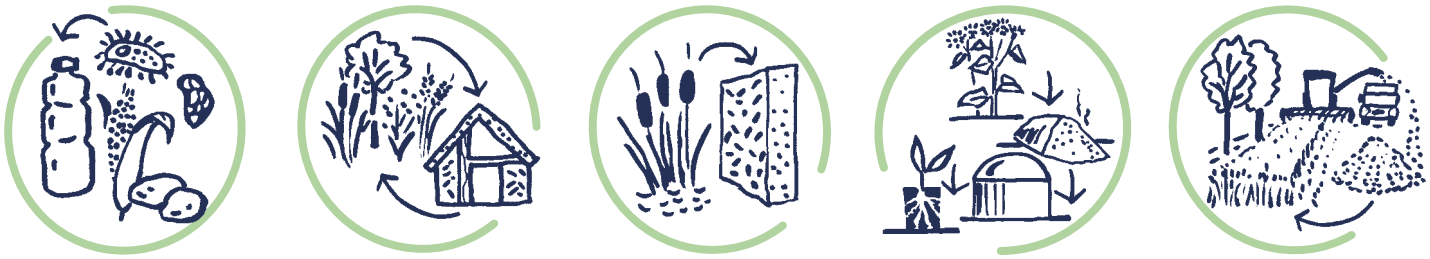
12. und 13. März 2026 | 12th and 13th March 2026
Tagungsort | Venue: Hotel Alte Werft
Ölmühlenweg 1 | 26871 Papenburg

eco CONGRESS

Regional Resources for the Future

Bioeconomy - Circular Economy - Paludiculture



TAGUNGSBAND

Congress book

The Eco Congress is supported by the ministry of food agriculture and consumer protection of Lower Saxony and the provinces Fryslân, Groningen and Drenthe.

Niedersachsen · Provinsje Fryslân · provincie groningen · provincie Drenthe

Konferenzsprache | Congress languages:
Deutsch und Englisch, simultan übersetzt
German and English with simultaneous translation

Wir möchten Sie darauf hinweisen, dass während der Konferenz
Bild- und Tonaufnahmen erstellt werden.
We would like to point out that during the conference there will be audio recordings and photographing.

Organisers:

3N Kompetenzzentrum
Niedersachsen Netzwerk Nachwachsende Rohstoffe und Bioökonomie e. V.
Kompaniestraße 1 | 49757 Werlte
Germany

Ecoras
Duinkerkenstraat 13
9723 BN Groningen
The Netherlands

Liebe Teilnehmerinnen und Teilnehmer des Eco Congress 2026,

herzlich willkommen in Papenburg zum diesjährigen Eco Congress unter dem Motto »Regional Resources for the Future«! Es ist mir eine besondere Freude, Sie hier begrüßen zu dürfen – ob als langjährige Wegbegleiter der Kreislaufwirtschaft oder als neue Impulsgeber für eine nachhaltige Zukunft.

Der Eco Congress steht seit 20 Jahren für den Austausch innovativer Ideen und die Vernetzung engagierter Akteure, die gemeinsam an Lösungen für die drängenden Herausforderungen unserer Zeit arbeiten. In diesem Jahr richten wir unseren Blick besonders auf die Potenziale regionaler Ressourcen und die Frage, wie wir durch intelligente Kreisläufe und kooperative Ansätze eine lebenswerte Zukunft gestalten können.

Ich bin überzeugt: Jeder Beitrag, jede Diskussion und jede Kooperation, die hier entsteht, ist ein wichtiger Schritt auf dem Weg zu einer Wirtschaft, die nicht nur Ressourcen schont, sondern auch Menschen verbindet. Nutzen wir diese beiden Tage, um voneinander zu lernen, uns zu inspirieren und gemeinsam neue Wege zu beschreiten.

Ich wünsche Ihnen anregende Gespräche, wertvolle Erkenntnisse und eine bereichernde Zeit in Papenburg!

Herzlichst,

Carolin Schneider & das Team vom 3N Kompetenzzentrum Niedersachsen Netzwerk Nachwachsende Rohstoffe und Bioökonomie e.V.

Beste deelnemers aan het Eco Congress 2026,

van harte welkom in Papenburg bij het Eco Congress van dit jaar met het motto “Regional Resources for the Future”!

Het Eco Congress is al 20 jaar een begrip. Enerzijds waar het gaat om het uitwisselen van innovatieve ideeën, anderzijds in het (grensoverschrijdend) verbinden van partijen die gezamenlijk werken aan oplossingen voor de uitdagingen van onze tijd. Dit jaar staat het Eco Congress in het teken van regionale hulpbronnen. We richten ons daarbij op de vraag hoe we door slimme kringlopen en samenwerking een leefbare toekomst kunnen vormgeven. Namens Ecoras ben ik verheugd dat wij de editie van dit jaar samen met 3N hebben mogen organiseren.

Elke bijdrage, elke discussie en elke samenwerking die tijdens het Eco Congress ontstaat vormt een belangrijke stap op weg naar een economie die efficiënt omgaat met hulpbronnen en die mensen met elkaar verbindt. Laten we deze twee dagen benutten om van elkaar te leren, ons te laten inspireren en samen nieuwe wegen in te slaan.

Hartelijke groet,

Cor Kamminga & het team van Ecoras

9:00

Welcome

By the organisers

9:10 - 10:40

Keynotes: The German and the Dutch perspective

Manfred Tannen
Vizepräsident Landwirtschaftskammer Niedersachsen
Vice President Chamber of Agriculture in Lower Saxony

Miriam Staudte
Niedersächsische Ministerin für Ernährung, Landwirtschaft und Verbraucherschutz
State Minister of Food, Agriculture and Consumer Protection in Lower Saxony

Gitta Connemann
Parlamentarische Staatssekretärin im Bundesministerium für Wirtschaft und Energie
Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Energy

Friso Douwstra
Regionalminister der Provinz Friesland
Regional Minister of the province of Friesland

Dr. Norbert Gebbe
Das Innovationsökosystem Niedersachsen und die Rolle von Niedersachsen.next
The innovation eco-system in Lower Saxony and the role of Niedersachsen.next
Niedersachsen.next

10:40 - 11:00 **Kaffee-Pause** | Coffee Break

11:00 - 12:00

Keynotes: The European perspective

Jens Gieseke
Mitglied des Europäischen Parlaments für die Region Westniedersachsen – Clean industrial deal
Member of the European Parliament for the region Western Lower Saxony - Clean industrial deal

Stephanie Koch
Interreg-Geschäftsführerin in der Ems-Dollard-Region
Managing Director of Interreg in the Ems-Dollard-Region

Pieter Faber
Leiter des EU-Büros Cities Northern Netherlands
Head of EU Office Cities Northern Netherlands

12:00 - 13:00 **Mittagessen** | Lunch Break

Nutzen Sie diese Gelegenheit, um sich die Poster, Ausstellungsstände und die Unternehmenspräsentation anzusehen oder sich mit anderen Teilnehmenden und Referent*innen auszutauschen.
Take this opportunity to view the posters, exhibition booths and the company presentation or to exchange ideas with other participants and speakers.

Keynotes: The German and the Dutch perspective

Manfred Tannen — 9:10 Uhr
Vizepräsident Landwirtschaftskammer Niedersachsen

Miriam Staudte — 9:30 Uhr
State Minister of Food, Agriculture and Consumer Protection in Lower Saxony

Gitta Connemann — 9:50 Uhr
Parliamentary State Secretary at the Federal Ministry for Economic Affairs and Energy

Friso Douwstra — 10:00 Uhr
Regional Minister of the province of Friesland

Dr. Norbert Gebbe — 10:20 Uhr
Niedersachsen.next GmbH

Keynotes: The European perspective

Europäischer Deal für saubere Industrie

11:00 Uhr

European Clean Industrial Deal

Jens Gieseke

Mitglied des Europäischen Parlaments

Europa hat verstanden, dass ein rein ökologisch definierter Green Deal nicht mehr genügt. Der Clean Industrial Deal markiert die strategische Neuausrichtung hin zu industrieller Wettbewerbsfähigkeit, technologischer Souveränität und resilienten Wertschöpfungsketten. Es ist der Kern einer modernen Standortpolitik: CO_2-Reduktion bleibt Ziel, aber Energiepreise, industrielle Skalierung, Fachkräfte, Finanzierung und Handelspolitik rücken gleichberechtigt ins Zentrum. Entscheidend ist die industrielle Umsetzung – vom Hochlauf sauberer Technologien bis zur Sicherung kritischer Rohstoffe – statt weiterer normativer Ambitionen und Ideologien ohne Realwirtschaft. Europa kann seine Wettbewerbsfähigkeit nur dann steigern, wenn ökologische Transformation und ökonomische Machtprojektion zusammen gedacht werden.

Grenzüberschreitende Innovationen für eine Kreislaufwirtschaft und Bioökonomie: die deutsch-niederländische INTERREG Erfahrung

11:20 Uhr

Cross-Border Innovation for a Circular Bioeconomy: The German–Dutch Interreg Experience

Stephanie Koch

Managing Director of Interreg in the Ems-Dollard-Region

The German–Dutch border region is one of Europe's most dynamic laboratories for sustainable innovation. For more than three decades, Interreg programmes have supported cross-border cooperation between businesses, research institutions and public authorities to address shared challenges such as climate change, resource efficiency and sustainable growth.

This keynote explores the potential of German–Dutch cooperation to enable joint experimentation, knowledge exchange and pilot solutions that would be difficult to realise within national frameworks alone. Drawing on experiences from the Interreg Deutschland–Nederland programme, the presentation highlights how cross-border partnerships stimulate innovation, strengthen regional competitiveness and accelerate the transition towards a circular and bio-based economy.

The German–Dutch example demonstrates how European territorial cooperation can transform regional complementarities into concrete innovation projects and sustainable economic opportunities.

Grenzüberschreitende Kreislaufwirtschaft und Bioökonomie – Ein Katalysator für die Wettbewerbsfähigkeit Europas

11:40 Uhr

Cross Border Circular and Bio Economy: A Catalyst for Europe's Competitiveness

Pieter Faber

Head of EU Office Cities Northern Netherlands

Against the background of the Strategic Agenda of the European Council and the Political Guidelines of the European Commission, Pieter Faber discusses the value of cross-border cooperation on the theme of the "Bio-Circular Economy." Such cooperation is a catalyst for one of the EU's top priorities in 2026: competitiveness and economic growth.

The Clean Industrial Deal plays a central role in this regard. The Clean Industrial Deal is built on six pillars, including circularity and access to materials. Pieter Faber highlights in particular the Circular Economy Act (2026), which is intended to establish a single market for waste and secondary materials. One of the goals of the Circular Economy Act is that by 2030 24% of material use in the EU should be circular.

Pieter Faber concludes with a forward-looking perspective on the EU budget for 2028–2034. He discusses how this budget will be different and why that matters.

13:00 - 13:45

BIO-ZIRKULÄRE KUNSTSTOFFE – AKTUELLE TECHNOLOGIE
BIO-CIRCULAR PLASTICS

Kreislaufwirtschaft für Kunststoffe
Tobias Deneke und Prof. Dr.- Ing. Andrea Siebert-Raths
IfBB – Institut für Biokunststoffe und Bioverbundwerkstoffe, Hochschule Hannover

Die nördlichen Niederlande: Transformation einer Gasförderregion zu einem Vorreiter im Bereich der biobasierten Energiewende
Prof. Dr. André Heeres
Hanze UAS

Fragen aus dem Publikum | *Questions from the audience*

13:45 - 14:30

Biobasierte Gebäude
BIO-BASED BUILDINGS

Prof. Dr.-Ing. Heinrich Wigger and Amelie Fiegert
Jade UAS Oldenburg

Erik Fledderus
Circulair Friesland

14:30 to 14:45
Praktische Beispiele | Practical Examples **- 3 Pitches**

Jan Jaap Folmer
Uppact B.V.

Coen Verboom
Bouwgroep Dijkstra Draisma

Dipl.-Ing. Hartmut Schoon
Enneatech AG

14:45 - 15:15 **Kaffeepause** | Coffee Break

15:15 - 16:00

PALUDIKULTUR – STAND DER TECHNIK
PALUDICULTURE – STATE OF THE ART

Ein Überblick aus niederländischer Perspektive
Dr. Christian Fritz
Radboud University Nijmegen

Online-Präsentation
Ein Überblick aus deutscher Perspektive
Prof. Dr. Gerald Jurasinski
Greifswald Mire Centre/ University of Greifswald

Diskussion | *Discussion*

16:00 - 16:45

BIOENERGIE UND KASKADENVERWERTUNG
BIOENERGY AND CASCADE UTILISATION – PEAT SUBSTITUTES OVERVIEW

Torfersatz aus Gärresten: Chance für Biogas und Motor für produktive, multifunktionale Anbausysteme
Peat substitute from digestate: Chance for biogas and driver for productive, multifunctional cultivation systems
Prof. Dr. Walter Stinner
Deutsches Biomasseforschungszentrum (DBFZ)

Nachwachsende Rohstoffe für die Substratindustrie und den Gartenbau – Potenziale, Grenzen und regulatorische Rahmenbedingungen
Renewable resources for the substrate industry and horticulture – potentials, limits and regulatory frameworks
Philip Testroet
Industrieverband Garten e.V. (IVG)

Fragen aus dem Publikum | *Questions from the audience*

16:45 - 17:55

CO_2-MÄRKTE UND VORSCHRIFTEN
CO_2-MARKETS AND REGULATIONS

Eise Spijker
JIN Climate and Sustainability

Erikjan van Huet Lindemann
Dutch Carbon Company B.V.

Online-Präsentation
Das dänische grüne Dreiparteienabkommen – Vereinbarung und Perspektiven für die Landwirtschaft
The Green Tripartite: Agreement and agricultural perspectives
Niels Peter Nørring
Dept. of Climate & EU Affairs, Danish Agriculture & Food Council

17:40 - 17:55
Praktische Beispiele für Paludi-Produkte
Practical Examples Paludi Products **- 3 Pitches**

Phillip Rutsch
OBI Group Holding

Sjanie Hindenberg
Klasmann-Deilmann GmbH

Petra Boorsma
Biosintrum

17:55 **Closing – Preview on Day 2**

19:00 **Konferenz-Dinner** | Conference Dinner

Dinner speech
Vanessa Gattung
Bürgermeisterin der Stadt Papenburg
Mayor of the City of Papenburg

BIO-ZIRKULÄRE KUNSTSTOFFE – AKTUELLE TECHNOLOGIE | BIO-CIRCULAR PLASTICS

Kreislaufwirtschaft für Kunststoffe

13:00 Uhr

Circular Economy for plastics

M. Sc. Tobias Fritjof Deneke, Prof. Dr.- Ing. Andrea Siebert-Raths

Hochschule Hannover - Institute for Bioplastics and Biocomposites

Over recent decades, plastic production in Europe has surged, reaching 60 million tonnes in 2016, with packaging accounting for 26% of all applications. While plastic packaging delivers benefits—such as reducing food waste and transport emissions—its short lifespan leads to significant waste challenges; of the 25.8 million tonnes of plastic waste generated annually in Europe, less than 30% is recycled, while most is landfilled or incinerated. The EU's 2018 plastics strategy aims for all plastic packaging to be reusable or recyclable by 2030. The newly adopted Packaging and Packaging Waste Regulation (PPWR) marks a transformative step by setting mandatory design, reuse, and recycling requirements as well as recycled content targets for packaging across the EU. However, to fully realize a circular plastics economy, further legislation, decisive action, and a fundamental shift in waste management culture toward circularity will be necessary at all levels of society and industry.

Die nördlichen Niederlande: Transformation einer Gasförderregion zu einem Vorreiter im Bereich der biobasierten Energiewende

13:20 Uhr

The Northern Netherlands: Transformation of a gas-producing region into a forerunner in the biobased circular transition

André Heeres

Hanze

The Northern Netherlands is a unique environment for sustainably-minded (bio)chemical businesses due to the regional availability of renewable feedstock, energy, and existing infrastructure, as well as the proximity to excellent knowledge centers and upscaling facilities. Within the last few decades, several developments unravelled in the biobased circular transition. Exploring how these developments were initiated, this presentation aims to show the opportunities that this region has to offer today. It also makes a strong argument for the economic potential arising from the creative combination of available feedstocks within an innovative ecosystem, providing necessary framework conditions and fostering close intersectoral collaboration.

BIO-BASIERTE GEBÄUDE | BIO-BASED BUILDINGS

Building BioBased – Vom Moor in die Gebäudehülle Typha als Dämmstoff

13:45 Uhr

Building BioBased – From the bog to the building envelope Typha as insulation material

Prof. Dr.-Ing. Heinrich Wigger & Amelie Fiegert B.Eng.

Jade Hochschule Oldenburg

The presentation describes the practical use of Typha in buildings. Together with national and international research partners, Jade University of Applied Sciences has gained broad experience through several research projects covering the entire value chain, from cultivation in peatlands and harvesting to processing, material development, and construction. The results have been applied in different building projects or are currently being implemented. These include the Science Cube in Werlte, the EEP building on campus, the extension of an institute building and a Tiny House with wall assembly models. The Jade University of Applied Sciences supports both the construction process and the collection and analysis of building physics measurements, supported by simulations, in order to determine reliable material parameters for Typha-based insulation materials.

Bio-based building 14:05 Uhr

Erik Fledderus
Circulair Friesland

Praktische Beispiele | Practical Examples **- 3 Pitches** 14:30 Uhr

Jan Jaap Folmer
Uppact B.V.

Coen Verboom
Bouwgroep Dijkstra Draisma

Dipl.-Ing. Hartmut Schoon
CEO Enneatech AG

PALUDIKULTUR – STAND DER TECHNIK | PALUDICULTURE – STATE OF THE ART

Paludikultur - Ein Überblick aus niederländischer Perspektive 15:15 Uhr

Paludi culture – an overview from the Dutch perspective

Dr. Christian Fritz
Radboud University Nijmegen

Online Präsentation

Paludikultur - Ein Überblick aus deutscher Perspektive 15:35 Uhr

Paludi culture – an overview from the German perspective

Prof. Dr. Gerald Jurasinski
Greifswald Mire Centre/ University of Greifswald

BIOENERGIE UND KASKADENVERWERTUNG | BIOENERGY AND CASCADE UTILISATION

Torfersatz aus Gärresten: Chance für Biogas und Motor für produktive, multifunktionale Anbausysteme

16:00 Uhr

Peat substitute from digestate: Chance for biogas and driver for productive, multifunctional cultivation systems

Prof. Dr. Walter Stinner

Deutsches Biomasseforschungszentrum (DBFZ)

As shown by Hermus (2025), digestate from biomass plants provides a good source to substitute peat and protect peatlands. For biogas plants, this opens opportunities for its development to biogas + culture substrate biorefineries. However, in farming systems with biogas production, digestate is an important source of humus reproduction for arable lands. For this reason, such biorefineries, using digestate fibers, requires humus reproducing crops on agricultural side. As shown by Ebertseder et al. (2014), high humus reproduction is provided by perennial legume leys, catch crops etc. Permanent crops like Silphium perfoliatum or mixtures from wild plants also deliver high humus reproduction (Emmerling 2016). All these cropping elements deliver multiple benefits for agricultural systems, enabling reduced needs for pesticides, enhancing and protecting biodiversity, protecting soils against erosion, improving water household (infiltration, restoring field capacity) and avoiding nutrient losses into ground or surface water.

Nachwachsende Rohstoffe für die Substratindustrie und den Gartenbau – Potenziale, Grenzen und regulatorische Rahmenbedingungen

16:20 Uhr

Renewable raw materials for the substrate industry and horticulture – potentials, limits and regulatory frameworks

Philip Testroet

Industrieverband Garten (IVG) e.V.

The discussion on renewable raw materials for the substrate industry and horticulture must be framed within the global scale of emission reduction efforts and realistic production requirements. While peat reduction strategies are widely promoted, peat remains an essential and, in some applications, irreplaceable raw material, particularly in professional horticulture and mushroom (champignon) production, due to its unique physical, chemical and biological properties.

This presentation examines Sphagnum mosses (peat mosses), Miscanthus, and digestates from biogas production as renewable raw materials for growing media. Sphagnum is assessed with regard to paludiculture-based production, substrate performance and scalability constraints. Miscanthus is discussed as an agriculturally produced biomass resource with structural benefits but limited functional equivalence to peat and significant processing requirements. Digestates are considered as nutrient-rich secondary raw materials, while highlighting challenges related to variability, salinity, hygiene and regulatory classification.

The contribution emphasises that future substrates will still contain peat and rely on material combinations rather than one-to-one substitution, and that alternative raw materials must be evaluated against realistic global emission reduction potential, agronomic performance and regulatory feasibility. The presentation concludes by underlining the decisive role of regulatory frameworks in shaping innovation and market uptake.

CO_2-MÄRKTE UND VORSCHRIFTEN | CO_2-MARKETS AND REGULATIONS

The valorization of climate performance - avoid - reduce -remove

Eise Spijker
JIN Climate and Sustainability

16:45 Uhr

A voluntary carbon market enables the creation of so-called carbon credits/certificates which can be sold to generate extra revenue for the company/person who implements the climate friendly technology of practice. One example is SNK. SNK a domestic voluntary carbon market certification scheme in The Netherlands, that has already approved a range of different project types and methodologies.
Aside from selling carbon certificates there are different types/classes of support schemes that could potentially also be suitable for generating financial value for a specific (carbon farming) activity that avoids, reduces emissions or removes carbon from the atmosphere.
There is a broad portfolio (or menu) of carbon farming technologies/practices that a farmer could adopt to a) generate farm-income and b) to become more climate-friendly/net zero was developed and will be presented during the presentation. However, when implementing multiple carbon farming practices on-farm there are some challenges in relation to efficient monitoring, reporting, verification and certification (administrative burden) as well as limiting the search costs to find the optimal financial valorisation route.
This leads to the conclusion that the optimal (financial) valorization of climate performance claims is a quest/challenge for every carbon farmer/entrepreneur. The challenges ahead are significant, and require a streamlining effort. Yet voluntary carbon markets offers promising perspectives to pave the way for incremental finance for climate friendly technologies.

Erikjan van Huet Lindemann
Dutch Carbon Company B.V.

17:00 Uhr

Online Präsentation

Das dänische grüne Dreiparteienabkommen – Vereinbarung und Perspektiven für die Landwirtschaft

17:25 Uhr

The Green Tripartite: Agreement and agricultural perspectives

Niels Peter Nørring
Dept. of Climate & EU Affairs, Danish Agriculture & Food Council

The Green Tripartite Agreement, adopted in November 2024, consists of a series of initiatives within the agricultural sector aimed at reducing agriculture's impact on climate, environment, and nature, while still supporting continued high production levels. A range of stakeholders – including the agricultural sector – agreed on the recommendations, which later formed the basis of the political agreement.
The agreement contains several different measures. Among other things, a CO_2 tax will be introduced on emissions from livestock production, lowland peat soils will be rewetted, extensive afforestation will be carried out, and investments will be made in pyrolysis and the storage of biochar. Approximately 7 billion euros have been allocated.
The fundamental premise of the agreement is to ensure cooperation and synergy gains, and that the more targeted approach will enable continued efficient production on the remaining areas.

Praktische Beispiele Paludi-Produkte | Practical Examples Paludi Products **- 3 Pitches** 17:40 Uhr

Phillip Rutsch

OBI Group Holding

Der Paludi-Karton wurde möglich gemacht durch das Zusammenspiel von Handel, Industrie, Landwirtschaft, Wissenschaft und Politik.Wir haben klar gezeigt, dass nachhaltige Lösungen nicht im Alleingang entstehen, sondern wenn alle Verantwortung übernehmen und ins Handeln kommen. Aber, es bleiben Hürden. Genau deshalb braucht es Verlässlichkeit und den klaren Willen von allen Stakeholdern, um von Pilotprodukten in den Standard zu gelangen.

Sjanie Hindenberg

Klasmann-Deilmann GmbH

Sphaxx This innovative, sustainably produced sphagnum raw material from Klasmann-Deilmann sets new benchmarks for quality and purity. Cultivated and processed under controlled conditions, Sphaxx delivers pure, healthy planting material in reliable, consistent volumes. By ensuring dependable availability, it removes one of the key barriers to establishing sphagnum farming areas and allows for immediate, scalable implementation.

Petra Boorsma

Biosintrum

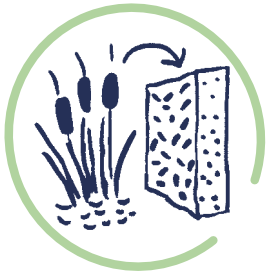
Sustainable recycled reed: the future of construction and interior design

We transform discarded reed roofs into high-quality, new sheet material – a sustainable alternative to incineration and a smart way to store CO_2 for the long term. Ideal for construction companies and interior designers who opt for circular, environmentally friendly solutions. We also work with nature conservation organisations in marshlands to give perennial reed, short stems and other mowing residues – which are released annually in addition to reed cutting – a valuable second life. This includes pressing sustainable boards and exploring innovative applications such as plant fermentation. With our recycled reed, we are not only committed to the circular economy, but we are also creating new opportunities for sustainable construction and nature conservation.

Dinner speech

Vanessa Gattung

Mayor of the City of Papenburg



Ab 9:15 Uhr finden zwei parallele Veranstaltungen statt:
im Saal 1 »Theater« und im Saal 2 »Stadthalle«
Starting at 9:15 two sections will run in parallel,
in Room 1 »Theater« and in Room 2 »Stadthalle«

9:15 - 10:45

PALUDIKULTUR – VOM FELD ZUM PRODUKT
PALUDICULTURE – FROM FIELD TO PRODUCT

Opening & Moderation
Frans Debets & Jessica K. Meißner
Debets Advies & 3N Kompetenzzentrum e.V.

Block 1: Torfmoos | Sphagnum
Silke Kumar
Torfwerk Moorkultur Ramsloh
Dr. Jens-Uwe Holthuis
Stiftung Naturschutz LK Diepholz
Dr. Gert-Jan van Duinen
Stichting Bargerveen

Block 2: Rohrkolben | Typha
Elisabeth Schwertfeger
Naturschutzstiftung Lk Cuxhaven
Florian Schick
Jade UAS Oldenburg
Jonas-Rumi Baumann
Hochschule Bremen
Tjeerd Veenhoven
Studio Tjeerd Veenhoven

Block 3: Nasswiesen | Wet meadow
Birthe Godt
Michael Succow Stiftung
Frank Havemeyer
Niedersächsisches Landvolk Kreisv. Osterholz e. V.
Phillip Rutsch
OBI Group Holding
Jasper van Belle
Veen Innovatie Polder Hegewarren

10:45 - 11:15 **Kaffeepause** | Coffee break

Block 1: Torfmoos-Anbau | Sphagnum farming

9:25 Uhr

Silke Kumar
Torfwerk Moorkultur Ramsloh

Um Paludikultur wirklich auszuweiten, brauchen wir Rechtssicherheit bei Genehmigungsverfahren, Agrarförderung (GAP) und Produktionskriterien. Paludikulturprodukte sollten nicht ausgeschlossen bzw. abgelehnt werden, weil sie etwas »Neues« sind.

Dr. Jens-Uwe Holthuis
Stiftung Naturschutz LK Diepholz

Wir sind in den Startlöchern!

Dr. Gert-Jan van Duinen
Stichting Bargerveen

The right timing for upscaling the wet use of peatlands and sustainable application of paludi biomass is now. Rewetting of drained peat soils, growing wet crops, and restoring degraded mire ecosystems and their services will become much more effective, efficient and sustainable if we do it together on the larger landscape scale.

Block 2: Typha

9:45 Uhr

Elisabeth Schwertfeger
Naturschutzstiftung Lk Cuxhaven

Rohrkolbenanbau als Paludi-Dauerkultur hat dort Sinn, wo wenig Aufwand für die Flächeneinrichtung (Bau von Verwallungen, Installation von Pumpentechnik) betrieben werden muss – im Optimalfall liegt die Fläche in einer Senke und ist bereits nass oder kann ohne Pumpentechnik aus Vorflutern bewässert werden.

Florian Schick
Jade UAS Oldenburg

Wir sind alle Pioniere, an jeder Stelle der Wertschöpfungskette.

Jonas-Rumi Baumann
Hochschule Bremen

Typha-Biomasse hat im Sinne einer Kaskadennutzung ein vielversprechendes Potenzial als Komponente in nachhaltigen, biobasierten Kunststoffen. Aufschluss- und Vorbehandlungsschritte könnten die Nutzbarkeit der Biomasse weiter verbessern.

Tjeerd Veenhoven
Studio Tjeerd Veenhoven

The opportunities for Paludi based fibre products is growing and our gained knowledge and experience is now implemented to move towards a commercial and sustainable proposition.

Block 2: Nasswiesen | Wet meadow

10:00 Uhr

Birthe Godt
Michael Succow Stiftung

*Landwirt*Innen müssen auf ihren Moorflächen wirtschaften und Einkommen erzielen. Ein fruchtbarer, gesunder Boden stellt ihre Wirtschaftsgrundlage dar. Paludikultur kann ein solches Einkommen dauerhaft und nachhaltig generieren.*

Frank Havemeyer
Niedersächsisches Landvolk Kreisv. Osterholz e. V.

Es ist an der Zeit, MOORwärts zu gehen: Moorflächen sind kein Problemraum, sondern Innovationsraum – für neue Geschäftsmodelle, neue Wertschöpfung und eine zukunftsfähige Landwirtschaft.

Phillip Rutsch
OBI Group Holding

Der Paludi-Karton zeigt: Wenn Handel, Industrie, Landwirtschaft, Wissenschaft und Politik gemeinsam handeln, sind nachhaltige Lösungen möglich.

Jasper van Belle
Veen Innovatie Polder Hegewarren

After 10 years of trials we've come to a point where paludiculture at farm scale is rapidly becoming a practical option, however development of the business model to make the switch to paludiculture economically viable is lagging. I think we need policy interventions to make paludiculture an economic reality.

11:15 - 13:00

NACHHALTIGE LANDNUTZUNG UND NÄHRSTOFFKREISLÄUFE
SUSTAINABLE LAND USE AND NUTRIENT CYCLES

Optimierung der Stickstoffverwertungseffizienz in europäischen Tierhaltungssystemen vom Futter bis zur pflanzlichen Stickstoffverwertung
Optimizing nitrogen use efficiency in European livestock systems from feed to plant N use
Dr. Frank Liebisch
Agroscope

Gärrest als Bodensubstrat – erste Ergebnisse aus dem BiToP-Projekt
Digestate as a soil substrate – first results from the BiToP project
Sascha Hermus
3N Kompetenzzentrum e.V.

Neues Denken in der Landwirtschaft und im Düngemanagement: Vom Düngerüberschuss zur Bodenresilienz
Re-thinking Farming and Manure Management: From Manure Surplus to Soil Resilience
Dr. Chris Schott
Wetsus European Centre of Excellence for Sustainable Water Technology

Maßnahmen und Fördermöglichkeiten des deutschen »Aktionsprogramms Natürlicher Klimaschutz« (ANK)
Measures and funding opportunities offered by German 'Federal Action Plan on Nature-based Solutions' (ANK)
Dr. Elke Burow
Kompetenzzentrum Natürlicher Klimaschutz (KNK) at ZUG gGmbH

Agroforstwirtschaft für nachhaltige Landnutzung – aktueller Stand und Entwicklung in Deutschland
Agroforestry for sustainable land use – current state and development in Germany
Michelle Breezmann
Deutscher Fachverband für Agroforstwirtschaft (DeFAF)

13:00 - 14:00 **Mittagessen |** Lunch Break

Nutzen Sie diese Gelegenheit, um sich die Poster, Ausstellungsstände und die Unternehmenspräsentation anzusehen oder sich mit anderen Teilnehmenden und Referent*innen auszutauschen.
Take this opportunity to view the posters, exhibition booths and the company presentation or to exchange ideas with other participants and speakers.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NACHHALTIGE LANDNUTZUNG UND NÄHRSTOFFKREISLÄUFE
SUSTAINABLE LAND USE AND NUTRIENT CYCLES

Optimierung der Stickstoffverwertungseffizienz in europäischen Tierhaltungssystemen vom Futter bis zur pflanzlichen Stickstoffverwertung

11:15 Uhr

Optimizing nitrogen use efficiency in European livestock systems from feed to plant N use

Dr. Frank Liebisch
Agroscope Switzerland

Nitrogen (N) is crucial for agriculture. Its large production led to high N surplus, causing severe negative environmental externalities. The reduction of N losses in livestock systems and consequent enhancement of their nitrogen use efficiency (NUE) represents a key lever to reduce the N surplus meeting European environmental targets. This talk evaluates potentials to improve NUE of European cattle and pig livestock systems from feed to plant N use along the livestock system cascade. It discusses options improving feed NUE, measures to reduce N losses at housing, manure storage, application and crop N recovery. The findings are synthesized using exemplary farms from European regions, to highlight potentials for livestock system NUE improvements. To achieve livestock system NUE of 75 % to 85 % scaled implementation of best available technologies has to go hand in hand with legislative harmonization and targeted development of additional reduction measures and auxiliary tools for farmers.

Gärrest als Bodensubstrat – erste Ergebnisse aus dem BiToP-Projekt

11:40 Uhr

Digestate as a soil substrate | first results from the BiToP project

M.Sc. Sascha Hermus
3N Kompetenzzentrum Nachwachsende Rohstoffe und Bioökonomie e.V.

BiToP aims to develop a process for treating fermentation residues using biorefining methods so that they can be used as peat substitutes (TES) in horticulture, thereby helping to reduce peat consumption and greenhouse gas emissions. The basis for input into biogas plants is, for example, farm manure, only 22% of which is currently used and which still offers considerable potential for exploitation (technical and ecologically recoverable potential in Lower Saxony: 12.3 million tonnes). At the same time, political pressure to phase out peat is increasing, as hobby soils are to be largely peat-free from 2026 and professional growing media from 2030.
BiToP addresses this conflict by conditioning the solid phase of biogas digestate through separation, washing and further process steps so that it can be used as a qualitatively suitable peat substitute component. Based on a scenario calculation with 10,000 biogas plants, a fermentation residue quantity of 12,790 tonnes per plant and 6% dry matter, the presentation shows that, depending on the degree of separation (10–50% separated dry matter) and subsequent processing, several million cubic metres of potential peat substitute could theoretically be made available per year in Germany. Decentralised processing is intended to minimise transport costs, enrich nutrients and salts in the liquid phase in a targeted manner and produce a salt- and nutrient-depleted solid phase that is attractive for the substrate market.
In several washing tests (multi-stage runs with variation of solid and liquid phase recirculation), the pH value, salt content and concentrations of nitrogen, phosphate and potassium are systematically compared with reference values for substrate compost and coconut products. The results show that repeated washing gradually reduces the salt and nutrient content of the solid phase to levels that appear fundamentally suitable for use as a peat substitute component, while at the same time producing nutrient-rich wash water that can be used separately or further treated. The presentation derives from this the potential to develop fermentation residues into a dual value-added product stream: on the one hand, climate-friendly peat substitutes, and on the other, concentrated nutrient solutions for more efficient use in agriculture. One focus is on the transferability of the results and networking with existing initiatives in order to establish practicable process chains for decentralised fermentation residue processing and to open up new business models in the field of peat-reduced substrates for biogas plant operators and substrate manufacturers.

Neues Denken in der Landwirtschaft und im Düngemanagement: Vom Düngerüberschuss zur Bodenresilienz

12:00 Uhr

Re-thinking Farming and Manure Management: From Manure Surplus to Soil Resilience

Dr. Chris Schott
Wetsus European Centre of Excellence for Sustainable Water Technology

ReFarM – Re-thinking Farming and Manure Management – addresses one of the central challenges in livestock-intensive regions: nutrient imbalance caused by manure surpluses. Animal manure contains valuable macronutrients, particularly phosphorus (P) and nitrogen (N), yet their fixed ratio rarely matches crop and soil demands. This mismatch leads to over-application of phosphorus, regional nutrient accumulation, and increased environmental pressures.

ReFarM develops and pilots an integrated approach to selectively recover phosphorus from animal manure through controlled precipitation processes, enabling its separation from nitrogen. By producing distinct nutrient streams, phosphorus can be applied where soils require replenishment, while nitrogen can be managed according to crop uptake capacity or further processed.

This targeted nutrient management improves manure valorisation, reduces emissions and nutrient losses, and contributes to circular fertiliser systems. By aligning nutrient recovery with soil needs, ReFarM supports climate-resilient agriculture and a more balanced regional nutrient cycle.

Maßnahmen und Fördermöglichkeiten des deutschen »Aktionsprogramms Natürlicher Klimaschutz« (ANK)

12:20 Uhr

Measures and funding opportunities offered by German 'Federal Action Plan on Nature-based Solutions for Climate and Biodiversity' (ANK)

Elke Burow
Kompetenzzentrum Natürlicher Klimaschutz (ZUG gGmbH

The world's soils act as the largest terrestrial carbon sink and almost two thirds of all living organisms exist in this ecosystem(1,2). However, many of the global ecosystems (e.g. >90% of European peatlands3) and their services are no longer functional. Therefore, the German 'Federal Action Plan on Nature-based Solutions for Climate and Biodiversity (ANK) was published in 2023 aiming to support the preservation and restoration of ecosystems. It addresses e.g. peatlands, (mineral) soils and forests. Measures in the form of funding opportunities have been established e.g. for protecting and rewetting of peatlands, conserving cultivation of organic and mineral soils, and the establishment of hedges, agroforestry systems as well as forests. ANK will run until 2029. The ministry (BMUKN*) has recently proposed a future draft of the programme with focus on those ecosystems having a high impact on the climate (peatlands, forests and mineral soils beneath grassland and arable land).

Agroforstwirtschaft für nachhaltige Landnutzung – aktueller Stand und Entwicklung in Deutschland

12:40 Uhr

Agroforestry for sustainable land use – current status and developments in Germany

Michelle Breezmann
Deutscher Fachverband für Agroforstwirtschaft

Der Deutsche Fachverband für Agroforstwirtschaft (DeFAF e.V.) setzt sich für die Verbreitung der Agroforstwirtschaft in Deutschland ein. Die Vielfalt der Agroforstsysteme sind ein wesentlicher Vorteil dieser nachhaltigen Landnutzung. In vielen Projekten des DeFAF e.V. werden unterschiedlichste Parameter untersucht und praxisnah aufbereitet. Auch für eine Verbesserung der Förderbedingungen setzt sich der DeFAF ein. Hierbei lebt und wirkt er vor allem durch das starke Engagement seiner Mitglieder.

14:00 - 16:00

BIOENERGIE UND KASKADENNUTZUNG – TORFERSATZSTOFFE
BIOENERGY AND CASCADE UTILISATION – PEAT SUBSTITUTES

Opening
Dr. Frank Köster
3N Kompetenzzentrum e.V.

Project PeatFree Substrates – Ergebnisse von Anbauversuchen und Silphie-Vergärung
Results of cultivation trials and silphium fermentation
Florian Ruhnau
HS Osnabrück

Peter Schreurs
Agrar Innovatie Nederland B.V.

Project From Grass to Gas
Ingrid Klinge
New Energy Coalition

Die Zukunft der gasförmigen Bioenergie
Future of gaseous bioenergy
Joost Kuhlenkamp
Landesverband Erneuerbare Energien Niedersachsen (LEE)

Biogas in Lower Saxony – Inventory 2024
Michael Kralemann
3N Kompetenzzentrum e.V.

Fazit | Abschiedsrede
Conclusion | On the Stairs: farewell speech

Get-Together

BIOENERGIE UND KASKADENNUTZUNG – TORFERSATZSTOFFE
BIOENERGY AND CASCADE UTILISATION – PEAT SUBSTITUTES

Project Peat-free Substrates 14:05 Uhr

Ergebnisse von Anbauversuchen und Silphie-Vergärung

Results from Cultivation Trials and the Evaluation of Silphie Digestate fibers

Florian Ruhnau
Hochschule Osnabrück

The Peat-Free Substrates project aims to develop high-quality peat-free growing media based on fiber-rich digestate derived from mono-fermentation of Silphium perfoliatum. Within this contribution, silphie digestate fibers were evaluated with regard to their suitability as a substrate component for horticultural applications. Several digestate batches were characterized using relevant physical, chemical and biological parameters commonly applied in substrate assessment. In addition, selected substrate variants were tested in a pot experiment with petunia to evaluate plant performance under practical cultivation conditions. The results demonstrate a pronounced batch-to-batch variability and identify chemical constraints as well as limited biological stability as key limiting factors. While silphie digestate fibers are not suitable as a complete peat substitute, mixing ratios of up to 25% were possible without major yield losses, whereas higher proportions negatively affected plant growth. Overall, the findings indicate that silphie digestate fibers may serve as a partial peat substitute following targeted processing and stabilization, particularly for defined horticultural application fields.

Produktion von Silphie-Substrat®

Production of Silphie Substrate®

Peter Schreurs
Agrar Innovatie Nederland B.V.

The Peat-Free Substrates project aims to develop high-quality peat-free growing media based on fiber-rich digestate derived from mono-fermentation of Silphium perfoliatum. Within the project various processing techniques have been tested in order to improve the pH, EC and stability. The main process, Mono Silphie fermentation for biogas, have been tested in order to optimize e.g. reactor temperature, fiber retention time and additives. Also additional methods have been tested concerning washing and separation techniques influencing the EC and Stability. Parallel to the processing techniques different cultivation methods of the crop Silphie have been taken on board to investigate the effect of various fertilizing and nutrients would be. Different harvesting moments have been observed and tested.

Projekt From Grass to Gas

14:35 Uhr

Ingrid Klinge-van Rooij
New Energy Coalition

Der Agrarsektor in der deutsch-niederländischen Grenzregion steht vor erheblichen ökologischen und strukturellen Herausforderungen. Es werden neue Restströme benötigt als Maisersatz. Schon in Ostfriesland „stehen in einem Umkreis von 40 km‘ ca. 5.000 Hektar Grünland zur Verfügung“, was das Potenzial von Grasrestströmen als Biogassubstrat unterstreicht. Das Projekt untersucht die technische, wirtschaftliche und regulatorische Machbarkeit der Grasfermentation, um Emissionen zu reduzieren und neue Wertschöpfungsketten zu erschließen. Analysiert wurden Verfügbarkeit und Qualität von Gras, geeignete Vorbehandlungstechnologien sowie bevorzugte Fermentationssysteme wie der mesophile Pfropfenstromfermenter. Ergänzend wurden rechtliche Rahmenbedingungen in beiden Ländern bewertet. Die Wirtschaftsanalyse zeigt, dass eine Kombination aus Gras und Schweinemist einen rentablen Business Case ermöglichen kann. Innovative Verfahren wie künstliche Pansenreaktoren, CO_2 Methanisierung und nachhaltige Wasserstofferzeugung eröffnen zusätzliche Nutzungspfade. Insgesamt bestätigt das Projekt die technische Machbarkeit und wirtschaftliche Attraktivität einer optimierten Grasfermentation, sofern stabile Substratströme und geeignete politische Rahmenbedingungen gegeben sind.

Die Zukunft der gasförmigen Bioenergie

15:05 Uhr

Future of gaseous bioenergy

Joost Kuhlenkamp
Landesverband Erneuerbare Energien Niedersachsen|Bremen e.V. (LEE)

In the context of the ongoing energy transition, with approximately 60% of electricity in Germany derived from renewable sources, the bottlenecks of this systemic transformation are becoming increasingly apparent. Heating systems for space and industrial processes must be decarbonized, industrial operations are under considerable transformational pressure, and progress in decarbonizing the transport sector remains limited. Despite planned power generation strategies and the expansion of battery storage, dispatchable electricity supply continues to be in high demand.

Addressing these challenges will require a portfolio of solutions, including electrification, hydro- and geothermal energy, biomass, and hydrogen production, with gaseous biomass assuming a particularly significant role. Due to its operational flexibility and the potential to leverage existing infrastructure, gaseous biomass is expected to be increasingly adapted for alternative applications. This presentation examines current trends in the biogas sector, relevant policy perspectives, and necessary actions, while assessing the potential of gaseous biomass in the energy transition.

Biogas in Niedersachsen – Inventur 2024

15:25 Uhr

Biogas in Lower Saxony – Inventory 2024

Michael Kralemann
3N Kompetenzzentrum Nachwachsende Rohstoffe und Bioökonomie e.V.

Biogas verstetigt in Niedersachsen immer mehr die Rolle des klimaschonenden Systemdienstleisters. Während die Menge an eingespeistem Strom leicht zurückgeht, nehmen die Anteile an Wärmenutzung, Flexibilisierung und Biomethanbereitstellung zu.
Ende 2024 waren 1.695 überwiegend landwirtschaftliche Biogasanlagen in Betrieb. Während die Zahl der Anlagen leicht gestiegen ist, verringerte sich die elektrische Bemessungsleistung geringfügig auf 865 MW. Der Zuwachs entfällt vor allem auf kleinere Anlagen, die verstärkt Reststoffe wie Gülle und Festmist einsetzen. Die Biogasanlagen decken 13,7 % der erneuerbaren Stromproduktion des Landes ab. Über Nahwärmenetze wird zusätzlich etwa ein Viertel der aus erneuerbaren Energien erzeugten Wärme bereitgestellt.
Bereits 38 % der installierten Leistung dienen einer bedarfsgerechten Strombereitstellung. Etwa vier von zehn Anlagen haben ihre installierte Leistung überbaut und ihre Kapazität im Durchschnitt verdoppelt, um besser auf Schwankungen im Strommarkt reagieren zu können.
Parallel dazu gewinnt die Aufbereitung von Biogas zu Biomethan an Bedeutung. Derzeit speisen landesweit 42 Anlagen Biomethan in das Erdgasnetz ein.

Ab 9:15 Uhr finden zwei parallele Veranstaltungen statt:
im Saal 1 »Theater« und im Saal 2 »Stadthalle«
Starting at 9:15 two sections will run in parallel,
in Room 1 »Theater« and in Room 2 »Stadthalle«

9:15 - 10:45

BIO-ZIRKULÄRE KUNSTSTOFFE – INITIATIVEN FÜR EINE GRENZÜBERGREIFENDE ZUSAMMENARBEIT 1.0

BIO-CIRCULAR PLASTIC – CONCRETE INITIATIVES FOR CROSS-BORDER COLLABORATION 1.0

Introduction
Cor Kamminga | Ecoras

Are you plesTic ready?
Dr. Martijn Beljaars
Greenwise Campus Circular Plastics

Operative Netzwerke
Operational networks
Dr. Philip Mörbitz
Fraunhofer Institut für Umwelt-, Sicherheits- und Energietechnik

Dipl.-Ing. Hartmut Schoon
Enneatech AG (Representative & Member Kunststoffnetzwerk

René van Bremen
Sustainable Products and Chemicals Cluster (SUSPACC)

Erik Fledderus
Circulair Friesland

Cross border cooperation & Interreg projects

EMPHATI
Pascal Gerlach & Dr. Frank Köster
3N Kompetenzzentrum e.V.

Two4C
Christiaan Bolck | Oost NL

NEXCARB
Christiaan Bolck | Oost NL

10:45 - 11:15 **Kaffeepause** | Coffee break

BIO-ZIRKULÄRE KUNSTSTOFFE – INITIATIVEN FÜR EINE GRENZÜBERGREIFENDE ZUSAMMENARBEIT 1.0
BIO-CIRCULAR PLASTICS – CONCRETE INITIATIVES FOR CROSS-BORDER COLLABORATIO 1.0

Are you plesTic ready?

9:25 Uhr

Dr. Martijn Beljaars

Greenwise Campus Circular Plastics

Greenwise circular plastics, as part of Greenwise Campus is developing a multidisciplinary method to assist sustainable innovations in the field of circular plastics: the plesTic method. Each of the 7 letters represent an area where sustainable innovations face challenges that hinder or prevent them from successfully coming to market: Policy, Logistics, Economy, Social acceptance, Technology, Innovative design and Corporate and community. Knowledge institutes as well as entrepreneurs from the entire ecosystem of the north of the Netherlands are closely involved. The insights gained are valuable both to new innovations trying to come to market as well as existing ones trying to make the next step.

Operative Netzwerke

9:40 Uhr

Kreislaufwirtschaft und biobasierte Kunststoffe bei Fraunhofer UMSICHT

Circular and Bio-based Plastics at Fraunhofer UMSICHT

Dr. Philip Mörbitz

Fraunhofer Institute UMSICHT

Dr Philip Mörbitz is the Group Manager of the Polymer Technology Group at Fraunhofer UMSICHT, specializing in the recycling of conventional and biobased plastics. Key goals in this area include designing mono-material packaging for recyclability, such as stand-up pouches, and creating debonding-on-demand solutions for composite materials. His research focuses on structure-property relationships between polymer composition and their rheological, mechanical, and thermal behaviors. His group explores polymer modification and develops sustainable functional additives, including biobased flame retardants and impact modifiers. Fraunhofer UMSICHT is dedicated to advancing circular and biobased plastics, developing high-performance materials with a focus on recyclability and sustainable lifecycle impacts. By covering the entire value chain, from polymerization to recycling, the institute supports the transition to a circular economy.

Re-Frame Polyamid: Wertschöpfung statt Downcycling

Re-Frame Polyamid: Value Creation Instead of Downcycling

Dipl.-Ing. Hartmut Schoon

Enneatech AG (Representative & Member Kunststoffnetzwerk)

Polyamides (PA) are used as thermal breaks in aluminum window profiles. At the end of their life, the aluminum windows are shredded and the aluminum is recycled. What remains is the shredder light fraction, which consists of a mixture of polyamides, rubber, glass shards, aluminum scraps, foams, other insulating materials, foil paper, paint particles and dirt, which is mostly used for energy recovery. In cooperation with partners, the post-consumer polyamide (PCR-PA) is also extracted from this shredded light fraction. At Enneatech AG, the PCR-PA undergoes a thorough incoming inspection, is analyzed, and processed into high-quality compounds by adding i.e. post-industrial PA and fresh glass fibers in a gentle process. The mechanical properties achieved with the PCR/PIR compound are comparable to the application specifications of virgin material for profile manufacturing. Enneatech AG supplies top class Entron eco compounds based on PCR/PIR recyclates with a very low carbon footprint.

René van Bremen
Sustainable Products and Chemicals Cluster (SUSPACC)

Suspacc Bio Cooperative; cluster of entrepreneurs in the Northern Netherlands, for which green chemistry is key priority to their (future) business operations
focus: biobased raw materials + circular and biodegradable polymers
My role within Suspacc Bio Cooperative (in co-operation with my Board members): strategic development of our cluster operational implementation of the strategic course, servicing our members, supporting them accelerating their transitions to green chemistry, with less individual effort for each

Erik Fledderus
Circulair Friesland

Erik Fledderus-Smedinga is projectmanager for Circulair Friesland, an association of over 185 members working towards a circular economy in Fryslân. Erik's focus is on circular and bio-based construction and plastics. Acting as an orchestrator for circulair value chains, Circulair Friesland has a broad experience in organizing regional value chains, with examples such as the program Fryslân Bouwt Circulair and the project plesTic ready.

Grenzübergreifende Zusammenarbeit & Interreg-Projekte 10:00 Uhr
Cross border cooperation & Interreg projects

EMPHATI
Dr. Frank Köster und Pascal Gerlach
3N Kompetenzzentrum Nachwachsende Rohstoffe und Bioökonomie e.V.

Ziel dieses grenzüberschreitenden Projektvorhabens ist es daher, neue nachhaltige und umweltfreundliche Produkte auf Basis von PHA/PHA-Blends mit Naturfasern für ausgewählte Anwendungen im Spritzguss und 3D-Druck in den teilnehmenden produzierenden Betrieben zu entwickeln. Eine begleitende Ökobilanz soll zudem über die gesamte Kreislaufwirtschaft hinweg durchgeführt werden, ausgehend von der PHA-Herstellung bis zum Endkunden und Endnutzungsszenarien.

Ein Hauptaspekt ist die Bildung eines grenzübergreifenden Clusters entlang der PHA-Wertschöpfungskette, die alle Akteure miteinander vernetzt und Wissenstransfer ermöglicht. In einem offenen Teil sollen Machbarkeits- und Pilotstudien ermöglicht werden.

Im Beitrag werden Ergebnisse für die Aktivitäten im Bereich Spritzguss, 3D-Druck und die Vernetzung durch die PHA-Akademie vorgestellt.

Two4C Christiaan Bolck
Oost NL
(See abstract below)

NEXCARB 10:30 Uhr
Christiaan Bolck
Oost NL

The East Netherlands is positioning itself as a frontrunner in the transition toward fossil-free and circular plastics, aligned with national ambitions to achieve a fully circular economy by 2050. Through the regional cluster Dutch Circular Polymer Valley and cross regio with the North of the Netherland and border collaboration with German partners, innovative ecosystems are accelerating applied plastics technology and biobased materials development.
The current Interreg project Two4C supports SMEs in overcoming market, regulatory, technical, and material barriers by facilitating circular business models and matchmaking across the Dutch-German border. Building on this foundation, the Interreg application NEXCARB focuses on challenge-based innovation to stimulate the development and upscaling of fossil-free, circular, and biobased plastics driven by real market demand. Together, these initiatives strengthen cross-border value chains and accelerate sustainable market adoption.

11:15 - 13:00

BIO-ZIRKULÄRE KUNSTSTOFFE – INITIATIVEN FÜR EINE GRENZÜBERGREIFENDE ZUSAMMENARBEIT 2.0

BIO-CIRCULAR PLASTIC – CONCRETE INITIATIVES FOR CROSS-BORDER COLLABORATION 2.0

Krankenhausabfälle
Hospital Waste
Femke van der Zant
University Medical Center Groningen (UMCG) (Care2Change)

Projekt SORTED
Project SORTED
Sven Jurgens
Ecoras

Zu schade zum Verbrennen – Von Papier zu Kunststoff
Too good to burn – From paper to plastics
Prof. Dr. Elke Wilharm
Ostfalia UAS

Von der Natur zur Düse: Verstärkung von PHA mit Hanffasern für nachhaltiges FFF
From Nature to Nozzle: Reinforcing PHA with Hemp Fibers for Sustainable FFF
Nadja Berger
UAS Münster

Nachhaltige Innenraummaterialien in Fahrzeugen
Sustainable interieur materials in vehicles
Dr. Matthias Rechel
Niedersachsen.next GmbH
Eduard Putsch
Expinos
Denis Schmitz
HS Osnabrück
Dr. Thomas Taddigs
Volkswagen AG

Podiumsdiskussion | Panel Discussion
Lead: Cor Kamminga | Ecoras
Joost Pâques | Paques Biomaterials
Prof. Dr.-Ing. Jan Post | Philips Health Tech Drachten
Christiaan Bolck | Oost NL
Cord Neemann | NEEMANN LiteFlex PACKAGING GmbH
Peter Brinkmann | TKT Kunststoff-Technik GmbH
Dr. Philip Mörbitz | Fraunhofer Institut (UMSICHT)
Wrap Up Cor Kamminga | ecoras

13:00 - 14:00 **Mittagessen** | Lunch Break

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BIO-ZIRKULÄRE KUNSTSTOFFE – INITIATIVEN FÜR EINE GRENZÜBERGREIFENDE ZUSAMMENARBEIT 2.0
BIO-CIRCULAR PLASTICS – CONCRETE INITIATIVES FOR CROSS-BORDER COLLABORATIO 2.0

Care2Change: Stärkung der lokalen Lieferkette zur Schaffung eines abfallfreien Gesundheitssystems

10:30 Uhr

Care2Change: Strengthening the Local Supply Chain to Create a Waste-Free Healthcare System

Femke van der Zant

MD, PhD candidate Sustainable Surgery, University Medical Centre Groningen

Healthcare and society face numerous challenges. The growing demand for healthcare and increasing treatment possibilities lead to larger healthcare volumes, which increasingly strain healthcare costs and available personnel. At the same time, global warming, including an increase in vector-borne diseases, declining air quality, a rise in heat-related illnesses, and deteriorating water safety, poses a major threat to public health. It is our responsibility to reduce the environmental impact the healthcare system and thus minimize the impact of climate change on public health. Both production of materials that become waste as well as the waste management itself increase the environmental impact of hospitals. Within Care2Change we aim to create a waste-free healthcare system by developing innovative circular solutions and strengthening the local supply chain.

Textilien in einer Kreislaufwirtschaft: SORTED!

Textiles in a circular economy: SORTED!

S. Jurgens M.Sc.

Ecoras

The consumption of textiles has the fourth highest impact on the environment. How can enhanced automation of the sorting process be an enabler for increased re-use and advanced recycling? Within the SORTED project fifteen partners from across the textile value chain make circular textiles a reality.

Zu schade zum Verbrennen – Von Papier zu Kunststoff

Too good to burn – From paper to plastics

Diana Lorenczyk, Malin Schleicher und Elke Wilharm

Ostfalia University of Applied Sciences

Ireen Gebauer und Katja Patzsch

Fraunhofer Center for Chemical Biotechnological Processes CBP

The increasing demand for renewable carbon sources and the depletion of fossil resources highlight the need for sustainable solutions in the chemical industry. This study evaluates the potential of used paper towels as a feedstock for glucose production and subsequent biotechnological applications.
A paper towel sorting and processing concept was developed for a model municipality. Automatic sorting achieved a purity level of over 99% with 4% paper loss. On a pilot scale enzymatic saccharification with commercial enzyme blends achieved saccharification yields of up to 57.0 %. The resulting glucose syrups were tested as the main carbon source for the growth of five pro- and eucaryotic production microorganisms (*S. cerevisiae, E. coli, L. rhamnosus, C. necator and P. verruculosum*). Among those, in particular, the PHA producer *C. necator* exhibited growth exceeding that of laboratory-grade glucose. These results demonstrate that glucose from upcycled paper towels is suitable for microbial fermentation, highlighting a promising pathway for sustainable carbon sourcing for biopolymer production.

Von der Natur zur Düse: Verstärkung von PHA mit Hanffasern für nachhaltiges FFF

...continued

From Nature to Nozzle: Reinforcing PHA with Hemp Fibers for Sustainable FFF

Nadja Berger M.Sc.
FH Münster University of applied sciences

This study investigates the development of natural fiber reinforced polymer composites (NFRPCs) [1] via fused filament fabrication (FFF) process based on biopolymer matrices derived from self-synthesized polyhydroxyalkanoates (PHA). PHAs, produced via microbial fermentation, represent a class of fully biodegradable, bio-based thermoplastics with challenging mechanical and thermal properties. The integration of short hemp fibers as a natural reinforcement phase aims to overcome inherent limitations of neat PHA, including low impact resistance and moderate stiffness. Critical processing parameters — including fiber length distribution, interfacial adhesion, extrusion temperature profiles, and print path optimization — are systematically evaluated to ensure filament homogeneity and printability. Mechanical characterization encompassing tensile, flexural, and impact testing are conducted in accordance with ISO standards. Preliminary findings indicate significant improvements in Young's modulus and ultimate tensile strength upon fiber incorporation, while preserving the material's biodegradable profile. This work advances the field of sustainable composite additive manufacturing and establishes a foundation for fully bio-based, high-performance FFF feedstocks.

Nachhaltige Innenraummaterialien in Fahrzeugen

Sustainable interieur materials in vehicles

Dr. Matthias Rechel
Niedersachsen.next GmbH

How can biobased and recycled materials find their way into automotive and agricultural vehicles? What are the driving forces in automotive industry? Today oil-based materials are established and their processibility is well understood. Access to large quantities of those materials is established.
In this talk we give an overview of the steps that need to be undertaken to enable new materials to be used in the mentioned industries. Questions that need to be answered are the scalability of the new material sources as well as the reach of a match between material performance and the performance levels that are defined in specifications. Finally, we show the approaches we are following to integrate new materials in agricultural machines and cars.

Eduard Putsch
Expinos

Denis Schmitz
HS Osnabrück

Dr. Thomas Taddigs
Volkswagen AG

Podiumsdiskussion | Panel Discussion 12:15 Uhr

Moderation
Cor Kamminga
Ecoras

Joost Pâques
Paques Biomaterials

Prof. Dr.-Ing. Jan Post
Philips Health Tech Drachten

Christiaan Bolck
Oost NL

Cord Neemann
NEEMANN LiteFlex PACKAGING GmbH

Peter Brinkmann
TKT Kunststoff-Technik GmbH

Dr. Philip Mörbitz
Fraunhofer Institut (UMSICHT)

14:00 - 16:00

ZIRKULÄRES UND BIOBASIERTES BAUEN: BEREIT FÜR DEN START?
CIRCULAR & BIO-BASED CONSTRUCTION: LESSONS LEARNED – READY FOR TAKE OFF?

Opening & Moderation
Jochen Keimer
3N Kompetenzzentrum e.V.

Block 1:
Biobasierte Materialien: Vom Feld zum Gebäude – Gewonnene Erkenntnisse!
Biobased Materials: From Field to Building – Lessons learned!

Strohgebäude: Wie aus einem landwirtschaftlichen Nebenprodukt eine Kohlenstoffsenke für Millionen von Tonnen wird
Straw Buildings: Turning an Agriculture By-Product into a Million-Ton Carbon Sink
Dirk Scharmer
Deltagrün Architektur Büro

Bauen mit nachwachsenden Rohstoffen – Potenzial zur Erreichung der Klimaziele
Building with Renewable Raw Materials – Potential for Achieving Climate Goals
Dorothee Mix
Bildungswerkstatt für nachhaltige Entwicklung e.V. (BIWENA)

Block 2:
Die Zukunft biobasierter Materialien – bereit für den Start?
The Future of Biobased Materials – ready for take off?

Übergang zu einer Kreislaufwirtschaft in Friesland
Biobased construction in Fryslan: role of the regional government in accelerating the circular transition
Charlotte Strijbos
Provinicie Fryslan

Exkursion zum BBoBB Showroom (auf dem Außengelände)
Exkursion to BBoBB Showroom (Outside of the Venue)

Fazit | Abschiedsrede
Conclusion | On the Stairs: farewell speech

Get-Together

ZIRKULÄRES UND BIOBASIERTES BAUEN: BEREIT FÜR DEN START?
CIRCULAR & BIO-BASED CONSTRUCTION: LESSONS LEARNED – READY FOR TAKE OFF?

Block 1: 14:05 Uhr
Biobasierte Materialien: Vom Feld zum Gebäude – Gewonnene Erkenntnisse!
Schwerpunkt: Biobasierte Gebäude und Dämmstoffe – Pilotprojekte
Biobased Materials: From Field to Building – Lessons learned!
Focus: Biobased buildings and insulation materials – pilot projects

Strohgebäude: Wie aus einem landwirtschaftlichen Nebenprodukt eine Kohlenstoffsenke für Millionen von Tonnen wird

Straw Buildings: Turning an Agriculture By-Product into a Million-Ton Carbon Sink

Dirk Scharmer
Deltagrün Architektur Büro

In Germany and across most of Europe, straw is not waste. It is primarily used for soil improvement, animal bedding, and roughage. Agriculture manages this resource responsibly and efficiently. Yet all current uses share one limitation: the carbon stored in straw is released again within a relatively short time.

Extending this carbon storage through long-term material use offers a significant climate opportunity.

Straw-based construction can transform an agricultural co-product into durable climate infrastructure. Realized projects and international case studies demonstrate that high-performance buildings with certified fire safety approvals are already possible. Based on current research, the potential ranges from carbon-positive single-family houses to a national million-ton CO_2 storage opportunity.

Scaling this solution requires cooperation between agriculture, industry, and the construction sector — turning a renewable field resource into a long-term carbon sink within the built environment.

Bauen mit nachwachsenden Rohstoffen – Potenzial zur Erreichung der Klimaziele

Building with renewable raw materials – potential for achieving climate goals

Dorothee Mix
BiWeNa e.V.

In order to achieve climate targets in the construction sector, there must be a shift in construction in the sense of a shift in materials. A wide variety of renewable raw materials are available for construction and insulation materials. The example of the first 5-story straw bale building in Germany as well as examples of how hemp can be utilised as a building material show what climate-friendly construction can look like.


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Block 2: 15:00 Uhr

Die Zukunft biobasierter Materialien – bereit für den Start?
Wie erreichen wir einen Durchbruch für biobasierte und zirkuläre Bauweisen?
The Future of Biobased Materials – ready for take off?
How do we achieve a breakthrough for biobased and circular construction methods?

Übergang zu einer Kreislaufwirtschaft in Friesland

Circular Transition in Fryslân

Charlotte Strijbos
Provincie Fryslan

In Fryslân, circular economy has been high on the agenda for many years. The region has developed an approach focusing on cooperation, practical action and scaling value chains at the regional level. In this presentation, key elements of this unique Frisian approach will be highlighted, showing how strong regional cooperation organized through Vereniging Circulair Friesland help turn ambitions into practice. Several successful programmes and projects will be discussed, including the Frisian Hemp Fibre Deal and the Interreg North Sea Region project Building Based on Biobased. These initiatives illustrate how a regional government can support the development of biobased value chains and how long term collaboration in the region leads to visible results.


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www.ecoras.nl

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Niedersachsen Netzwerk Nachwachsende Rohstoffe und Bioökonomie e.V.

3N Centre of Experts

Lower Saxony Network for Renewable Resources and Bioeconomy e. V.

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Niedersächsisches Ministerium für Umwelt, Energie und Klimaschutz

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