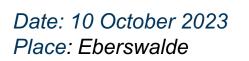




jOiNEd For sUsTainability - bUilding climate REsilient communities in WB and EU

HNEE Study Visit – Day 1

Eberswalde University for Sustainable Development Eberswalde (HNEE)





Co-funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or EACEA. Neither the European Union nor the granting authority can be held responsible for them."



Creating a sustainable future – holistically, decisively, and together

Welcome at HNEE!



Hochschule für nachhaltige Entwicklung Eberswalde



Self perception

Developing and implementing new approaches to solutions that not only reduce our ecological footprint, but also increase our sustainable handprint and thus have a real impact - that is our goal here at the HNEE.

Prof. Dr. Matthias Barth, Präsident der HNEE



Profile

- 2,300 students
- 20 unique degree programmes
- 10 % international students
- 406 employees (65 of whom are professors)
- Whole Institution Approach Regionally anchored globally networked
- EMAS-certified since 2010 and climate-neutral since 2014
- Winner of the European EMAS Award in 2010 and 2017
- Strong inter- and transdisciplinary research
- Broad spectrum of competence-oriented sustainability curricula



© HNEE / Michael Handelmann



4

Learning sites



City campus



Forestry campus



Forest Botanical Garden



History

| Founding of Eberswalde School of High Forestry Education by Wilhelm Pfeil Re-establishment as University of Applied Sciences Eberswald | | as ied | | | Lecture oles of Sustainable opment | | National Award - education for sustainable development "Place of Learning | |
|--|--------------------------|--------------|-----------|--|--|--|---|---|
| 1830 1963 Closure Eberswa | | | certified | 0 2013 Renamed University Sustainab Developm | to for ble | | 017 202 Winner of Europear Award | the EMAS New mission statement |
| le für nachhaltige Entwicklung | Eberswalde (HNEE) Discus | sion of Stat | ements | | | | | |



Teaching

Our central task is to train and educate committed

people who can act in a scientifically sound and reflective manner in their profession and society and contribute to sustainable development.

Excerpt from the Teaching Mission Statement, 2020



Bachelor

- Forestry
- International Forest Ecosystem Management
- Landscape Management and Nature Conservation
- Organic Farming and Marketing (also as Dual Programme)
- Wood Science and Technology (also as Dual Programme)
- Mechatronics in Wood Engineering (Dual Programme)
- Sustainable Economy and Management



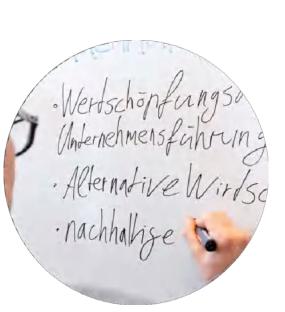


©HNEE / Frederic Schweizer und Robert Kluba



Master

- Forest Information Technology
- Global Change Management
- Forestry System Transformation
- Sustainable Regional Development: Education Management Nature Conservation
- Organic Agriculture and Food Systems
- Strategic Sustainability Management
- Wood Science and Technology
- Sustainable Business Management
- Sustainable Tourism Management
- Biosphere Reserves Management







Further education

 Strategic Sustainability Management (M. Sc., career-accompanying)

 Education - Sustainability -Transformation (M. A., careeraccompanying)

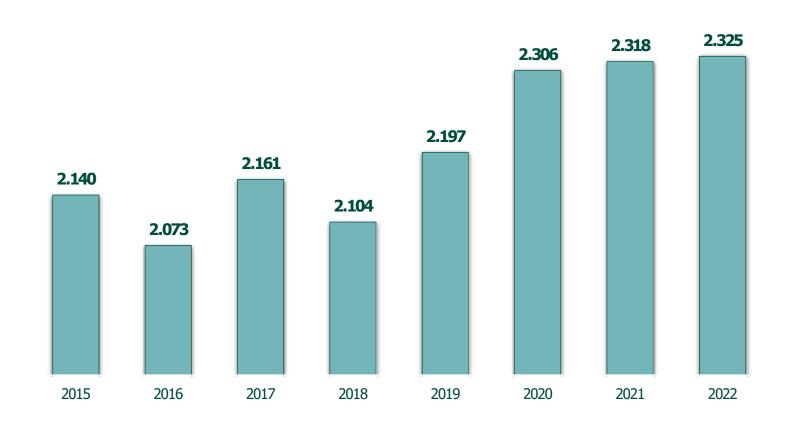


©HNEE / Torsten Stapel



10

Development of student numbers





11

Partner universities

- Approx. 120 cooperations worldwide
- Numerous cooperations and exchange agreements with partner universities and colleges
- Exchange of academics or students and joint research projects





Research

- Impact and application-oriented as well as pioneering research for sustainable development
 - inter- and transdisciplinary cooperative integrative

I-Sustainable Production and use of Natural Products

with a focus on materials science and engineering

II-Sustainable Rural Development:

with an interdisciplinary focus on natural, environmental, economic and social sciences III - Sustainable Management of limited Resources

with a socio-economic focus.



13

Engagement and participation

- Strong student commitment is reflected in more than 20 active student initiatives and firmly established committees and interest groups.
- Sustainable development is shaped together with students and staff at the Round Table on Sustainable HNEE Development.
- The office of student vice-presidency has been firmly established at the HNEE since 1999.





14

HNEE has positioned itself perfectly:

- Consistently sustainable and with a strong profile
- Highly topical fields of study and research
- Very good demand for studies
- European EMAS Award 2010 and 2017
- Climate neutral university since 2014
- Successful in education and research
- About 150 research projects in the field of sustainability annually
- High funding rate among universities of applied sciences
- Successful in federal and EU competitions
- Strong networking in the region





Questions





Practicalities: study visit/ project meeting





Agenda: 10th October 2023

9:30 - 10.00 Introduction of HNEE

Sustainability and climate action at University of Eberswalde

- **10.00 11.00** Introduction into operational sustainability management & campus tour (by Tanita Sohr)
- 11.00 11.15 COFFEE BREAK
- 11.15 12.00 Sustainability in practice: e.g., sustainable canteen (by Saziye Aksungur)
- 12.00 12.30 Project Workshop from students for students: e.g. gender and climate justice (by Vincent Ruge)
- 12.30 13.30 LUNCH BREAK

Research at HNEE under sustainability principles:

- **13.30 14.30** Sustainability Transformation Transfer Research Centre: Presentation of current research projects with different stakeholders (by Dr. Thomas Göttert)
- 14.30 15.00 REGION.innovativ zirkulierBAR: project on circular economy in cooperation with various stakeholders from different field at regional level (by Katja Searles)
- 15.00 15.15 COFFEE BREAK
- **15.15 16.00** InnoSupport: Research | Start-up | Transfer: internal service unit for the entire innovation chain of research, start-up and transfer (*by Kerstin Lehmann/Dr. Jakob Wegener*)

Food stamps, value max:

€(1 meal + 1 soft drink)



Agenda: 11th October 2023

Sustainability in Education

- 09.15 09.30 Registration of Participants
- 09.30 10.15 Coordination Office Sustainability at Brandenburg universities (by Dr. Jennifer Krah)
- **10.15 10.45** Sustainability in education: Study model for highlighting sustainability competencies at the HNEE (by Alexandra Wolf)
- 10.45 11.00 COFFEE BREAK

Deep Dive into Study Programmes at HNEE

- **11.00 11.45** M.Sc.: Global Change Management: Adaptive, proactive, and precautionary approach to natural resource management and sustainability *(by Christoph Nowicki)*
- 11.45 12.30 M.A. Education-Sustainability-Transformation (part-time study) (by Prof. Dr. Heike Molitor) Higher education for development: learning methods and approaches
- 12.30 13.30 LUNCH BREAK
- 13.30 14.30 M.Sc.: Biosphere Reserve Management and Biosphere Reserve Institute: Biosphere Reserves as role model regions for sustainable development (*by Dr. Dr. Ana Filipa Ferreira*)
- 14.30 15.15 MA.: Sustainable Tourism Development and ZENAT research projects: On the way to sustainable and climate-friendly travel (by Prof. Dr. Wolfgang Strasdas)
- 15.15 15.30 COFFEE BREAK
- 15.30 16.00 Wrap up of Study Visit



Enjoy your stay!





Mit der Natur für den Menschen. Seit 190 Jahren.

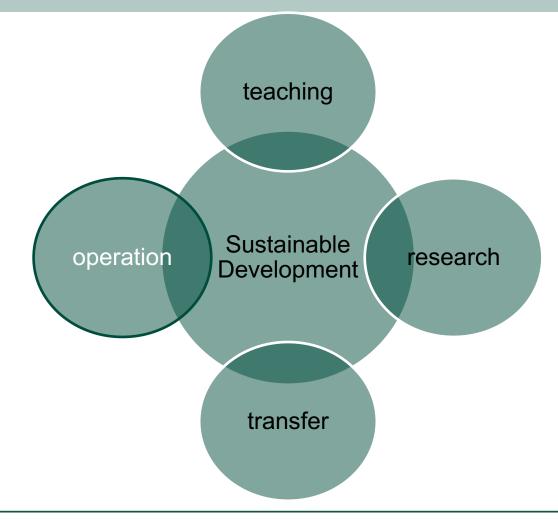
The Sustainability Management of HNEE

Introduction into operational sustainability management & campus tour





Sustainable Development at HNEE



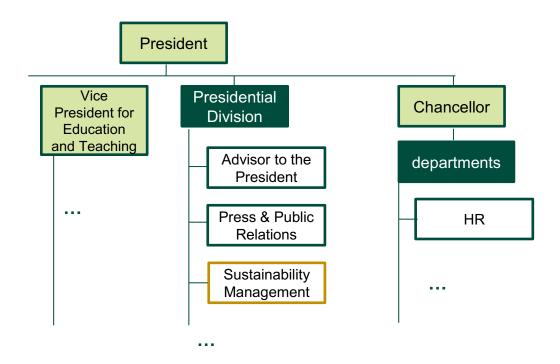


Overview

- 1. Classification of Sustainability Management Tasks
- 2. Mission Statement
- 3. Environmental Management System (EMAS)
- 4. Current Projects / Outlook
- 5. Campus tour city campus



Classification of Sustainability Management Tasks



Section from the organizational chart of HNEE.

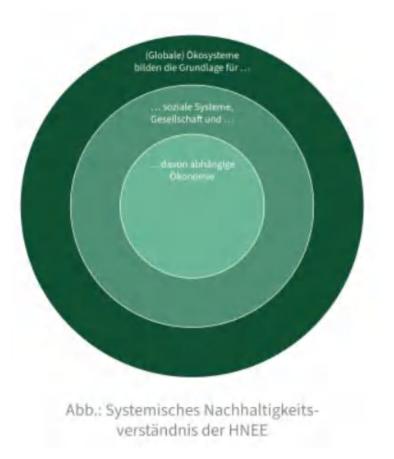
- Responsible for planning, coordinating, implementing, and evaluating sustainability measures.
- Environmental and climate protection management are integral components of sustainability management.
- Sustainability management provides advisory support to the university leadership.



Mission statement

- What do we stand for?
- What do we do?
- Where do we want to go?

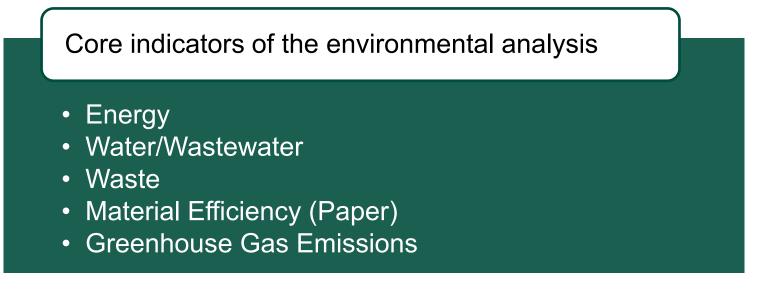
"At the Eberswalde University for Sustainable Development, sustainability is lived and jointly shaped via teaching, research, third-mission activities, and the process of administering. The university develops application-oriented solutions that provide a sustainable link between society and the environment. Its mission statement is grounded in a systemic understanding of sustainability and serves as a point of orientation for self-determined thinking and acting for all university members."





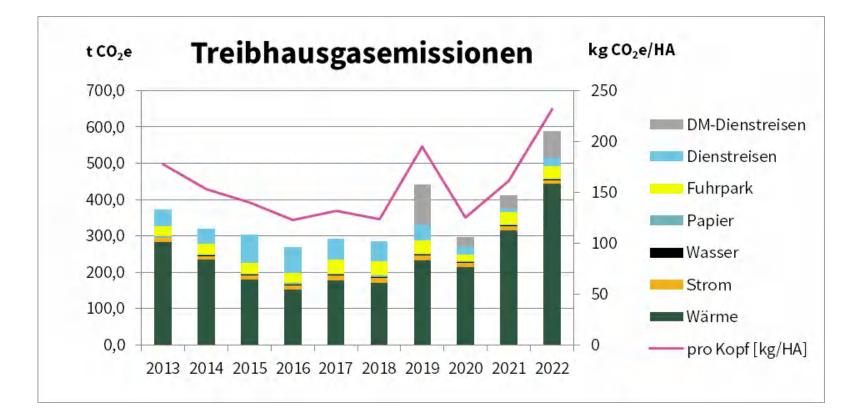
Environmental Management System (EMAS)

- The environmental management system of HNEE has been EMAS validated since 2009.
- It serves for the continuous improvement of environmental performance, based on regular environmental analysis.





Environmental Management System (EMAS)





UMWELTZE

Environmental Management System (EMAS)

| Paper | Fleet | Electricity | Thermal energy |
|---|--|--|--|
| Since 2007, HNEE has been using recycled paper both internally and externally. The paper is certified with the Blue Angel label. | Alongside 14 conventional vehicles and a tractor, the HNEE is part of the local car- sharing project BARshare. bicycles are available for rent. | Since 2007, HNEE has exclusively sourced green energy and operates three photovoltaic systems. | Wood pellets Wood chips |

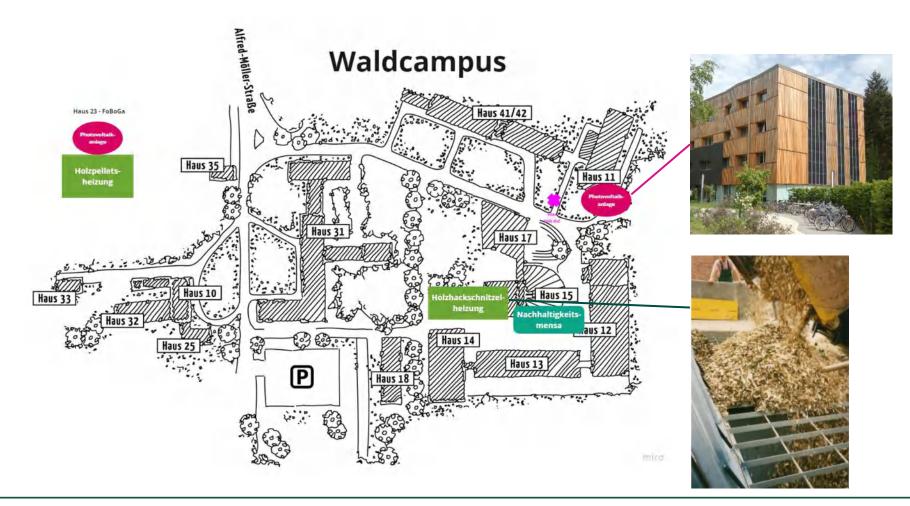


Current Projects / Outlook

- Preparation of the Sustainability Report 2021-2022
- Updating the Sustainable Procurement Guidelines
- Planning a Round Table on "Democracy and Sustainability"
- Online Survey on the Environmental Situation at HNEE in November
- Special Funding: HNEE receives 743,000 euros from the state of Brandenburg to convert the lighting at HNEE to LED. This upgrade affects 117 rooms within the university.

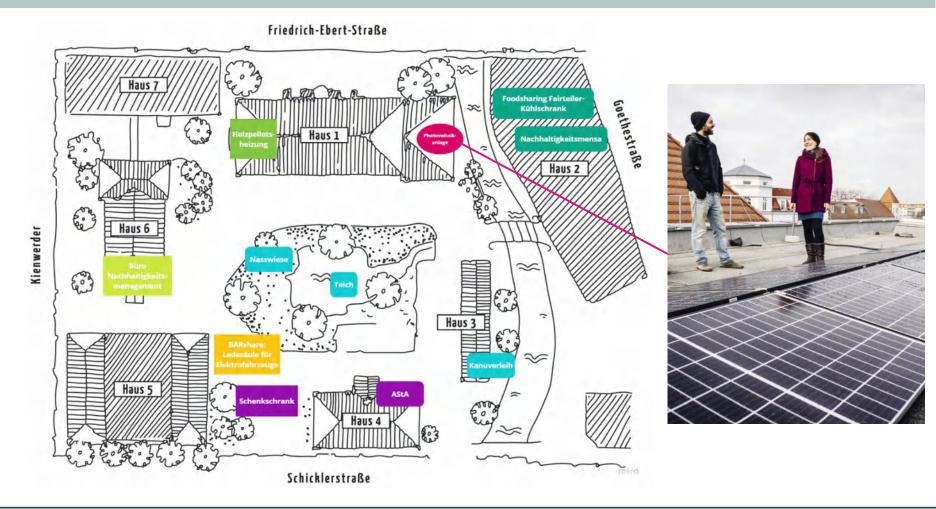


Forest campus





Campus tour – city campus





Thank you for your attention!



Connecting with Nature for the Benefit of Humanity. For 190 years.

The development process of a green canteen

Sustainability in practice



Why transform a canteen?

- There are many starting points for a transformation in an institution.
- Reasons for choosing the canteen:
 - You get in touch with the people of your institution.
 - You build new cooperations with small/medium enterprises in the local area.
 - You transfer the institutions knowledge about sustainability into practical fields and other institutions.
 - You can actually see and taste the difference.
 - Food industry and transportation causes a lot of emissions.
 - In our case 500 meals per day.



A little calculation on emissions

Meals with meat:

An average meal with meat: 500 meals sold per day in the canteen: 40 weeks of courses:

Vegetarian meals:

An average vegetarian meal: 500 meals sold per day in the canteen: 40 weeks of courses: 2,45 kg CO² 1225 kg CO² / day 245.000 kg CO² / year

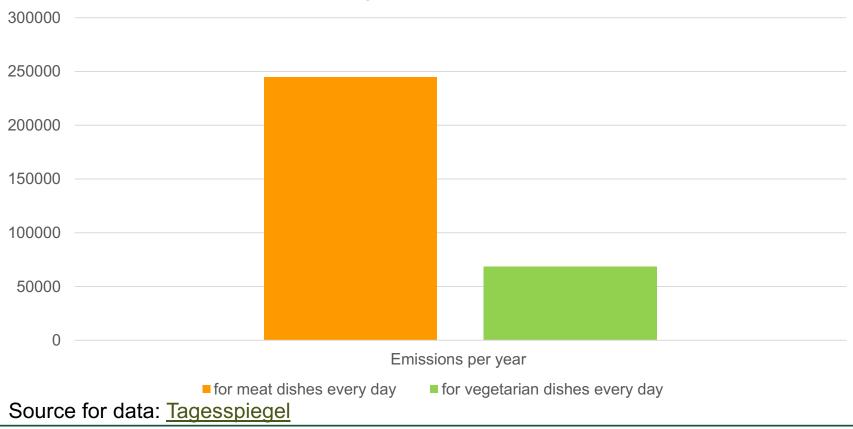
0,685 kg CO² 342,5 kg CO² / day 68.500 kg CO² / year

Source for data: <u>Tagesspiegel</u>



A little calculation on emissions

Comparison of emissions for canteens serving only meat or vegetarian meals



Eberswalde University for Sustainable Development · Schicklerstraße 5 · 16225 Eberswalde · Germany



How it all started

- With a student...
- In his Master thesis, my collegue wrote a climate protection concept paper for the Eberswalde University.
- He looked at the main indicators like energy, water and heating
- But also at related relevant fields.
- According to scientific results a change to a vegetarian menu could save a lot of emissions.



The process begins

- To start the transformation, we needed to understand who provides us with food.
- In Germany Universities usually don't have their own department for canteen related works – it's outsourced.
- Usually there are other public institutions who act as provider.
- In our case there is Studentenwerk FFO, who is responsible for 5 more canteens in the region.
- They recrute the staff, order goods and decide what to cook and the prices.



The process evolves

- We started to get in touch with this institution and built a work force consisting of students, university staff and Studentenwerk staff.
- On a regular base we had meetings to discuss, what could be changed and what could not.
- By doing so we evolved a broader understanding for the working principles of Studentenwerk.
- During the meetings we set up a paper with concrete ideas of what to change in the canteen.
- In cooperation the university and the institution Studentenwerk organized a conference to confirm the paper.



The biggest milestone

- This conference was a big success.
- We had a **professional moderation** & the leading question for the conference was **"HOW** can we change our canteens menu?"
- The heads of both institutions, the major of the city as well as the minister for education were present.
- Students, staff and the cooking team were involved in the conference.
- Two chefs who had done a transformation in big canteens held **keynotes** on how it is possible to change your food supply and succeed.
- There was a big **outreach** since the local **press** was invited too.
- In the end we created a real **sense of a new beginning**.
- The two heads of institutions **agreed** on the prepared paper and a **promise** to change was made in public.



The results

- Vegan cooking training for all kitchen staff
- Vegan & vegetarian options every day (cheapest price)
- Meat only twice a week (meat is produced ethically and appropriate to the species)
- Cooperation with local producers
- Increase of organic ingredients to 30%
- Fairtrade-organic coffee only & option to use oatmilk
- Electronic terminals for feedback



Increase of users



The process continues

- The workforce still meets every six months to discuss whats new and what other topics one could work on.
- Last year we started a recipe contest "climate-dish-competition" to involve peoples cooking ideas.
- We set up a project and applied for funding to transfer the knowledge to other institutions and to build up local supply chains.



The keys for a succesful green canteen

- Tasty vegan & vegetarian options
- Stable prices
- Involvement of all groups
- Communication & cooperation
- Will-power to change



Learnings for transformation processes

- The knowledge is in your institution already.
- Students can actually produce something meaningful with their work and get things started.
- Cooperation is key.
- Don't ask if you should do, ask HOW you should do it.
- Try and error and then try again.
- Keep it going!





Thank you for listening!

Any questions?



Q & A

Some questions for you:

- How is the food/menu in your local canteen?
- Do you think your students/professors/staff would be interested in changing to a more plant-based diet?
- How is your canteen organized/structured?
- Do you see potential for your universities in this kind of project?
- What are the main obstacles from your perspective?



PROJECT WORKSHOPS

Vincent Ruge Coordination of Project Workshops



How can students learn in a selforganized and sustainable way?



KEY CONCEPTS







BY STUDENTS

Concepts are initiated and **designed** by students.

FOR ALL STUDENTS

Project workshops can be attended by students **across all faculties**.

INTERDISCIPLINARY

Transfer of knowledge between students of different **faculties** based on project needs.

NEW SKILLS

Students learn how to **selforganize** as individuals and groups with high **responsibilities**.

ENRICH CURRICULA

-

Covering **topics** that students are **missing** in their curricula.

EXAMPLES

Gender and Climate Justice



© HNEE / Florian Reischauer

Economy for the Common Good



© HNEE / Florian Reischauer

Permaculture



© Fabienne Buchmann

Commons



© HNEE / Florian Reischauer



ESTABLISHMENT



INITIATIVE

Students propose a new concept based on clear guidelines.







COUNCIL

The concept is **reviewed** and **approved** by the project workshop council consisting of students.

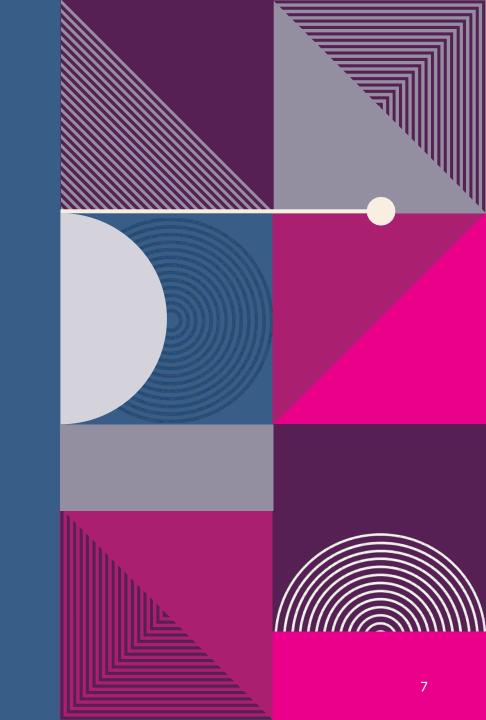
IMPLEMENTATION

Two **tutors** plan the curriculum, invite speakers, organize excursions and moderate the group.

SUSTAINABILITY

A **requirement** for a project workshop is that it has to provide knowledge about **sustainable development** in some way.

By experience, **suggested** topics that students want to **learn more** about **already** have this connection.



THANK YOU

Vincent Ruge projektwerkstatt@hnee.de





Unser Name ist Programm

Research Center [Sustainability-Transformation-Transfer]

Thomas Göttert







Aims

- Empirical assessment, analysis and visualization of transfer activities at the HNEE
- Scientific foundation and sharpening of the concept of sustainability transfer
- Classification of these activities in the context of a sustainability transformation
- Further develop HNEE's contributions to an N-transformation in order to highlight its activities
- Dissemination of knowledge and know-how around sustainability transfer and transformation





Publications & transfer of knowledge



Forschungszentrum [Nachhaltigkeit – Transformation – Transfer] | Hochschule für nachhaltige Entwicklung Eberswalde





Networking



Forschungszentrum [Nachhaltigkeit – Transformation – Transfer] | Hochschule für nachhaltige Entwicklung Eberswalde







Teaching, mentoring & supervision of students



Hochschule für nachhaltige Entwicklung Eberswalde

Einrichtungen / Fachbereiche

Logbuch der Veränderung

FILTERN

Y Autor*in

Gutsohn, Andrea (1) Hahnle, Madeleine (1) Selleneit, Tabea (1) Stahl, Jana Katharina (1) Weinberger, Rebecca (1) Wiemers, Hannah (1) Logbuch der Veränderungen: Gunther-Wolff-Preis für Hannah Wiemers!









Sustainability transfer "in the making"



Forschungszentrum [Nachhaltigkeit – Transformation – Transfer] | Hochschule für nachhaltige Entwicklung Eberswalde





Contributions from the research center to the HNEE profile

• The research center itself does what it offers to the HNEE to sharpen its profile

| Sustainability transformation | Sustainability transfer | |
|---|---|--|
| Orientation | Implementation | |
| Creates spaces for reflection through interdisciplinarity and 'analytical distance' | Creates transformation knowledge through the thematic cluster "Sustainability Transformation in North Brandenburg" | |

=>Sustainability transfer as a connecting cross-sectional topic for theory, empiricism and methods

=>Impulses for transfer, research and teaching; strategic-normative processes





Sustainability Transfer as profile-forming element of HNEE

•"Eberswalde University for Sustainable Development (HNEE) is driver of a sustainability transformation. Its transfer activities and practice-university cooperations are effective in business, science, administration, politics, and civil society. In research and teaching, HNEE makes action-oriented contributions to the implementation of the Sustainable Development Goals through Sustainability Transfer."

From the vision of HNEE 's transfer strategy (2020) (own translation)



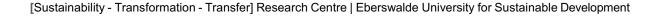
[Sustainability - Transformation - Transfer] Research Centre as research and organizational support unit with theoretical-conceptual and empirical-analytical focus



[Sustainability - Transformation - Transfer] Research Centre



What is "Sustainability Transfer"?



www.hnee.de





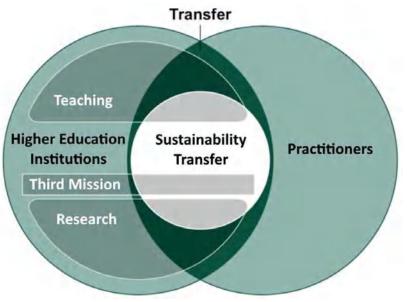
The concept of "Sustainability Transfer"

- •(Sustainability) transfer: voluntary exchange of e.g. ideas, experiences, knowledge, and technologie between university and practitioners from economy, civil society, political-administrative system)
- •Goal: tackling practice-oriented questions and problems from a sustainability perspective

Characteristics: definition of sustainability goals a n description of sustainability effect(s)

Results:

- contributions to sustainable development, e.g. discourses, concepts, solutions, or technologies
- strengthening of key competencies for sustainable development through (joint) learning processes

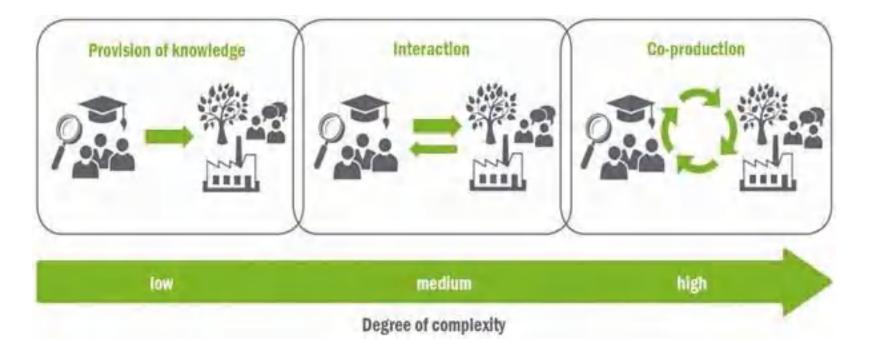


Embedding Sustainability Transfer in the functions of Higher Education Institutions Source: Nölting et al. (2021), p. 24





"Sustainability Transfer": Degrees of complexity



Source: Nölting et al. (2021)

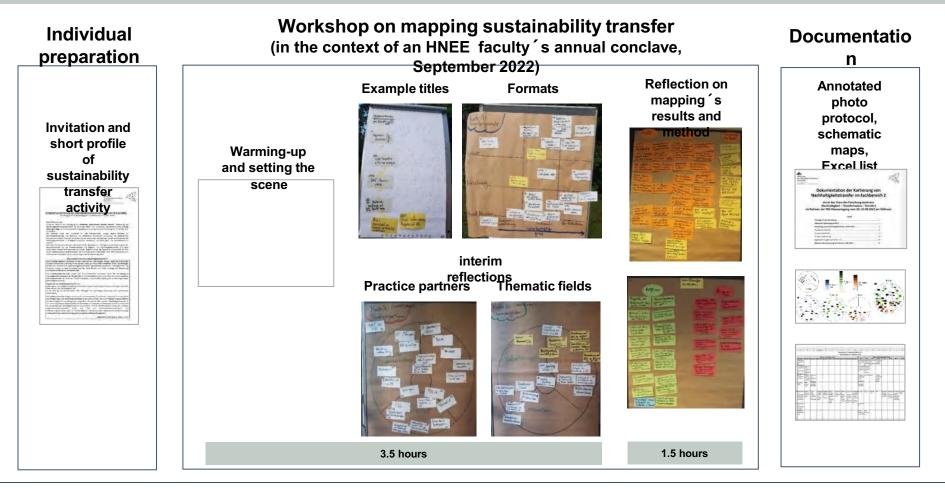


| | Teaching | Research | Third Mission |
|--|---|--|---|
| Examples for " Provision of knowledge from/out of the university | Inviting practitioners to courses Using teaching examples from practice in courses (e.g., question, case study, role play) Excursions to practitioners Student project or thesis: developing solutions for practitioners (questions and information from practice) | Popular science publications (professional journals, brochures) Handout for practitioners (manuals, checklists, recommendations) Public relations communication on research results (websites, flyer, press releases, interviews) Public presentations, panel discussions in professional events, Blogs (researchers communication about research) Exhibitions on the basis of research Provision of scientific expertise for policy and society Developing patents, license agreements, models etc. | Press work Open day Exhibitions Websites Social media Corporate design and layout Collaboration on Transfer Consulting for communication (concepts etc.) Fair events Alumni work |
| Interaction for practi-tioners | Developing solutions for practitioners in courses Team-teaching with practitioners Internship Practical training, certificates Advice from practitioners for teaching programs (advisory board) Student project or thesis: developing solutions with practitioners (question, information from practice, joint supervision, results: recommendations etc.) | Consulting for enterprises, policy, associations (advisory board, hearing, expert communication, expert report) Research workshop with practitioners on questions of implementation and validation of research results from a practice perspective | Frame for dialogue formats Cooperation agreements with businesses, public agencies and municipalities Start-up activities support and consultation |
| Co-production jointly with practi-tioners | Using learning methods that explicitly refer to practice (research hased learning, project based learning, service learning) Student project or thesis: developing solutions jointly with practitioners (joint development of questions, scoping, joint supervision, and valuation through practitioners) | Transdisciplinary projects: joint problem description, co-design of research projects Transdisciplinary projects: joint development/ co-production of sustainability innovations, solutions, overall concepts Transdisciplinary projects: test of instruments, solutions and implementation (co-implementation) Joint scientific publications with practice | Societal engagement (e.g., cultural, social and ecological offers for and by students) Developing and shaping cooperation and strategic partnerships for sustainable development through joint activities |





Provision of reflection and learning spaces on sustainability transfer







Transfer study at HNEE





Article Sustainability Transfer as a Concept for Universities in **Regional Transformation—A Case Study**

Uwe Demele *, Benjamin Nölting , Wibke Crewett and Georgi Georgiev

Research Center [Sustainability-Transformation-Transfer], Eberswalde University for Sustainable Development, Schicklerstr. 5, 16225 Eberswalde, Germany; Benjamin.Noelting@hnee.de (B.N.); wibke.crewett@hnee.de (W.C.); ggeorgiev@hnee.de (G.G.)

* Correspondence: uwe.demele@hnee.de

Abstract: The research object of this study is the in-depth discourse on the sustainability transfer activities of higher education institutions (HEIs) and their contribution to a regional sustainable transformation. For this purpose, a heuristically-derived concept of sustainability transfer is empirically tested with a mixed-methods approach based on the example of Eberswalde University for Sustainable Development (HNEE). The empirical findings demonstrate that the realization of sustainability transfer depends mainly on the personal initiative of teachers and researchers. Major barriers are a lack of time and financial resources. The observed concept of sustainability transfer is applicable to all study and research areas of HNEE. Involvement in sustainability transfer can include the whole of society, from politics, enterprises, and civil society to education and research institutions. Overall, the empirical testing of the concept offered by this study illustrates its practical suitability to capturing specifically those sustainability transfer activities that are not tapped by third mission approaches. This opens up a novel dimension for transfer potential at universities and their role in regional sustainability transformation. It also highlights that the interdependencies between HEIs and practitioners need to be more contextualized with guality criteria such as the value of the transfer performance or level of ambition.



Citation: Demele, U.; Nölting, B.; Crewett, W.; Georgiev, G. Sustainability Transfer as a Concept for Universities in Regional Transformation-A Case Study. Sustainability 2021, 13, 4956 https://doi.org/10.3390/su13094956

Keywords: higher education institutions; sustainability transfer; sustainable transformation; practitioner-university partnership; sustainable development

Diskussionspapier-Reihe Nachhaltigkeitstransformation & Nachhaltigkeitstransfer Nr. 2

NACHHALTIGKEITSTRANSFER - EIN KONZEPT FÜR WISSENSCHAFTS-PRAXIS-KOOPERATIONEN

Eine empirische Potentialanalyse am Beispiel der Hochschule für nachhaltige Entwicklung Eberswalde







Transfer study at HNEE

Important findings:

- Sustainability transfer takes place in all functions and areas of HNEE
- initiated by the members of the HNEE mostly voluntarily - out of intrinsic motivation
- wide range of formats and levels of complexity
- to carry out additional, time-consuming and cost-intensive tasks in addition to the core business
- Overall low participation

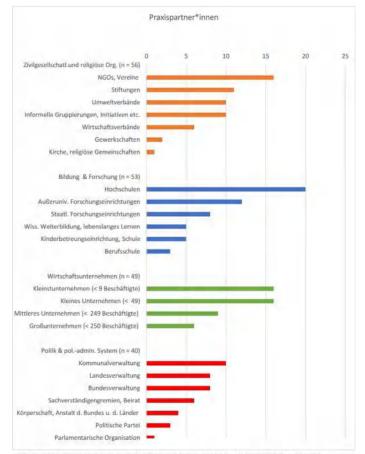


Abbildung 4. Proxisportner*innen bei Transferprojekten (Mehrfachnennungen möglich, n= 35 Teilnehmende)

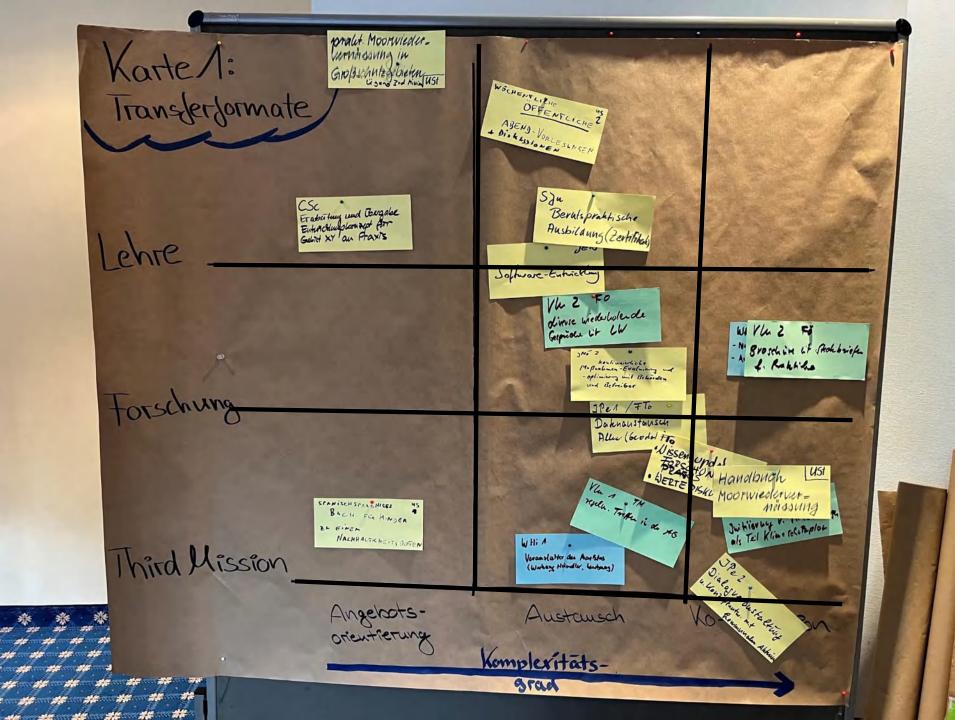


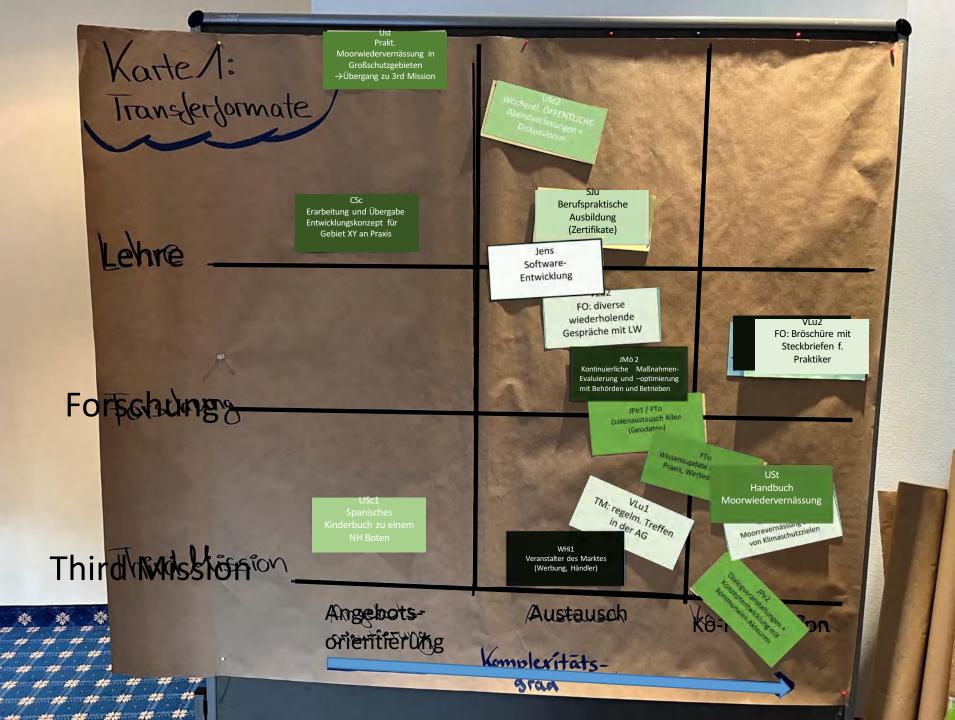


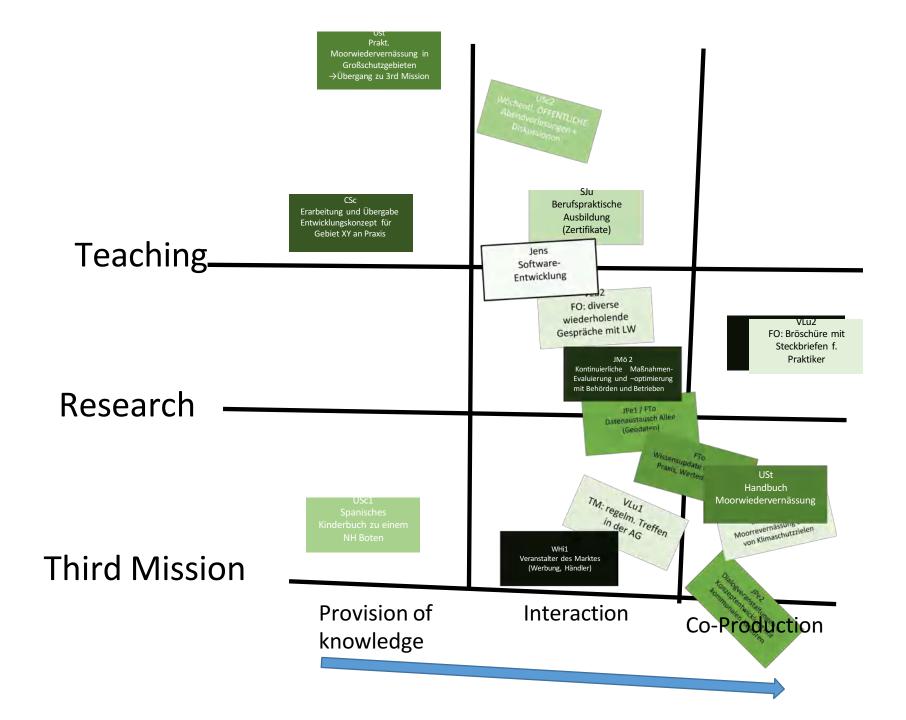
Mapping of sustainability transfer

Aims:

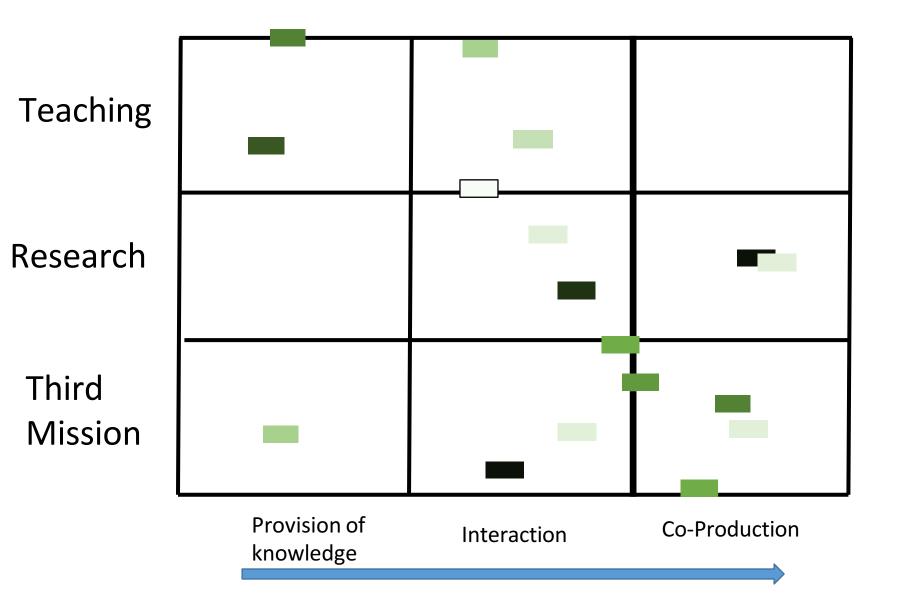
- *Description of transfer activities:* Methodically guided, differentiated identification, description and analysis of sustainability transfer activities
- *Visualization of sustainability transfer:* Visualization and presentation of transfer activities for internal and external communication, attracting practice partners, reporting to sponsors, etc.
- *Reflection on sustainability transfer:* Discussion and reflection on the goals and effects of sustainability transfer, conflicting goals and potential risks of transfer activities
- *(Further) development of the transfer profile:* Establishing relationships with each other in the department/institute/research group, building block for developing your own transfer profile or your own transfer strategy



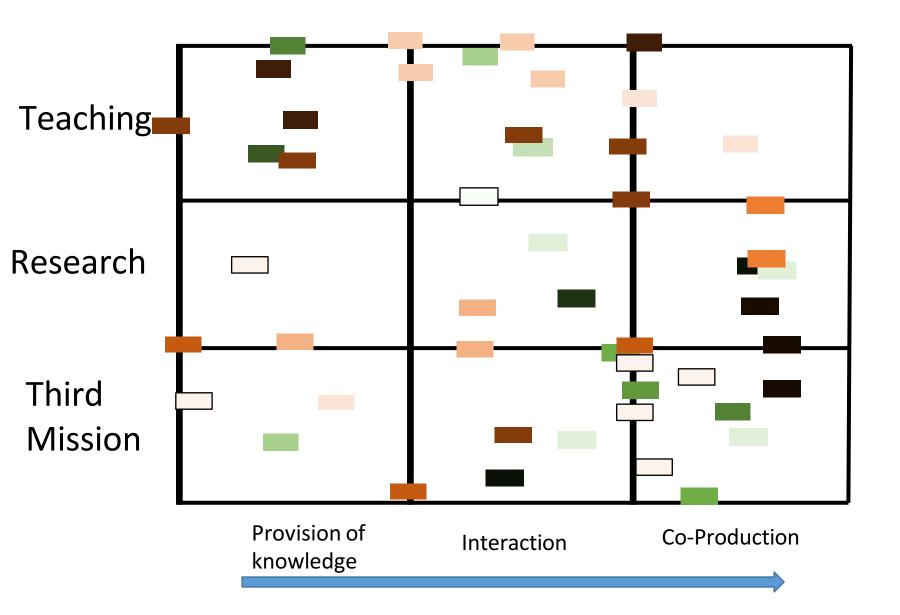


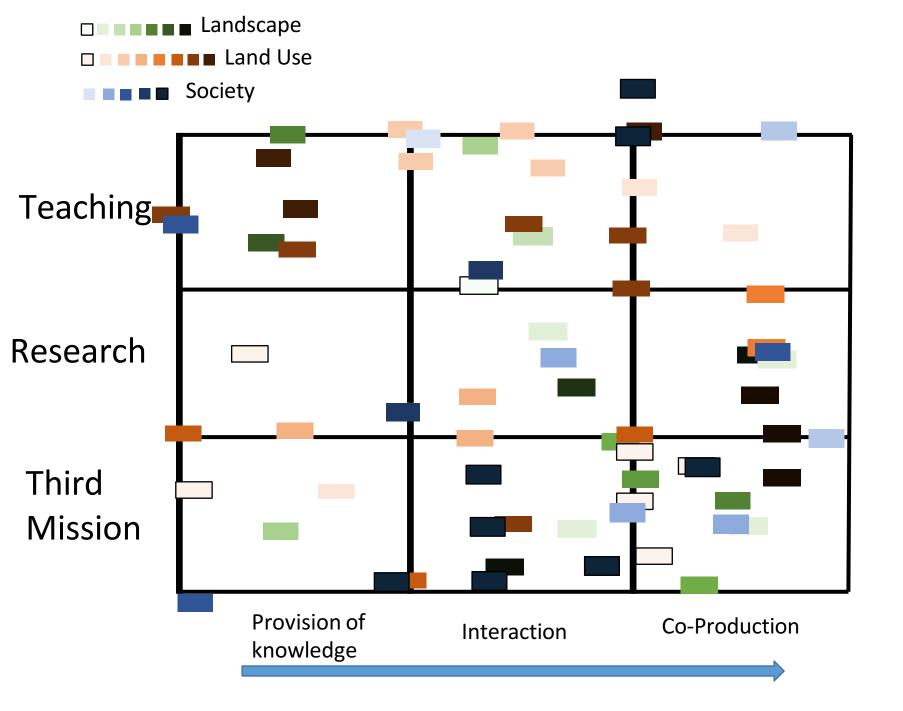








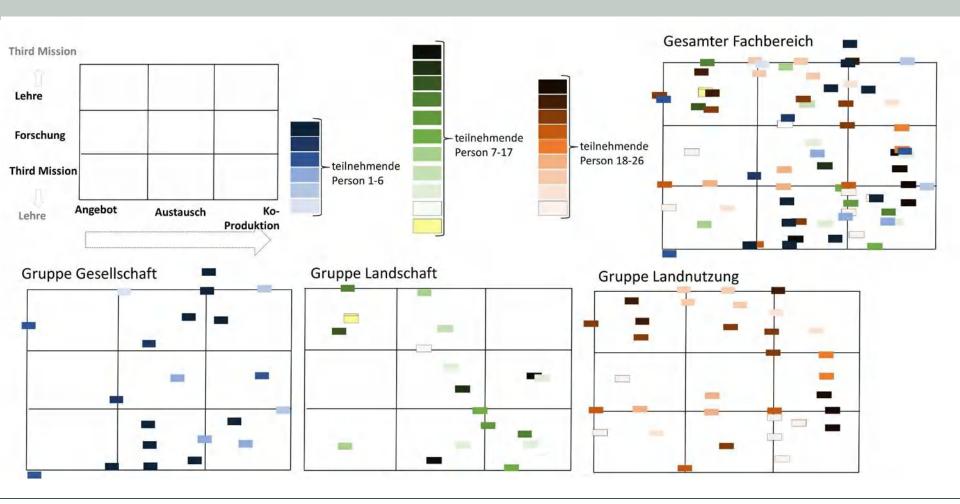








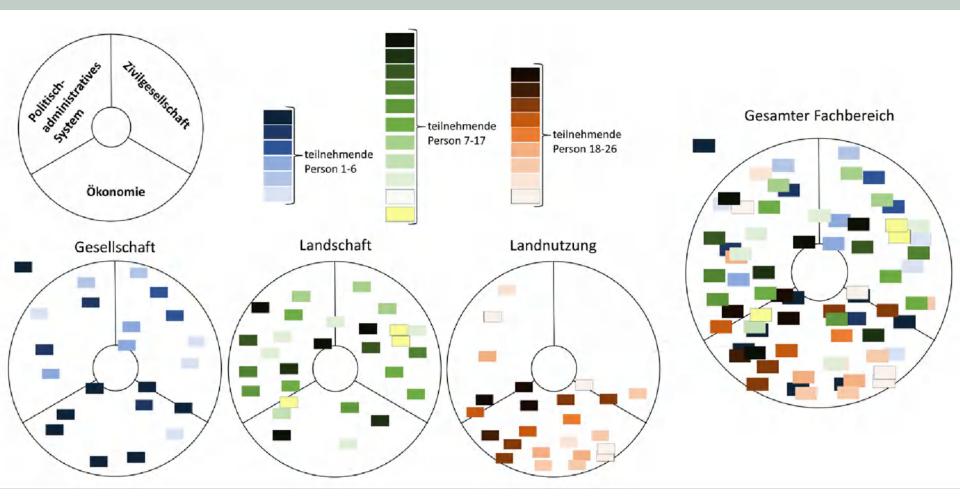
Formats & degrees of complexity







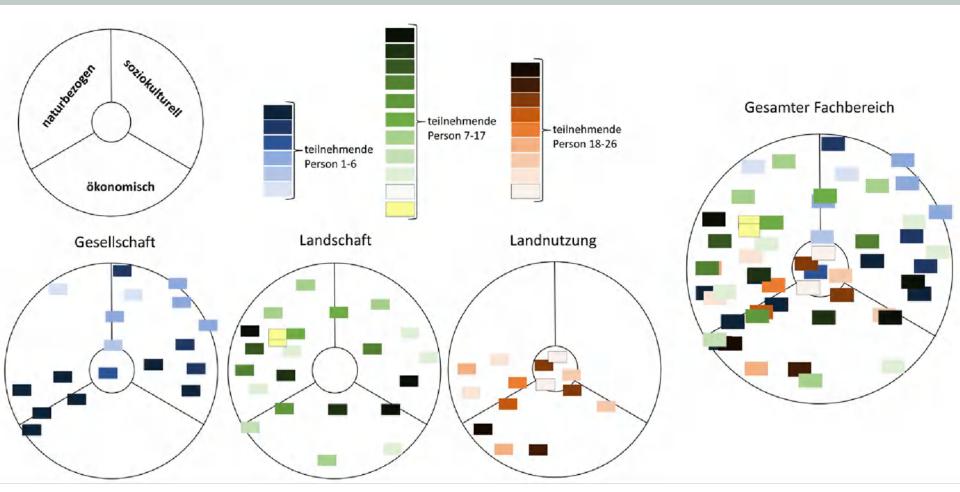
Practice partners





Topics





Forschungszentrum [Nachhaltigkeit – Transformation – Transfer] | Hochschule für nachhaltige Entwicklung Eberswalde





Mapping of sustainability transfer

Important findings:

- A wide range of transfer formats is covered
- "Blind spots" when working with practice partners
- Dual role institutional member vs. practice partner
- Reflection on the concept of sustainability transfer
- Further development of the concept in terms of content
- Sharpening definitions (e.g. co-creation vs. co-production, differentiation of categories)
- Structures for successful NHT





SOLIDARITĂT UND

SOLIDARISCHES VERHALTEN IN DER CORONA-PANDEMIE

Nr. 04: Outsohn A, Selleheit T, König B

lool org 10 57741 coust-360 (2)

THE VALUE OF PHOTOGRAPHY IN SCIENCE AND EDUCATION

Nº 08: Currie B. Gottert T (2023

mps //doi.org 10.57741/cous4-636

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Notine B (2022)

Mapping of sustainability transfer







How do you find the invisible?



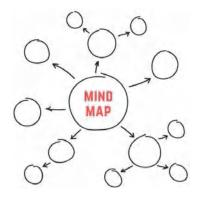
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How can sustainability transfer be mapped?

- Projects and practice partners should be able to be arranged within a schematic graphic or mind map so that the characteristics of the transfer become clear
- Projects and practice partners as well as the "spaces" in which transfer takes place should be located on a geographical map including tabular information



https://www.istockphoto.com/de/fotos/mind-map

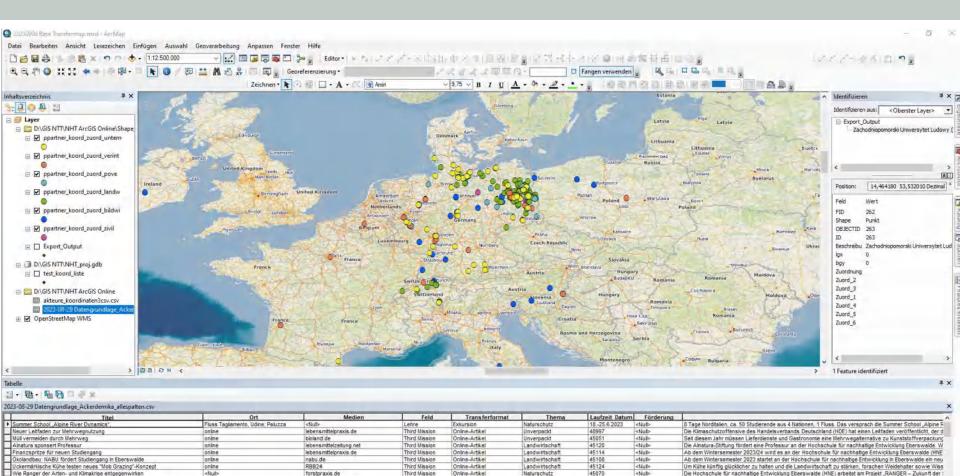


https://www.photowall.de/political-world-map-poster





How can sustainability transfer be mapped?



45050

45099

45108

5.-6.6.2023

Naturschutz

Landwirtschaft

Landwirtschaft

Hochschule für nachhaltige Entwicklung Eberswalde

Regionalentwicklung

<Nul>

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Im Rahmen des

1 🕨 🖬 🔲 🔤 (0 aus 64 Ausgewählte)

Mehr Qualität in der Schutzgebietsbetreuung durch Ranger*inne

Agrarbetrieb setzt auf Reisanbau

14 4

Exkursion: Nachhaltige Regionalentwicklung

Exkursion - Ökologische Wertschöpfungskette

<Nul>

oninė

Forschungszentrum [Nachhaltigkeit – Transformation – Transfer]

Kommune Storkow

diverse Orte in Schleswig-Holstein

kommunalwirtschaft.eu

<Null

deutschlandfunkkultur.de

Third Mission

Third Mission

Lehre

Lehre

Online-Artike

Podcast

Exkursion

Exkursion

nittelwirtschaft" besuchte

Die Hochschule für nachhaltige Entwicklung Eberswalde (HNE) erarbeitet im Projekt "RANGER - Zukunft de

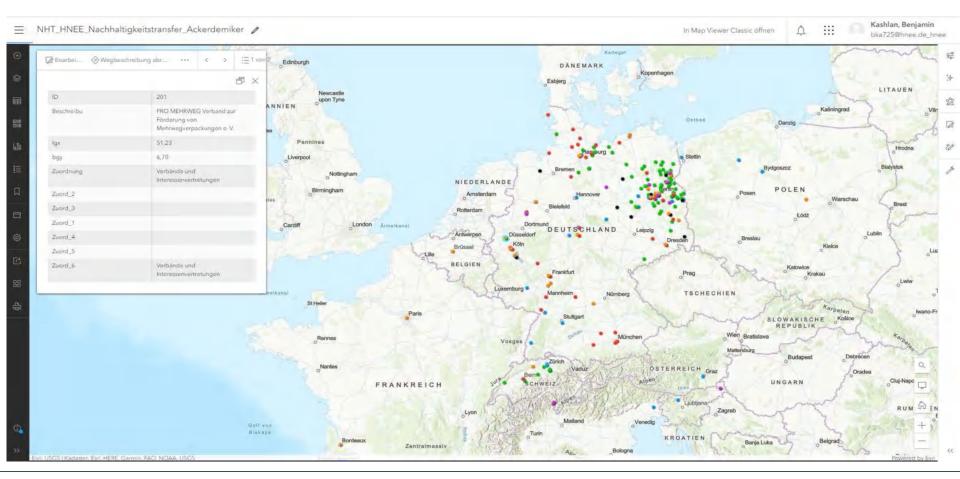
In ehemaligen Fischteichen im brandenburgischen Linum wird künftig Reis angebaut - zunächst einmal auf

Die Exkursion fand im Modul "Akteursgruppen und Prozessgestaltung in der ländlichen Entwicklung" von Pro





How can sustainability transfer be mapped?







Sparring partner within and beyond HNEE



Workshop on sustainability transfer with HEIs in Brandenburg, 2022



Meeting of HNEE transfer advisory board, 2022







Dialogue with society and scientific community

- Regional, national, and international networking
- Edition of a discussion paper series on issues related to sustainability transformation and transfer



Hosting a workshop on digitization and sustainability at the Smart Country Convention Brandenburg, 2022



Presentation of the Research Centre to the Minister of Education and Research, 2022

| | NACHHALTIG | EITSTRANSFER |
|--|------------------------------|--|
| DNZEPTPAPIE rspektiven auf chhaltigkeitstransfor e der HNEE | | S-PRAXIS- N?! jalanalyse am Beispiel hhaltige Entwicklung |
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Acquisition and implementation of research projects

• With HNEE members and external partners

March 2020: Log book of changes



October 2022



January 2023









UNIVERSITY FACULTIES PROGRAMMES RESEARCH

INTERNATIONAL

SERVICES

You are here: Research » [Sustainability - Transformation - Transfer] Research Centre



(from left to right: Dr. Ilka Roose, Dr. Bettina König, Prof. Dr. Benjamin Nölting, Dr. Christine Hobelsberger, Dr. Thomas Göttert)

The [Sustainability - Transformation - Transfer] Research Centre is a scientific institution of the Eberswalde University for Sustainable Development (HNEE). It is funded by the Brandenburg Ministry of Science, Research and Culture (MWFK) under the institutional contract between the university and the state (January 2020-December 2023).

Sustainable development is not created in a test tube, but needs to be practised and tested. How can researchers and practitioners work together? How do they learn from and with one other, and how can this dialogue be meaningfully encouraged? These are the questions that the [Sustainability - Transformation - Transfer] Research Centre is exploring using the concept of sustainability transfer.

(Prof. Matthias Barth, President of the Eberswalde University for Sustainable Development)

Hochschule für nachhaltige Entwicklung Eberswalde Forschungszentrum Nachhaltigkeit - Transformation - Transfer



| Learn more | | |
|---------------------------|--|--|
| About the Research Centre | | |
| Team | | |
| Activities | | |
| Publications | | |
| Discussion Paper Series | | |
| Further education | | |



With nature for people. For 190 years.

InnoSupport Research | Start-up | Transfer

internal service unit for the entire innovation chain of research, start-up and transfer

Dr. Jakob Wegener (Officer for EU Research Funding)/ Kerstin Lehmann (Head of InnoSupport Research | Startup | Transfer)

Eberswalde, 10.10.2023



Impressions – Forest Campus





Impressions - City Campus and Botanical Forest Garden









Impressions - City of Schwedt





Eberswalde University for Sustainable Development · Schicklerstraße 5 · 16225 Eberswalde · Germany



research and transfer

- renowned university with a clear profile in the field of sustainable development
- Fundamental and far-reaching changes such as climate change, energy crisis, globalisation and digitalisation
 -> included in HNEE's strategic orientation and
 "translated" into teaching, research and transfer activities
- very well networked in the region but also internationally and successful in research and transfer activities
- Third-party funding and research strength, innovative learning-teaching settings with highly intrinsically motivated learners and teachers





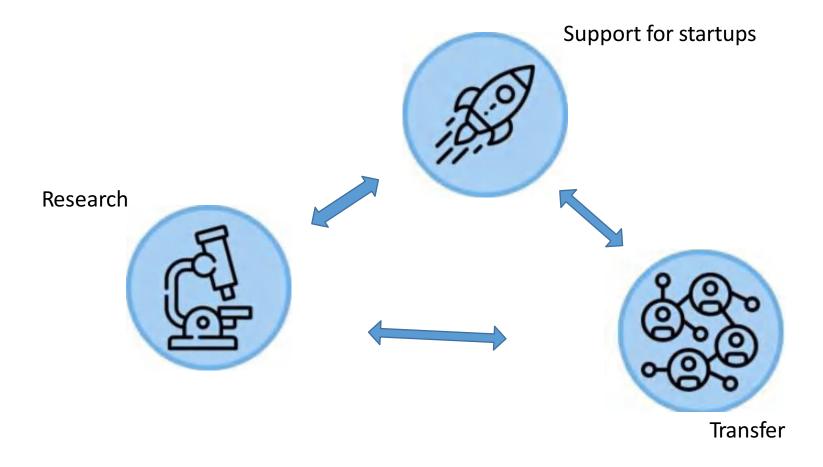


InnoSupport: Research | Start-up | Transfer

- Establishment of **InnoSupport Research | Start-up | Transfer** as a universityinternal service unit for the entire innovation chain of research, start-up and transfer with comprehensive advisory and support services in the individual areas.
- Professionalisation of processes in the area of research support/third-party funding management
- Expansion of offers and support in the area of start-ups (promotion of early start-up phases via StartUpLab@FH as a physical creative space as well as with teaching modules and an annual Kickstart competition)
- Impact in the region through the Schwedt presence office and StartUpLab Schwedt

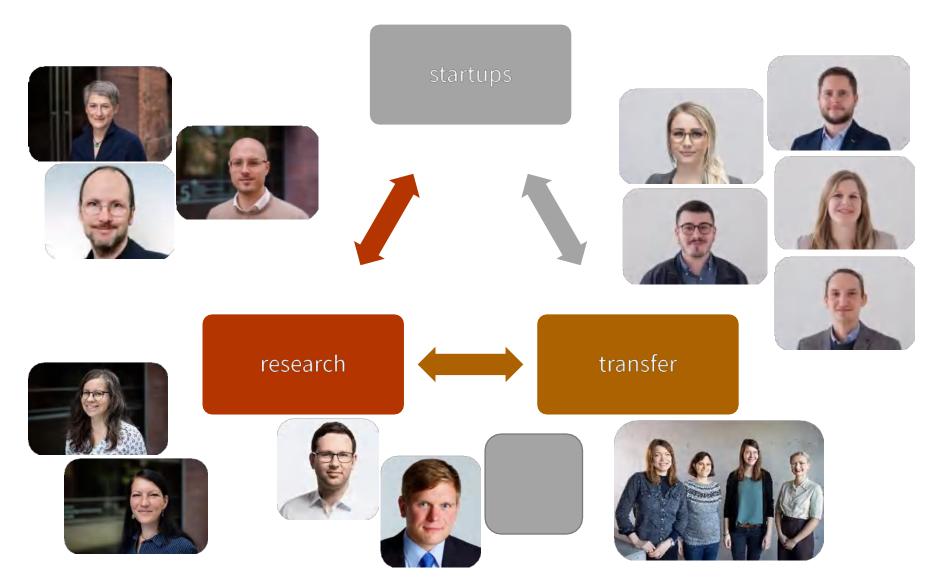


Department InnoSupport – Support along the whole web of sustainable innovation





InnoSupport contact persons





Research



- living, application-oriented science
- co-operation with national and international research institutes
- EU....Jakob ergänzt du?





Research Areas





I - Sustainable development of rural areas with an interdisciplinary focus on natural, environmental, economic and social sciences.



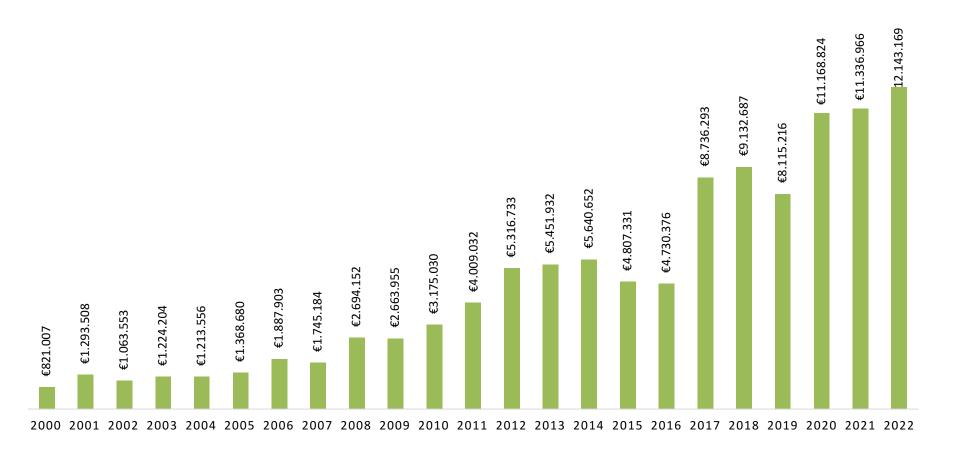
II - Sustainable production and use of natural materials with a focus on materials science and engineering.



III - Sustainable management of limited resources with a socio-economic focus.

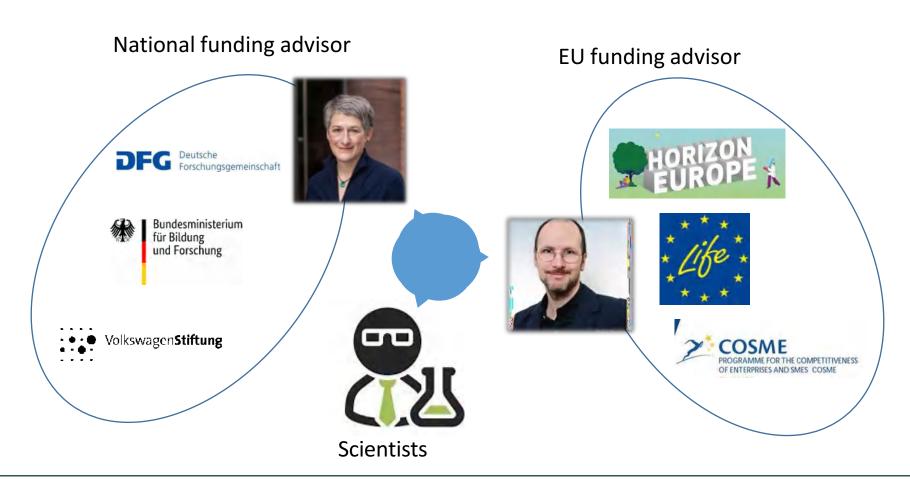


Development of third-party funding HNEE total





Acquisition of funds for sustainable projects – a trialogue...





A special support structure for acquisition of EU-funding...



The Eu competence Network of Brandenburg Universities is....

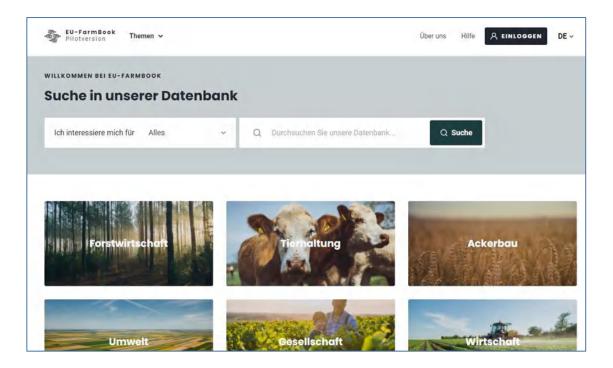
- A network of EU research officers of all eight universities in Brandenburg
- Organizer of training events for applicants and administrative staff
- Funded by the regional government



EU-projects: Pathways to continental impact

Examples of ongoing projects with HNEE participation:

1. EUFarmBook – an online platform for agricultural knowledge





EU-projects: Pathways to continental impact

Examples of ongoing projects with HNEE participation:

1. ProForPES – Testing and spreading the idea of "Payment for Ecosystem Services"

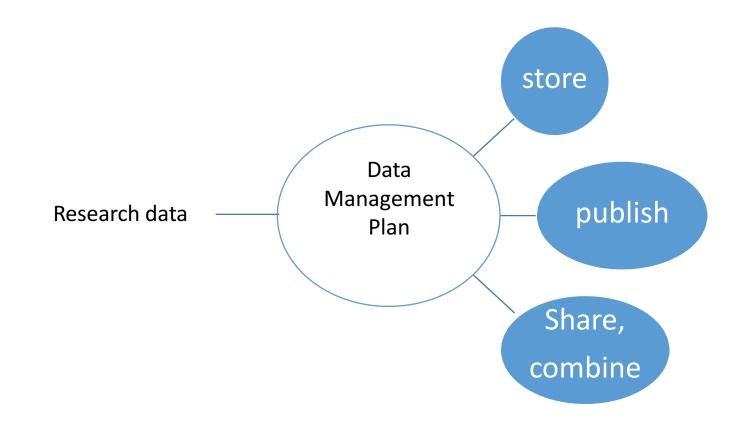




Co-funded by the European Union



Research Data Management – Maximization of data utility



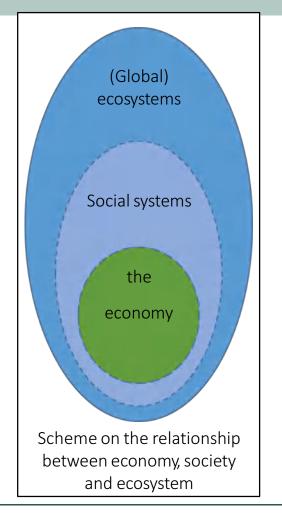


Our understanding of Transfer

Transfer is understood in a broad sense at the Eberswalde University of Applied Sciences and goes beyond the narrow understanding as technology transfer:

In transfer, actors from the university and practice voluntarily exchange knowledge, ideas, technologies and experiences. The practical actors come from all areas of society: business, science, politics, administration, municipalities and civil society organizations such as associations. Such an exchange is primarily about working on practical problems. In this way, the university opens itself up to social concerns, whereby the topics are developed in cooperation with practitioners.

The transfer strategy is **based on the principles for sustainable development** of our university.





Annual "University meets Economy" –day: An event to close the feedback loop







InnoSupport Research | Start-up | Transfer

- InnoSupport is involved in the coordination of joint applications (e.g. InNoWest/ BMBF-Innovative Hochschule, BMBF-Regulus-Verbünde etc.) or is itself an applicant and project executor such as StartUpLabor Schwedt (BMWK/ MWFK - funding), HNEE-Story-telling (MWFK - funding) or InnoTransfer (MWAE funding; further development of the content of the transfer office).
- Topics such as research data management (FDM), open access (OA), research information system (FIS) initiated/coordinated/supported by or in cooperation with InnoSupport
- Funding of individual areas through subsidies (transfer/presence office/foundation) presents a challenge (employment contracts/staff retention)Impact in the region through the Schwedt presence office and StartUpLab Schwedt



Transfer - Presence Schwedt | Uckermark

- The HNEE has been operating the Schwedt | Uckermark Outreach Centre since 2008, with a new financial and content-related orientation and a new team since 2018.
- Goal: To increase the visibility of universities in rural areas, thereby increasing the propensity of pupils to study, to initiate cooperation projects with regional actors within defined fields of action, etc.



- Interface between science, research and the region as well as strengthening the university's presence and visibility in the region.
- Successful formats such as Science Slam, FilmWorkshop with young people and Film University, HPI Workshop; CareerDay; Job and Career Fairs



Work in the region using the example of Schwedt, among others

- Special feature StartupLabor Schwedt
- Project as a measure within the framework of the future package of the federal and state governments
- **Goal:** Linking transformation away from a carbon-based industry with solutions from start-up teams from Germany.
- Start-ups can obtain growth prospects at the location (space, infrastructure, mentoring by large-scale industry); location obtains: improved access to key technologies
- Duration: 01.01.2023 31.12.2027; project volume: 6.25 million €over 5 years (90 % federal government; here BMWK; 10 % state)
- Associated project partners: PCK and LEIPA First StartUp at PCK as of 01.07.23
- located at InnoSupport Research | Start-up | Transfer/ VP Alexander Pfriem



Thank you very much for your attention!

Questions?

Eberswalde University for Sustainable Development · Schicklerstraße 5 · 16225 Eberswalde · Germany

Circular Economy in Practice: Nutrient Recycling in Eberswalde, Germany

.

Katja Searles Eberswalde University of Sustainable Development

GEFÖRDERT VOM



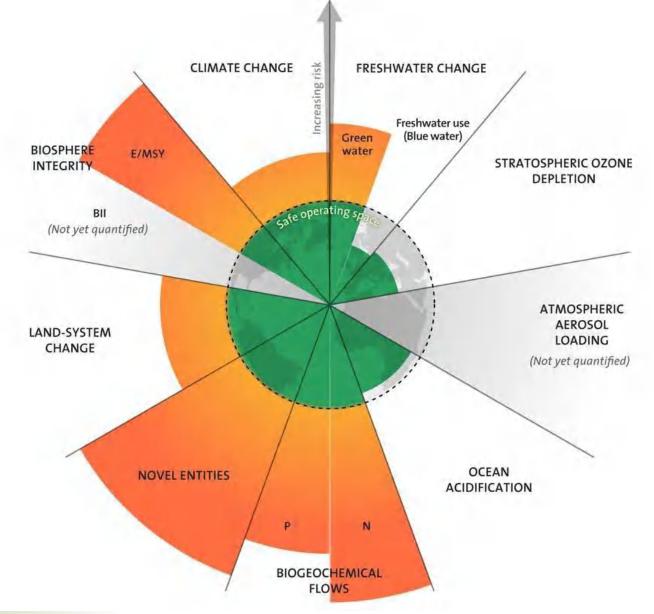
Bundesministerium für Bildung und Forschung





Reasons

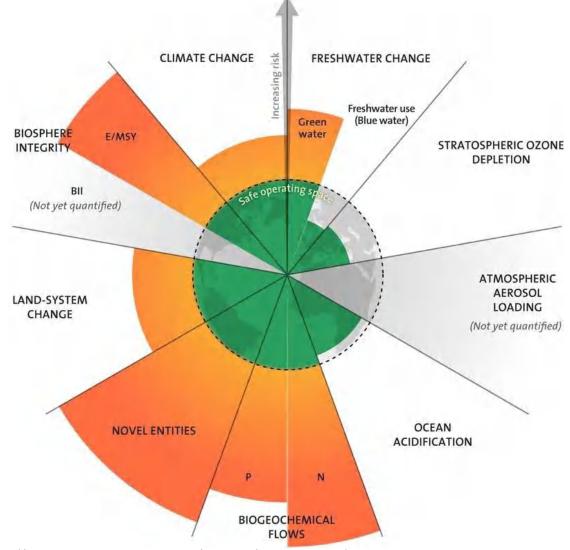
- 1. Production of mineral nitrogen and phosphorus fertilizers dependent on
- fossil/finite resources
- •2. Pollution of water bodies with nutrients, pathogens & harmful substances
- 3. <u>Climate crisis, heat & drought, water</u> <u>scarcity</u>
- 4. Compliance with planetary boundaries



https://www.stockholmresilience.org/research/research-news/2022-01-18-safe-planetary-boundaryfor-pollutants-including-plastics-exceeded-say-researchers.html

• • • Introduction | Transformation of sanitary systems **and** nutrient recycling

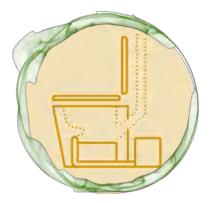
Reasons



https://www.stockholmresilience.org/research/research-news/2022-01-18-safe-planetaryboundary-for-pollutants-including-plastics-**exceeded**-say-researchers.html

- Reduce ressource consumption
- Circulate nutrients
- Eliminate harmful substances

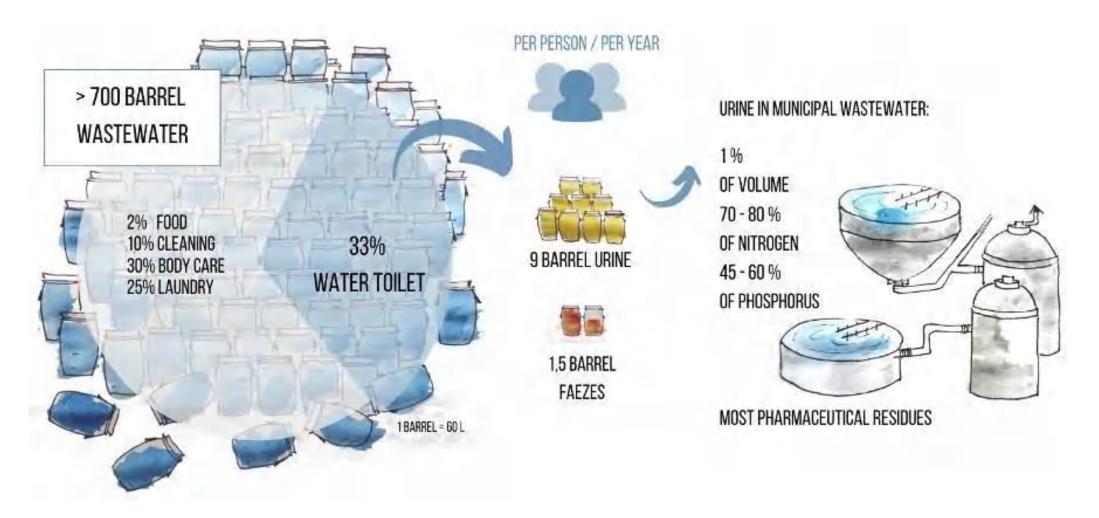
From the linear to the circular



Gerten, D., Heck, V., **Jägermeyr**, J. et al. Feeding ten billion people is possible within four terrestrial planetary boundaries. Nat Sustain 3, 200–208 (2020). https://doi.org/10.1038/s41893-019-0465-1

zirkulierBAR

Potential of the sanitary system for the circular economy



Eigene Abbildung / Zahlen aus: Herrmann T, Klaus U (1997) Fluxes of nutrients in urban drainage systems: Assessment of sources, pathways and treatment techniques. Water Science and Technology, 36(8-9), 167-172 | Simha P. Ganesapillai M (2017) Ecological Sanitation and nutrient recovery from human urine: how far have we come? A review. Sustain. Environ. Res. 27, 107-116.

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objectives

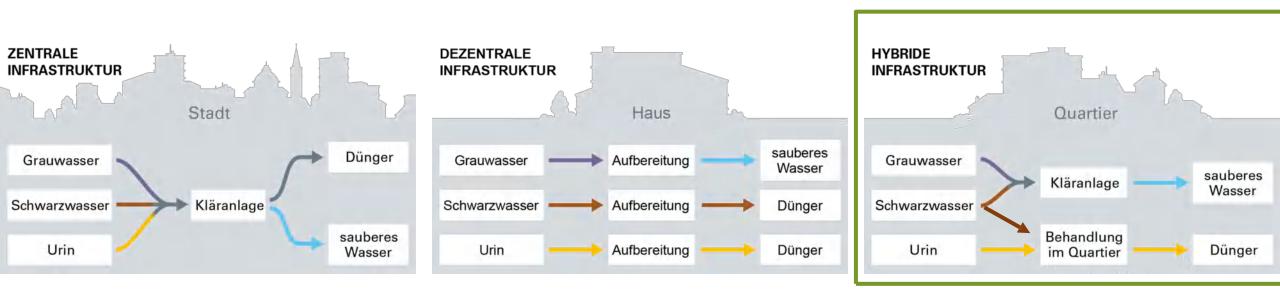
Save water, circulate valuable materials, eliminate harmful substances.



Krause et al. 2021, "Ressourcen aus der Schüssel sind der Schlüssel: Diskussionspapier zur Sanitär- und Nährstoffwende: Wertstoffe zirkulieren, Wasser sparen und Schadstoffe eliminieren", www.naehrstoffwende.org

zirkulierBAR

Socio-technical transformation paths



Further development of the current system and wastewater treatment plants with more extensive resource utilization

Redesign of the system based on material flow separation and decentralized, resource-oriented wastewater and waste treatment

Grafiken: Abwasserbehandlung – zentral**, dezentral**, hybrid https://www.eawag.ch/de/forschung/menschen/abwasser/dezentrale-**ressourcengewinnung**-aus-abwasser/systeme

zirkulierBAR: Vision

We want to recycle nutrients from food that has been eaten and return them to agriculture and horticulture as part of a sustainable regional circular economy.



CC zirkulierBAR

• • zirkulierBAR - project

Partners

In the Barnim-: Eberswalde region, : municipalities and future-oriented companies are working together with universities and research institutions to create a living lab for sustainable regional recycling management in the field of water and agriculture.



Urine-diverting toilets

- Used at:
- Festivals, construction sites
 - Private households
 - Camping- and leisure areas
 - Public toilets in parks, gardens





• • zirkulierBAR - project

zirkulier**BAR**



Hygienization by heating

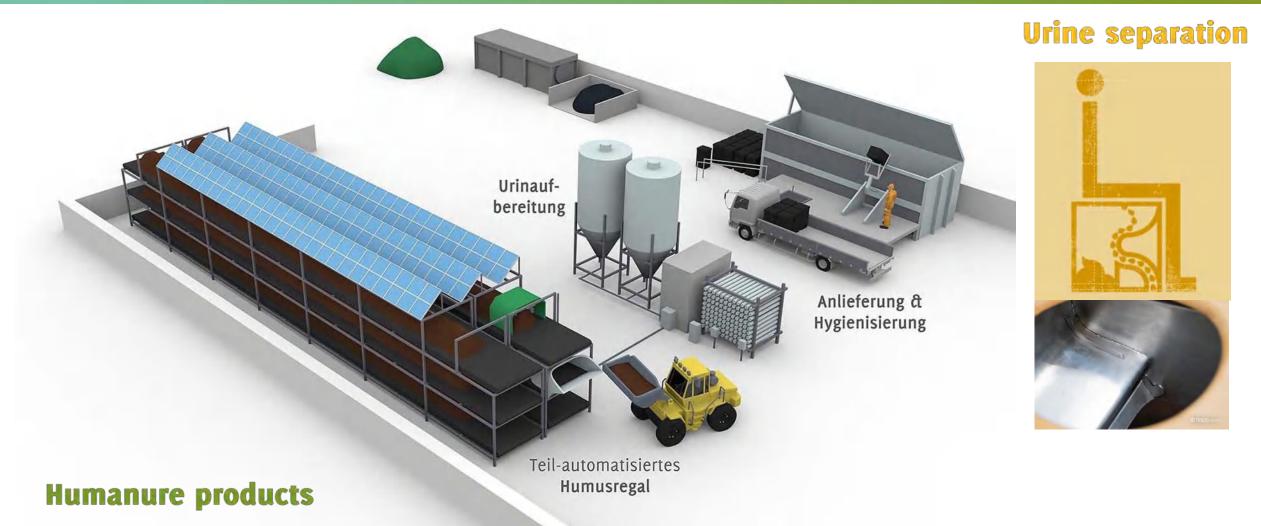


Humification through controlled oxygen-supplied composting

Quality control with laboratory analyses according to DIN SPEC

Fotos: Kreiswerke Barnim, Finizio Future Sanitation

Recycling plant living lab Eberswalde/Barnim



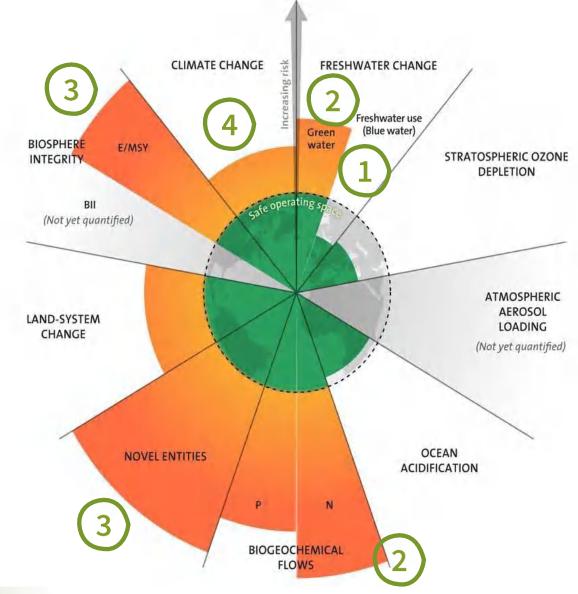
Humus fertilizer from compost toilets "H.I.T." & liquid mineral fertilizer "Aurin"

CC zirkulierBAR

Save water, circulate valuable materials, eliminate harmful substances.

- •
- •

- 1. Conserve fresh water as a resource!
- 2. Nutrients and carbon back into the cycle!
- 3. Conserve water, soil and biodiversity!
- 4. Climate protection and adaptation (No. 2)!



https://www.stockholmresilience.org/research/research-news/2022-01-18-safe-planetary-boundaryfor-pollutants-including-plastics-**exceeded**-say-researchers.html

Thank you!

Katja Searles – Katja.Searles@hnee.de



www.zirkulierBAR.de @ZirkulierBar @ @zirkulier.bar info@zirkulierbar.de



These legal barriers still need to be overcome



Legal barriers in 2023

