevant activities by various stakeholders at the university (without central coordination) have been established.</li> </ul>
2	Sustainability is dealt with decentrally within sections of the university.	<ul style="list-style-type: none"> <li>• There are departmental projects, individual initiatives and involvements as largely parallel activities with little connection between them.</li> </ul>
1	Sustainability is promoted by individual persons/groups acting out of personal commitment.	<ul style="list-style-type: none"> <li>• Individual (student) initiatives, professors, academic staff or administrative staff are active (e.g. by initiating or writing a sustainability report, implementing individual research projects or lectures or individual teaching activities).</li> </ul>

Table 3: The degree of governance in the area of organisation (5 = high, 1 = low)



## Knowledge

How is the necessary know-how developed and used competently?

The realisation of sustainable development requires not only knowledge of the subject, but also of the relevant objectives, actions and processes, the availability of which at the university must be developed and used competently.

	Definition	Examples
5	Structures for targeted joint knowledge work with a broad focus are used: <ul style="list-style-type: none"> <li>independently of a concrete problem / cause</li> <li>Here all forms of know-how such as factual, problem and explanatory knowledge AND target and orientation knowledge AND transformation, action and design knowledge are used</li> </ul>	<ul style="list-style-type: none"> <li>There are dialogue-oriented forms of work (e.g. committees) in which sustainable development issues are discussed irrespective of the occasion.</li> <li>Comprehensive know-how (stocktaking, root cause analysis, action approaches, target achievement) is generated and used to support the coordination and control of the sustainability process.</li> </ul>
4	Structures for targeted joint know-how generating work with a narrow focus are applied <ul style="list-style-type: none"> <li>to address concrete problems</li> <li>Individual forms of know-how are applied, e.g.: knowledge of facts, problems and explanations OR knowledge of objectives and orientation OR knowledge of transformation, action and design</li> </ul>	<ul style="list-style-type: none"> <li>There are dialogue-oriented forms of work (e.g. committees) in which concrete projects to promote sustainability (e.g. handouts, events, teaching/learning formats) are discussed.</li> <li>Evaluation formats for individual activities/measures are established.</li> </ul>
3	Opportunities for the exchange of knowledge are created.	<ul style="list-style-type: none"> <li>Research platforms are established.</li> <li>Conferences on sustainability are organised.</li> <li>Colloquia with a focus on sustainability are organised.</li> </ul>
2	Know-how is made available (uni-directional, not as a dialogue).	<ul style="list-style-type: none"> <li>A sustainability report is drawn up.</li> <li>Libraries and databases are equipped for sustainability.</li> <li>Sustainability related training formats for employees and researchers are available.</li> <li>There are individual lectures/seminars and research on sustainability-relevant topics.</li> <li>Handouts are provided, e.g. by the administration.</li> <li>Formats such as newsletters or websites on sustainability are provided.</li> </ul>
1	Relevant knowledge is limited to individual persons or projects as knowledge carriers and is not communicated or used institutionally.	<ul style="list-style-type: none"> <li>Knowledge is generated individually, e.g. by specifying particular topics for theses and research projects.</li> </ul>

Table 4: The degree of governance in the area of knowledge (5 = high, 1 = low)

## Visibility

How is awareness of the need for sustainable university development achieved?

Making sustainability activities at the university publicly visible and accessible can help create greater participation and awareness of sustainable development.

	Definition	Examples
5	Sustainability is the central distinguishing feature of the university, both internally and externally.	<ul style="list-style-type: none"> <li>• Individual faculties or the entire university bear the term sustainability in their names.</li> <li>• When new professorships are advertised, they are specified with sustainability in mind.</li> <li>• Local debates are taken up and shaped.</li> <li>• Sustainability research and teaching are attractive for students and teachers.</li> </ul>
4	Sustainability is a visible part of the university's self-image.	<ul style="list-style-type: none"> <li>• Sustainability is anchored in the university's mission statement.</li> <li>• Sustainability prizes are awarded.</li> <li>• There are offers for external groups of protagonists (e.g. a public lecture series or other activities for pupils, senior citizens etc.).</li> <li>• A sustainability report is published.</li> </ul>
3	Sustainability activities are systematically communicated to the university public.	<ul style="list-style-type: none"> <li>• Sustainability related information is communicated to all university members (e.g. via website, newsletter, blog).</li> <li>• Environmental or sustainability days are organised (e.g. by the student union, student initiatives).</li> <li>• Sustainability research and teaching are bundled and positioned in a clearly visible way.</li> <li>• There is central coordination of public relations work on sustainability.</li> </ul>
2	There are individual publicity measures for sustainability.	<ul style="list-style-type: none"> <li>• Sustainability-relevant topics or activities are communicated decentrally (e.g. newsletter of a department).</li> <li>• Individual, high-profile activities take place.</li> </ul>
1	The sustainability activities at the university are carried out by a small circle of people.	<ul style="list-style-type: none"> <li>• Information is only passed on to those directly affected (e.g. directives on saving resources).</li> <li>• Committed stakeholders inform those around them about sustainability-related activities.</li> </ul>

Table 5: The degree of governance in the area of visibility (5 = high, 1 = low)



## Appendices

### Thematic overview of the six guides

#### Sustainability reporting (Work package 2)

Reporting as a cross-sectional task enables development steps and changes in the organisation to be mapped over time, and sustainability-related activities to be collated and discussed. In addition, reports support the university management as a management tool. The HOCH<sup>N</sup> guide on the application of the university-specific sustainability code for sustainability reporting at universities presents examples based on the criteria of the German Sustainability Code, adapted for university concerns (HS-DNK).

#### Governance (Work package 3)

The cross-sectional area of governance deals with the structural conditions and institutional mechanisms of university sustainability. The findings presented in this "Sustainability Governance at Higher Education Institutions" guide are based on the evaluation of a comprehensive empirical study conducted at the eleven participating HOCH<sup>N</sup> universities. Representatives from all areas of higher education were interviewed: students, researchers, the university management, administrative staff and sustainability coordinators.

The guide focuses on requirements for success in the implementation of sustainability at universities. In addition, measures of university sustainability governance are presented. This concerns in particular the establishment of structures and processes through which actors from all university fields of action are involved in the university's sustainability process and with which a transformative effect can be achieved in the long term.

#### Teaching (Work package 4)

In the field of teaching, the focus is not only on creating awareness among students for sustainability issues, but also on how the teaching and learning process can be structured holistically according to the ESD model. The HOCH<sup>N</sup> guideline on education for sustainable development in higher education provides access to the core elements of ESD as well as to areas of tension, action and culture.

#### Research (Work package 5)

The HOCH<sup>N</sup> guideline on sustainability in higher education research examines the landscape of sustainability-oriented higher education research with regard to its

research priorities and key stakeholders, as well as research modes and essential scientific and practice-relevant findings. In addition, relevant fields of action and a selection of concrete instruments are identified for initiating, expanding and consolidating sustainability-oriented research at the researcher's own university. The common HOCH<sup>N</sup> understanding of sustainability, which is intended to facilitate orientation and reflection both within and outside the network and thus represents an entry to the subject, was developed principally in the field of research.

#### Operations (Work package 6)

The guideline on sustainability in higher education operations provides a closer look at exemplary operating procedures at a higher education institution. These include procurement, waste management, mobility, buildings and energy management, controlling, research, event management, employment and communication.

#### Transfer (Work package 7)

Transfer is understood in a broad sense as reciprocal interaction between university and practical applications in the field. At many universities transfer takes place as a matter of course. The guide on transfer for sustainable development at higher education institutions shows how transfer can contribute to sustainable development and provide stimulus for the university. It provides an overview of various forms and formats of sustainability transfer in teaching and research. The guide supports teachers, researchers and students in classifying their transfer activities, and shows starting points for how sustainability transfer can be initiated, developed further and established in concrete implementation.

## List of figures

Fig. 1: Overall structure of HOCH <sup>N</sup> (University of Hamburg)	Page 13
Fig. 2: Prerequisites for successful university sustainability	Page 26
Fig. 3: Measures for designing the sustainability process at universities	Page 34

## List of abbreviations

BMBF	Bundesministerium für Bildung und Forschung (Federal Ministry of Education and Research)
BNC	Baukastensystem Nachhaltiger Campus (Sustainable Campus Modular System)
BNE	Bildung für Nachhaltige Entwicklung (Education for Sustainable Development)
DNK	Deutscher Nachhaltigkeitskodex (German Sustainability Code)
EMAS	Eco-Management and Audit Scheme
ESD	Education for Sustainable Development
HS-DNK	Deutscher Nachhaltigkeitskodex für Hochschulen (German Sustainability Code for Universities)
DUK	Deutsche UNESCO-Kommission (Germany's UNESCO Commission)
FONA	Research for Sustainable Development (BMBF framework funding programme)
GAP	Global Action Programme
HIS-HE	Institut für Hochschulentwicklung e.V. (Institute for University Development)
HNEE	Hochschule für nachhaltige Entwicklung Eberswalde (Eberswalde University for Sustainable Development)
HOCH <sup>N</sup>	Sustainability at Universities, BMBF-funded project
HRK	Hochschulrektorenkonferenz (Conference of University Rectors)
SME	Small and medium-sized enterprise
KNU	Kompetenzzentrum nachhaltige Universität (Sustainable University Competence Centre)
LeNa	(Guideline) Sustainability Management at Non-university Research Institutions
RNE	Council for Sustainable Development
SDG	Sustainable Development Goal
SISI	Sustainability in Science
UHH	University of Hamburg
UNESCO	United Nations Educational, Scientific and Cultural Organization

## List of references

Bauer, M., Bormann, I., Kummer, B., Niedlich, S. & Rieckmann, M. (2018): Sustainability Governance at Universities: using a Governance Equalizer as a Research Heuristic. In: Higher Education Policy , 2018, 31, (491-511). Available at: <https://rdcu.be/baycb>, [13.02.2019].

Niedlich, S., Bormann, I., Kummer, B., Rieckmann, M. & Bauer, M. (2017). The understanding of governance. AP Governance working paper No.1. Available at: [www.hochn.uni-hamburg.de/-downloads/governance-verstaendnis1.pdf](http://www.hochn.uni-hamburg.de/-downloads/governance-verstaendnis1.pdf), [06.09.2018].

Niedlich, S., Kummer, B., Bormann, I., Rieckmann, M. & Bauer, M. (2017). Governance-regulating factors as a heuristic for the analysis of sustainability governance at universities. AP Gov. working paper No. 2. Available at: [www.hochn.uni-hamburg.de/-downloads/ap2-governance-regler.pdf](http://www.hochn.uni-hamburg.de/-downloads/ap2-governance-regler.pdf), [06.09.2018].

## List of tables

Table 1: Degree of governance in the area of policy	Page 47
Table 2: Degree of governance in the professional commitment area	Page 48
Table 3: Degree of governance in the area of organisation	Page 49
Table 4: Degree of governance in the area of know-how	Page 50
Table 5: Degree of governance in the area of publicity	Page 51



## Internet links

BNC Hochschule Zittau-Görlitz

[www.hszg.de/de/hochschule/managementsysteme/umweltmanagement/baukastensystem-nachhaltiger-campus.html](http://www.hszg.de/de/hochschule/managementsysteme/umweltmanagement/baukastensystem-nachhaltiger-campus.html)

BNE portal

[www.bne-portal.de/en](http://www.bne-portal.de/en)

COPERNICUS Alliance

[www.copernicus-alliance.org](http://www.copernicus-alliance.org)

HNEE energy-saving campaign

[www.hnee.de/de/Hochschule/Leitung/Nachhaltigkeitsmanagement/Klimafreundliche-Hochschule/ECHO-Projekt/ECHO-Projekt-K6132.htm](http://www.hnee.de/de/Hochschule/Leitung/Nachhaltigkeitsmanagement/Klimafreundliche-Hochschule/ECHO-Projekt/ECHO-Projekt-K6132.htm)

HRK and DUK declaration on sustainability

[www.hrk.de/resolutions-publications/resolutions/beschluss/detail/towards-a-culture-of-sustainability/](http://www.hrk.de/resolutions-publications/resolutions/beschluss/detail/towards-a-culture-of-sustainability/)

EMAS

[www.emas.de/meta/english-summary/](http://www.emas.de/meta/english-summary/)

AP Governance working paper on the derivation of governance-regulating factors

[www.hochn.uni-hamburg.de/-downloads/ap2-governance-regler.pdf](http://www.hochn.uni-hamburg.de/-downloads/ap2-governance-regler.pdf)

AP Governance working paper on the understanding of governance within the network

[www.hochn.uni-hamburg.de/-downloads/governance-verstaendnis1.pdf](http://www.hochn.uni-hamburg.de/-downloads/governance-verstaendnis1.pdf)

HOCH<sup>N</sup>

[www.hoch-n.org/en](http://www.hoch-n.org/en)

netzwerk n

[www.netzwerk-n.org](http://www.netzwerk-n.org)

LeNa project website

<https://nachhaltig-forschen.de>

Sustainability at the Free University

[www.fu-berlin.de/en/sites/nachhaltigkeit/index.html](http://www.fu-berlin.de/en/sites/nachhaltigkeit/index.html)

Sustainability report of Leuphana University Lüneburg

[www.leuphana.de/en/university/history/sustainability/sustainability-report](http://www.leuphana.de/en/university/history/sustainability/sustainability-report)

Sustainability guidelines of the University of Vechta

[www.uni-vechta.de/uni/nachhaltige-hochschule/home/nachhaltigkeitsleitlinien/](http://www.uni-vechta.de/uni/nachhaltige-hochschule/home/nachhaltigkeitsleitlinien/)

The University of Hamburg's Sustainable University Competence Centre (KNU)

[www.nachhaltige.uni-hamburg.de/en](http://www.nachhaltige.uni-hamburg.de/en)

German Sustainability Code

[www.deutscher-nachhaltigkeitskodex.de/en-gb/Home/DNK/Hochschul-DNK](http://www.deutscher-nachhaltigkeitskodex.de/en-gb/Home/DNK/Hochschul-DNK)

Sustainability-oriented network in Bavaria

[www.nachhaltigehochschule.de](http://www.nachhaltigehochschule.de)

Sustainability network for German universities

[www.hochn.uni-hamburg.de/en/5-mitmachen](http://www.hochn.uni-hamburg.de/en/5-mitmachen)

Transfer at the HNEE

[www.hnee.de/de/Forschung/Transferzentrum/Transfer-Foerderung-K4696.htm](http://www.hnee.de/de/Forschung/Transferzentrum/Transfer-Foerderung-K4696.htm)

## Imprint

**Published by:** Free University of Berlin, University of Vechta

**Works cited:**

Chapter – Introduction: Bassen, A.; Schmitt, C.T.; Stecker, C.; R  th, C. (2018): Sustainability governance at universities (beta version). BMBF project “Sustainability governance at universities: develop – network – report (HOCH<sup>N</sup>)”, Hamburg.

Chapter – The underlying understanding of sustainability: Vogt, M.; L  tke-Spatz, L.; Weber, C.F. (conception and coordination) with the collaboration of Bassen, A.; Bauer, M.; Bormann, I.; Denzler, W.; Geyer, F.; G  nther, E.; Jahn, S.; Kahle, J.; Kummer, B.; Lang, D.; Molitor, H.; Niedlich, S.; M  ller-Christ, G.; N  lting, B.; Potthast, T.; Rieckmann, M.; R  th, C.; Sassen, R.; Schmitt, C.T. und Stecker, C. (2018): Sustainability in university research (beta version). BMBF project “Sustainability governance at universities: develop – network – report (HOCH<sup>N</sup>)”, Munich.

All other chapters – : Bormann, I.; Rieckmann, M.; Bauer, M.; Kummer, B.; Niedlich, S.; (2018): Sustainability governance at universities (beta version). BMBF project “Sustainability governance at universities: develop – network – report (HOCH<sup>N</sup>)”, Berlin and Vechta.

**Picture credits:**

Illustrations: cover, Page 10, Page 16: Charlotte Hintzmann; Page 2: University of Hamburg

Pictograms HOCH<sup>N</sup> fields of action: University of Hamburg

Icon symbols Fig. 1: [thenounproject.com/](https://thenounproject.com/)Creative Commons license Attribution 3.0 United States, CC BY 3.0 US Team, User by Wilson Joseph; Building by Scott Dunlap

Font used: Fira Sans, The Mozilla Corporation/bBox Type GmbH ; SIL Open Font License (OFL)

Layout: Marte Engels/Universit  t Hamburg & Werner A. Sch  ffel

Climate-neutral printing on 100 percent recycled paper.

Date: April 2019

[www.hoch-n.org/en](http://www.hoch-n.org/en)



The cross-sectoral field of governance deals with the structural conditions and institutional mechanisms of university sustainability. The findings presented in this guide are based on the evaluation of a comprehensive empirical study conducted at the eleven participating HOCH<sup>N</sup> universities. Representatives from all areas of higher education were interviewed, including students, researchers, the university management, administrative staff and sustainability coordinators. The guide looks at the conditions required for the successful implementation of sustainability at universities. In addition, measures relating to sustainability governance at universities are presented. This concerns in particular the establishment of structures and processes which involve protagonists from all university fields of action in the development of university sustainability, and with which a transformative effect can be achieved in the long term.