

WCH-InfoBrief - Bioökonomie

Stand 14.01.19

Inhaltverzeichnis:

Förderungen zu den Themen:

• Horizon 2020 – Work Programme 2018-2020	1
• Bioökonomie, Nachhaltigkeit	14
– CONNECT Bildung-Forschung-Innovation (BMBF)	
– Experiment-In search of bold research ideas (Volkswagenstiftung)	
• Wirkstoffentwicklung	15
– Targetvalidierung für die pharmazeutische Wirkstoffentwicklung (BMBF)	
• Zusammenarbeit mit gezielten Ländern	15
– Förderung von Pilotmaßnahmen für Partnerschaften in Wissenschaft, Forschung und Bildung mit Belarus (BMBF)	
– 6. Deutsch-Südkoreanische Ausschreibung für gemeinsame Forschungs- und Entwicklungsprojekte mittelständischer Unternehmen (BMWi)	
– 5. Ausschreibung für gemeinsame Forschungs- und Entwicklungsprojekte kleiner und mittlerer Unternehmen zwischen Deutschland und Frankreich (BMWi)	
• Individuelle Förderung	17
– Global Biobased Businessplan Competition (G-BiB)	
– IQ Innovationspreis Mitteldeutschland	
– Women&work-Erfinderinnenpreis	
– Projekte für inter- und transdisziplinär arbeitende Nachwuchsgruppen in der Sozial-ökologischen Forschung (BMBF)	
Tagungen	19
Sonstiges	21
• Kostenlose Beratung zum Schutz geistigen Eigentums - 2. Quartal 2019	
• Workshopangebote an der MLU	

FÖRDERUNGEN

Horizon 2020 - Work Programme 2018-2020

Important notice on this work programme

The 2020 updates of this Work Programme have not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

9. Food security, sustainable agriculture and forestry, marine, maritime and inland water research and the bioeconomy

- **Call - Sustainable Food Security**

From functional ecosystems to healthy food

- SFS-01-2018-2019-2020: Biodiversity in action: across farmland and the value chain
- SFS-02-2020: Healthy terrestrial livestock microbial ecosystems for sustainable production
- LC-SFS-03-2018: Microbiome applications for sustainable food systems

- SFS-04-2019-2020: Integrated health approaches and alternatives to pesticide use

Specific Challenge: Plant protection and biocidal products (both covered under the term "pesticides") are used in agriculture to secure yield and ensure food and feed safety across agricultural production and the agri-food chain. At the same time, pesticides may have effects on the environment, non-target organisms, animal and human health. In the EU they are regulated and assessed for pre-market approval but tools and methods need to be further developed to better understand the overall risks and impacts associated with their individual and combined use and possible side effects. Member States and EU policies seek to reduce reliance on pesticides by designing and implementing more integrated approaches to the use of pesticides while at the same time safeguarding competitiveness.

Scope:

- Integration of plant protection in a global health approach (RIA)
- [2020] Alternative to contentious pesticides (IA)

- SFS-05-2018-2019-2020: New and emerging risks to plant health

Specific Challenge: Trade and the movement of goods and people have facilitated the introduction, spread and establishment of plant pests and diseases. While new pests and diseases are likely to arise, existing ones might become more severe because of intensification, climatic variations and changes in agricultural and forest management practices. They can have a significant impact on agricultural and forest productivity, environment and economics. Appropriate and rapid responses from decision-makers need to be based on scientific knowledge which addresses pest and disease management in a comprehensive manner.

Scope: Proposals will target one or more new or emerging plant pests (the term "pests" includes weeds) and/or diseases (regulated or non-regulated, introduced or native) that

are causing, or likely to cause, significant (socio)economic and/or environmental losses to European agriculture and/or forestry. Proposals will increase knowledge of the biology, pathways of entry and spread of pest(s)/disease(s) and clarify the dependencies on abiotic factors. They will improve methods and strategies for early detection, prevention and control as well as enlarge the range of tools for integrated, sustainable and effective pest/disease management.

- SFS-06-2018-2020: Stepping up integrated pest management
- SFS-07-2018: Making European beekeeping healthy and sustainable
- SFS-08-2018-2019: Improving animal welfare
- SFS-10-2020: Epidemiology of non-regulated contagious animal diseases: from integrated data collection to prioritisation
- SFS-11-2018-2019: Anti-microbials and animal production
- SFS-12-2019: A vaccine against African swine fever
- SFS-13-2020: Genome enabled breeding in terrestrial livestock
- DT-SFS-14-2018: Personalized Nutrition

- LC-SFS-15-2018: Future proofing our plants

Specific Challenge: Future proofing plants' qualities could serve as a path to increased nutrition security and sustainable food systems. Now the time has come to capitalise on the results of decades of extensive plant research, while strategically moving towards a system approach to food chains.

Scope: Proposals shall map, assess and prioritise the technologies and methodologies for plant (both terrestrial and aquatic) improvement with a focus on enhancing plant nutrition efficiency and yield, enhancing nutrition and sensory quality, and ensuring environmental protection. Existing and new approaches and technologies should be assessed to best encompass future research and innovation aiming at plant improvement, while developing a holistic approach to exploit the potential of plant research. Following the RRI principles, proposals should ensure that societal actors (researchers, citizens/CSOs, policy makers, businesses, etc.) are brought together to align the forthcoming research programmes with the values, needs, and expectations of society.

- SFS-16-2018: Towards healthier and sustainable food

Specific Challenge: Food production and processing need to further evolve in terms of better preservation of the raw material and natural food properties while ensuring healthy, tasty and sustainable food. In parallel it is necessary to improve the understanding of the influence of consumers' practices in maintaining the healthy food attributes from purchasing to consumption.

Scope: Activities will assess and develop food processing methods (e.g. minimal, mild, careful processing) with the potential to optimise the preservation of the naturally occurring nutritional, structural and functional food properties, even once the food is processed. They will focus on innovative small-scale processing technologies tailored to the needs of SMEs, while ensuring links between food processing and primary production. Work will include, as appropriate, testing of solutions and

assessment of their impacts on product characteristics (food structure, composition and stability, safety, nutritional and sensory quality), traceability and authenticity, sustainability (environmental, social, economic) and public health. When needed, proposals should address requirements from relevant EU regulatory frameworks including needs for pre-market approval. Activities will also look into the potential for the post-harvest preservation of naturally occurring nutritional food properties. Furthermore, work will explore appropriate business models adapted to proposed methods / technologies, taking into account organisation and distribution concepts, consumer behaviour / acceptance and/or the potential for consumer engagement.

- LC-SFS-17-2019: Alternative proteins for food and feed

Environment and climate-smart food production and consumption

- LC-SFS-19-2018-2019: Climate-smart and resilient farming
- LC-SFS-20-2019: European Joint Programme on agricultural soil management
- SFS-21-2020: Emerging challenges for soil management
- LC-SFS-22-2020: Forest soils Research and Innovation Action
- SFS-23-2019: Integrated water management in small agricultural catchments
- CE-SFS-24-2019: Innovative and citizen-driven food system approaches in cities
- CE-SFS-25-2018: Integrated system innovation in valorising urban biowaste

Building capacities

- DT-SFS-26-2019: Food Cloud demonstrators
- SFS-27-2018: Monitoring food R&I investments and impacts
- SFS-28-2018-2019-2020: Genetic resources and pre-breeding communities

Specific Challenge: With increasing concerns over biodiversity loss and genetic erosion, there is a need to step up collaborative efforts to expand and improve the preservation, evaluation and the use of plant and animal GenRes in farming and forestry.

Scope:

- [2018]: Joining forces for GenRes and biodiversity management (CSA)
- [2019]: Adding value to plant GenRes (RIA)

Activities will improve processes, tools and know-how associated with a dynamic management and documentation of GenRes collections (both ex-situ and in-situ, as appropriate). Major efforts should go into capturing and characterising the genetic diversity in germplasm and revealing novel information to users. This will include acquiring comprehensive and more precise genotypic and phenotypic information on GenRes material, understanding the connections between the two, how they vary in different environmental contexts and having in place appropriate (bioinformatic) tools for data processing, exchange and visualisation.

- [2020]: The GenRes-user interface and pre-breeding activities (IA)

- SFS-29-2018: Innovations in plant variety testing

– SFS-30-2018-2019-2020: Agri-Aqua Labs

Specific Challenge: Understanding the different adaptation strategies, and the circumstances that favour one strategy over another, is vital for understanding how annual or perennial crops perform in a given environment or under changing conditions. It will also help to assess how plants may respond to future environmental changes.

Scope:

○ [2018]: Understanding the genome of farmed animals, its expression and translation into traits (RIA)

○ [2019]: Looking behind plant adaptation (RIA)

Proposals shall advance our understanding of the ability of plants to (pre)adapt to specific – often extreme - conditions or to react to sudden changes in their environment. They will look into the specific mechanisms (genetic, epigenetic, physiological, morphological, metabolic...) and dynamics that underlie adaptive processes of crops and how these responses are modulated by the type and severity of conditions/stresses. In studying adaptation of crops to single or multiple abiotic conditions, work shall also establish potential fitness trade-offs. While taking advantage of findings from (semi) model crops, work shall focus on crop plants and relevant agronomic conditions.

○ [2020]: Plant energy biology (RIA)

– SFS-31-2019: ERANETs in agri-food

Targeted international cooperation

– SFS-32-2018: Supporting microbiome coordination and the International Bioeconomy Forum. **Fehler! Textmarke nicht definiert.**

– EU-Africa Partnership on Food and Nutrition Security and Sustainable Agriculture (FNSSA)

– SFS-33-2018: Support to the implementation of the EU-Africa Research and Innovation Partnership on Food and Nutrition Security & Sustainable Agriculture (FNSSA)

– LC-SFS-34-2019: Food Systems Africa

– SFS-35-2019-2020: Sustainable Intensification in Africa

– CE-SFS-36-2020: Diversifying revenue in rural Africa through bio-based solutions

– EU-China FAB Flagship initiative

– SFS-37-2019: Integrated approaches to food safety controls across the food chain

– SFS-38-2018: Highly efficient management of soil quality and land resources

– CE-SFS-39-2019: High-quality organic fertilisers from biogas digestate

– SFS-40-2020: Healthy soils for healthy food production

Call - Rural Renaissance

From farm to society: understanding dynamics and modernising policies

- RUR-01-2018-2019: Building modern rural policies on long-term visions and societal engagement
- RUR-02-2018: Socio-economic impacts of digitisation of agriculture and rural areas
 - Specific Challenge: Aside from the benefits of digital innovations, there are also challenges, and sometimes threats, that need to be addressed to ensure that technological innovations go hand in hand with societal needs and expectations. To cope with the digital revolution research needs to clarify its dynamics and its net impact on socio-economic challenges that agriculture and rural areas are confronted now and in the future.
 - Scope: Proposals shall analyse the social and economic impacts of digitisation on agriculture and rural areas, looking into costs, benefits and possible trade-offs. Analyses shall fill knowledge gaps on the impacts of digitisation on agriculture and rural areas regarding at least: employment and quality of life, functioning of markets and value chains, competitiveness and scalable opportunities for agricultural and rural businesses and (re)deployment of public services. Beyond the impacts of past and ongoing developments, the action shall explore future scenarios for digitisation in the coming decades, characterising drivers and barriers which are likely to accelerate or hamper their respective development, as well as their respective impacts.
- RUR-03-2018: Contracts for effective and lasting delivery of agri-environmental public goods
- RUR-04-2018-2019: Analytical tools and models to support policies related to agriculture and food
- RUR-21-2020: Agricultural markets and international trade in the context of sustainability objectives

Organising sustainable food and non-food value chains under changing conditions

- RUR-05-2020: Connecting consumers and producers in innovative supply chains
- RUR-06-2020: Innovative agri-food value chains: boosting sustainability-oriented competitiveness
- RUR-07-2020: Reducing food losses and waste along the agri-food value chain
- CE-RUR-08-2018-2019-2020: Closing nutrient cycles
- RUR-09-2018: Realising the potential of regional and local bio-based economies
 - Specific Challenge: New, sustainable technology options or business models suitable for local deployment are needed, as current integrated biorefinery models are predominantly based on complex technologies and are difficult to finance, so remain inaccessible to many players.
 - Scope: Proposals shall foster cooperation and networking between relevant actors at all levels, so that regional bio-based economies can take off, promote open innovation

approaches, and ensure adequate knowledge exchange within and among regions. Emphasis shall be put on increasing the capacities of regional/local authorities and stakeholders, especially in regions with high potential (e.g. underused biomass streams, human capacities), but that have a low number of established biorefineries. Proposals shall ensure proper support and guidance in developing regional strategies and roadmaps through participative approaches, adapted to the local conditions and biomass sources. These shall also include avenues to address the education and information gap on key issues related to sustainability, to increase R&I capacities and to improve the generation of innovation, making best use of the various funding streams available and establishing synergies with relevant policies and programmes, notably those related to rural and regional development, and related Smart Specialisation Strategy implementing bodies.

- CE-RUR-10-2019: Circular bio-based business models for rural communities
- LC-RUR-11-2019-2020: Sustainable wood value chains
- RUR-18-2019: Support to the BIOEAST initiative: boosting knowledge and innovation-based bioeconomies

Taking advantage of the digital revolution

- DT-RUR-12-2018: ICT Innovation for agriculture – Digital Innovation Hubs for Agriculture
- RUR-13-2018: Enabling the farm advisor community to prepare farmers for the digital age
- RUR-20-2018: Digital solutions and e-tools to modernize the CAP

Boosting innovation and enhancing the human and social capital in rural areas

- RUR-15-2018-2019-2020: Thematic networks compiling knowledge ready for practice
- RUR-16-2019: Fuelling the potential of advisors for innovation
- RUR-17-2019: Reinforcing the EU agricultural knowledge base

Call - Food and Natural Resources

- FNR-01-2020: Strengthening the European agroecological research and innovation ecosystem
- FNR-02-2020: Developing long-term monitoring and evaluation frameworks for the Common Agricultural Policy
- FNR-03-2020: A comprehensive vision for urban agriculture
- FNR-04-2020: Towards a European research and innovation programme on soils and land management

- FNR-05-2020: Husbandry for quality and sustainability
- LC-FNR-06-2020: Defossilising agriculture – solutions and pathways for fossil-energy-free farming
- FNR-07-2020: FOOD 2030 - Empowering cities as agents of food system transformation
- FNR-08-2020: Supporting the food safety systems of the future
- CE-FNR-09-2020: Pilot action for the removal of marine plastics and litter
- FNR-10-2020: Public engagement for the Bioeconomy

Specific Challenge: The successful transition towards the bioeconomy requires a profound transformation on both the supply and the demand sides of the economy and involve different multipliers (consumers, retailers, etc.). It is therefore important to raise public awareness and knowledge about the environmental and socio-economic impacts of activities on all bioeconomy areas among a wide range of stakeholders.

Scope: Proposals will build upon sectoral communication activities at national, regional and local level through awareness raising about the bioeconomy at large for European citizens. The actions shall promote the environmental and socio-economic benefits of bioeconomy areas through awareness-raising and education on sustainable production, consumption and lifestyles.

- FNR-11-2020: Prospecting aquatic and terrestrial biological resources for biologically active compounds

Specific Challenge: The main challenge is, depending on the source selected, technology readiness for sustainable exploitation of natural resources, poor availability of the scarce source biological material (e.g. in case of protected / rare species), low concentrations of the target compounds, and difficulties in obtaining pure molecules.

Scope: Proposals shall cover the entire development pipeline with focus on:

- Biodiscovery (prospecting), i.e. identification of suitable molecules, verification of their claimed benefits, optimisation of technological exploitation including the cultivation strategies for selected production systems and metabolic engineering to ensure high productivity and purity, and,
- Product (final formulation) development and commercialisation, in Europe.

The proposals shall especially focus on small molecules, with novel bioactivities, qualities and applications, in particular from unusual or underutilised sources, and on understanding of their relevant chemical, genetic, physiological and environmental make-up. The proposals shall prove the techno-economic feasibility and effectiveness of a chosen production route.

- FNR-12-2020: Industrial microbiomes: learning from nature

Specific Challenge: The challenge is the use of industrial microbiome approaches to optimise existing industrial processes and/or to develop wholly new microbiome-based industrial processes.

Scope: Proposals shall focus on concrete bio-based processes and/or products. They shall embrace the understanding and transposition of natural consortia mechanisms to industrial environments as well as the engineering of synthetic microbial consortia that are inspired by the metabolic interaction found in nature. Proposals shall employ

newly developed -omics tools to understand, monitor and exploit microbial communities in the industrial environment.

- LC-FNR-13-2020: Bio-based industries leading the way to turning CO₂ emissions into chemicals

- CE-FNR-14-2020: Innovative textiles: Reinventing fashion

- CE-FNR-15-2020: A network of European bioeconomy clusters to advance bio-based solutions in the primary production sector

Specific Challenge: The inclusive and sustainable bio-based business models (e.g. cooperative, producer associations and higher-level structures such as clusters) offer a major opportunity for local communities. They can support a merging of the local creation of value, societal engagement and environmental protection. The challenge entails developing strategies meeting the above-mentioned principles, while mobilizing stakeholders to adopt sustainable and inclusive business models, based on technologies and undervalued or underutilised resources, suitable for use at small scale and easy to replicate and adapt to local conditions.

Scope: Proposals shall establish a pilot network of national/regional bioeconomy clusters gathering relevant actors in the bioeconomy (e.g. EU, national/regional policy and funding bodies, industry, academia, farmer associations and cooperatives, industry, researchers, civil society and NGOs). These clusters shall develop appropriate strategies for the deployment of bio-based solutions integrating the primary production sector, adapted to the specific conditions and assets of each region and exploiting synergies between the different policy instruments, such as the CAP, regional funds and relevant national programmes.

- FNR-16-2020: Enzymes for more environment-friendly consumer products

Specific Challenge: The specific challenge is to seize the opportunity of the constantly increasing demand for greener consumer products by using novel enzymes, enabling not only economic competitiveness but also more sustainable solutions.

Scope: Proposals shall address the development of novel or improved enzyme(s) for the processing phase and/or to be included in the formulation of one or more of the following consumer products: washing agents, textiles, personal care, cosmetics and nutraceuticals. The approach could also involve bioprospecting or exploitation of existing databases. The activities shall include the assessment of the environmental impact of the developed approach. They shall aim at a strong improvement of environmental performance, against the state of the art, linked to the enzyme functionality. Proposals shall address the development of an efficient production system of the targeted enzyme(s) together with downstream processes and methods for enzyme formulation and inclusion into the consumer product(s).

- CE-FNR-17-2020: Pilot circular bio-based cities: sustainable production of bio-based products from urban biowaste and wastewater

- FNR-18-2020: Sustainability of bio-based products: international governance aspects and market update

Specific Challenge: The challenge involves analysing comprehensively diverse sustainability-related aspects of bio-based industrial products, local vs. global value

chains, their carbon and environmental footprint, global value chain traceability and use of specific certification and labelling schemes. Better understanding in this regard could lead to improved sustainable value-chains, greater trust and acceptance by the consumers and end-users, and awareness of the decision makers.

Scope: Building on the state of the art, including previous and ongoing EU-funded projects, this action will bring together global sustainability experts in bio-based innovation (focus on bio-based products) to strengthen the common understanding of sustainability goals and green innovation, and to provide reliable and easy-to-use data for policymakers, consumers and end-users

5.ii. Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing

Call – Transforming European industry

Biotechnology

- BIOTEC-06-2020: Reprogrammed microorganisms for biological sensors (IA)

Specific Challenge: The challenge is to realistically engineer microorganisms that (1) use synthetic networks to expand the portfolio of molecules that are currently known to be detected by natural systems, and (2) perfect the networks for improved performance in given industrial settings.

Scope: The aim is to re-programme microorganisms or synthetic biological systems with properties to be used as biological sensors in critical industrial sectors. Proposals should: (i) address sensitivity, specificity and the possibility of detecting multiple analytes. (ii) include demonstration activities at medium scale in order to confirm the performance and robustness of the reprogrammed microorganisms as biosensors in the selected application, (iii) address Social Sciences and Humanities (SSH) elements regarding acceptability of the technologies used by stakeholders and regulatory aspects.

- BIOTEC-07-2020: Multi-omics for genotype-phenotype associations (RIA)

Specific Challenge: Less progress has been made in associating genome information (genotype) with the complex variation of observable traits (phenotype) of a living being.

Scope: Proposals submitted to this topic will work on the integration of different 'omics datasets and different data types towards the definitive goal of fully understanding the causal relations between the genome of an organism and its phenotype, i.e. how biological systems respond to variations in their genetic make-up or in their external environment. Proposals should also focus on systems biology solutions and will develop methods that integrate 'omics datasets and use data collected in several experiments. And they should involve at least two case studies for the application in one or two industrial sectors where biotechnology can provide added value, excluding healthcare.

- CE-BIOTEC-08-2020: New biotechnologies to remediate harmful contaminants (RIA)
- CE-BIOTEC-09-2020: Upcycling Bio Plastics of food and drinks packing

12. Climate action, environment, resource efficiency and raw materials

- **Call - Building a low-carbon, climate resilient future: climate action in support of the Paris Agreement**

Decarbonisation

- LC-CLA-01-2018: Supporting the development of climate policies to deliver on the Paris Agreement, through Integrated Assessment Models (IAMs)
- LC-CLA-02-2019: Negative emissions and land-use based mitigation assessment
- LC-CLA-10-2020: Scientific support to designing mitigation pathways and policies .
- LC-CLA-11-2020: Innovative nature-based solutions for carbon neutral cities and improved air quality.

Climate adaptation, impacts and services

- LC-CLA-03-2018: Climate change impacts in Europe.
- LC-CLA-04-2018: Resilience and sustainable reconstruction of historic areas to cope with climate change and hazard events.
- LC-CLA-05-2019: Human dynamics of climate change.
- LC-CLA-12-2020: Advancing climate services.
- LC-CLA-13-2020: Climate Resilience of European coastal cities and settlements.
- LC-CLA-23-2020: European mountain regions research policy supporting action.

Inter-relations between climate change, biodiversity and ecosystem services.

- LC-CLA-06-2019: Inter-relations between climate change, biodiversity and ecosystem services
- LC-CLA-09-2019: ERA-NET Cofund action on biodiversity and climate change: Impacts, feedbacks, and nature-based solutions for climate change adaptation and mitigation
Specific Challenge: A properly aligned European Research Area, which is also open to the world, can make an essential difference in enabling a transformative, climate-resilient sustainability agenda to take shape. The alignment of research and innovation agendas is therefore crucial in bringing about the necessary transformations.
Scope: The Cofund action should examine: the impact of climate change on all levels of biodiversity, ecosystem functioning and ecosystem services; feedback processes; the potential of nature-based solutions for enhancing climate change adaptation,

mitigation, including negative emissions; and synergies and trade-offs between different policies, including those on biodiversity, climate action and air quality.

- LC-CLA-14-2020: Understanding climate-water-energy-food nexus and streamlining water-related policies
- LC-CLA-15-2020: Forest Fires risk reduction: towards an integrated fire management approach in the E.U.
- LC-CLA-16-2020: Multi-hazard risk management for risk-informed decision-making in the E.U.

- **Call - Greening the economy in line with the Sustainable Development Goals (SDGs)**

Connecting economic and environmental gains - the circular economy

- CE-SC5-01-2018: Methods to remove hazardous substances and contaminants from secondary raw materials
- CE-SC5-02-2018: Independent testing programme on premature obsolescence
- CE-SC5-03-2018: Demonstrating systemic urban development for circular and regenerative cities
- CE-SC5-04-2019: Building a water-smart economy and society
- CE-SC5-05-2018: Coordinated approaches to funding and promotion of research and innovation for the circular economy

Specific challenge: A strategic approach would help build international synergies among programme owners (in order to overcome and avoid fragmentation), and strengthen dissemination of lessons learned and new solutions for the circular economy resulting from currently isolated national programmes and funding.

Scope: The action should establish a joint platform which will formulate, based on a thorough understanding of the state-of-the-art, the research and innovation needs and priorities for circular economy development in the EU. To this end, this action should bring together national and regional programme owners which will adequately represent the diversity of conditions and approaches from around the EU.

- CE-SC5-24-2020: Improving the sorting, separation and recycling of composite and multi-layer materials
- CE-SC5-25-2020: Understanding the transition to a circular economy and its implications on the environment, economy and society

Specific challenge: Understanding, in critical and thoughtful way, the transition to a circular economy and its positive and negative implications on the environment, economy and society (including human health), will be important for the development and adoption of circular economy approaches, including the design of well-targeted transitional policy measures. Moreover, the identification and analysis of best practices of the transition to a circular economy in- or outside Europe, on a citizen, business sectorial and macroeconomic level, possibly covering different cooperation

models (including B2B, B2C, P2P, etc.) will serve as an inspiration for specific projects.

Scope: The research will assess the current state of transition towards the circular economy in relevant economic sectors (public, private and non-profit) and analyse possible transition scenarios, as well as their outcomes and impacts. It will identify the key factors (regulatory, governance-based, market, technological, cultural, societal, etc.) that can stimulate or hinder this transition.

- CE-SC5-28-2020: Develop and pilot circular systems in plastics, textiles and furniture sectors
- CE-SC5-29-2020: A common European framework to harmonise procedures for plastics pollution monitoring and assessments
- CE-SC5-30-2020: Plastics in the environment: understanding the sources, transport and distribution of plastics pollution
- CE-SC5-31-2020: Develop, implement and assess a circular economy oriented product information management system for complex products from cradle to cradle

Raw materials

- CE-SC5-06-2018: New technologies for the enhanced recovery of by-products
- CE-SC5-07-2018-2019-2020: Raw materials innovation for the circular economy: sustainable processing, reuse, recycling and recovery schemes
- CE-SC5-08-2018-2019-2020: Raw materials policy support actions for the circular economy
- SC5-09-2018-2019: New solutions for the sustainable production of raw materials
- SC5-10-2019-2020: Raw materials innovation actions: exploration and Earth observation, mining and substitution pilots
- SC5-26-2020: Sustainable management in extractive industries

Water for our environment, economy and society

- SC5-11-2018: Digital solutions for water: linking the physical and digital world for water solutions
- SC5-12-2018: EU-India water co-operation

Innovating cities for sustainability and resilience

- SC5-13-2018-2019: Strengthening international cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems
- SC5-14-2019: Visionary and integrated solutions to improve well-being and health in cities

- SC5-27-2020: Strengthening international collaboration: Enhanced natural treatment solutions for water security and ecological quality in cities

Protecting and leveraging the value of our natural and cultural assets: Earth observation

Protecting and leveraging the value of our natural and cultural assets: Nature-based solutions, disaster risk reduction and natural capital accounting

- SC5-17-2018: Towards operational forecasting of earthquakes and early warning capacity for more resilient societies
- SC5-18-2018: Valuing nature: mainstreaming natural capital in policies and in business decision-making
- SC5-23-2019: Multi-stakeholder dialogue platform to promote nature-based solutions to societal challenges: follow-up project
- SC5-32-2020: Addressing wild pollinators decline and its effects on biodiversity and ecosystem services
- SC5-33-2020: Monitoring ecosystems through research, innovation and technology

Protecting and leveraging the value of our natural and cultural assets: Heritage alive

- SC5-19-2018: International network to promote cultural heritage innovation and diplomacy
- SC5-20-2019: Transforming historic urban areas and/or cultural landscapes into hubs of entrepreneurship and social and cultural integration

Specific support and implementation aspects

- SC5-21-2019: ERA-NET Cofund action for climate action, environment, resource efficiency and raw materials
- SC5-22-2019: Assessing and fostering the impacts of Research and Innovation Actions (RIA) and Innovation Actions (IA) granted by Societal Challenge 5 in 2014-2015
- SC5-34-2020: ERA-NET Cofund action on conservation and restoration of degraded ecosystems and their biodiversity, including a focus on aquatic systems
- SC5-35-2020: ERA-NET Cofund action on enhancing urban transformation capacities
- SC5-36-2020: ERA-NET Cofund action on raw materials ...

Bioökonomie, Nachhaltigkeit

- **CONNECT Bildung-Forschung-Innovation (BMBF)**

Der Wettbewerb „CONNECT Bildung-Forschung-Innovation“ fördert die Weiterentwicklung von Kooperationsprojekten und -strukturen zwischen deutschen und internationalen Akteuren, um diese durch die Verbindung mit weiteren Akteuren auf ein neues Niveau zu heben. Auf diese Weise sollen bestehende Nuklei der internationalen Kooperation untereinander verknüpft, übergeordnete Themen identifiziert, zusätzliche inhaltliche Aspekte aufgenommen und neue Akteure integriert werden.

Die Vernetzung setzt somit Impulse sowohl für ein quantitatives Wachstum (zusätzliche Akteure im bestehenden Kontext) als auch für ein qualitatives Wachstum (Diversifizierung des Spektrums der Themen und Akteure).

Deadline: 04.04.19

<https://www.bmbf.de/foerderungen/bekanntmachung-2241.html>

- **Experiment-In search of bold research ideas (Volkswagenstiftung)**

Das Angebot der Volkswagenstiftung „Experiment! – Auf der Suche nach gewagten Forschungs-ideen“, richtet sich an Forscher/-innen aus den Natur-, Ingenieur-, und Lebenswissenschaften (einschließlich unmittelbar benachbarter Disziplinen aus den Verhaltenswissenschaften), die eine radikal neue und riskante Forschungsidee austesten möchten.

Sie erhalten die Möglichkeit, während einer auf 120.000 Euro und 18 Monate begrenzten explorativen Phase erste Anhaltspunkte für die Tragfähigkeit ihres Konzeptes zu gewinnen.

Pro Institut wird nur 1 Antrag zugelassen.

Deadline: 01.08.19

<https://www.volkswagenstiftung.de/unsere-foerderung/unsere-foerderung/unsere-foerderung/angebot-im-ueberblick/experiment>

Erinnerungen:

- **FACCE SURPLUS, FACCE JPI für Forschungsprojekte zu nachhaltiger Landwirtschaft, Ernährungssicherheit und Klimawandel**

Deadline erster Stufe: 19.03.2019

<http://projects.au.dk/faccesurplus/joint-calls/third-call/>

- **Bio-Based Industries Joint Undertaking**

Deadline: 04.09.2019

<https://www.bbi-europe.eu/sites/default/files/bbi-ju-awp-2019.pdf>

Wirkstoffentwicklung

- **Targetvalidierung für die pharmazeutische Wirkstoffentwicklung (BMBF)**

Gegenstand der Förderung sind Einzel- und Verbundvorhaben, in denen Targets unter industrierelevanten Aspekten validiert und damit auf ihre Eignung als Ausgangspunkt für die Wirkstoffentwicklung überprüft werden. Dafür sind Untersuchungen zur genauen Aufklärung der Biologie des Targets und dessen Einfluss auf Krankheitsmechanismen notwendig, die dazu geeignet sind, den therapeutischen Nutzen der Targetmodulation abzuschätzen.

Die Suche nach neuen Targets ist nicht Bestandteil dieser Bekanntmachung und daher nicht förderfähig. Das Screening zum Auffinden neuer Wirkstoffe sowie die Wirkstoffoptimierung sollten nicht Schwerpunkt der Arbeiten sein.

Deadline: 23.04.19

<https://www.bmbf.de/foerderungen/bekanntmachung-2340.html>

Zusammenarbeit mit gezielten Ländern

- **Förderung von Pilotmaßnahmen für Partnerschaften in Wissenschaft, Forschung und Bildung mit Belarus (BMBF)**

Die geförderten Vorhaben sollen auch der Vorbereitung von umfangreicheren Antragstellungen bei Förderorganisationen wie BMBF, Europäischer Union (EU) oder der Deutschen Forschungsgemeinschaft (DFG) dienen. Zu diesem Zweck werden anwendungsbezogene Forschungsprojekte zu folgenden Schwerpunkten gefördert:

- lokale Nutzung erneuerbarer Energien im Kontext landwirtschaftlicher und forstwirtschaftlicher Abfallwirtschaft (insbesondere Biomasse und Biogas),
- **Biotechnologien im Bereich Agrar- und Forstwirtschaft**,
- Ökologie, Biodiversität und Umweltschutz (insbesondere Waldökosysteme).

Deadline: 05.04.19

<https://www.bmbf.de/foerderungen/bekanntmachung-2247.html>

- **6. Deutsch-Südkoreanische Ausschreibung für gemeinsame Forschungs- und Entwicklungsprojekte mittelständischer Unternehmen (BMWi)**

Deutschland und die Republik Korea veröffentlichen hiermit eine Ausschreibung für gemeinsame Forschungs- und Entwicklungsprojekte (FuE-Projekte) zur Entwicklung innovativer Produkte, Verfahren oder technischer Dienstleistungen aus allen Technologie- und Anwendungsbereichen.

Es wird erwartet, dass die Antragsteller marktreife Lösungen für Produkte, Dienstleistungen oder Verfahren entwickeln, die über ein großes Marktpotenzial verfügen.

Deadline: 18.04.19

https://www.zim.de/ZIM/Redaktion/DE/Downloads/International/6-ausschreibung-deutschland-suedkorea.pdf?__blob=publicationFile&v=2

- **5. Ausschreibung für gemeinsame Forschungs- und Entwicklungsprojekte kleiner und mittlerer Unternehmen zwischen Deutschland und Frankreich (BMWi)**

Frankreich und Deutschland veröffentlichen hiermit eine Ausschreibung für gemeinsame Forschungs- und Entwicklungsprojekte (FuE-Projekte) zur Entwicklung innovativer Produkte, Verfahren oder technischer Dienstleistungen aus allen Technologie- und Anwendungsbereichen. Es wird erwartet, dass die Antragsteller marktreife Lösungen für Produkte, Dienstleistungen oder Verfahren entwickeln, die über ein großes Marktpotenzial verfügen.

Deadline: 14.06.19

https://www.zim.de/ZIM/Redaktion/DE/Downloads/International/5-ausschreibung-frankreich-deutschland.pdf?__blob=publicationFile&v=5

Erinnerungen

- **Wissenschaftlich-technische Zusammenarbeit mit der Ukraine (BMBF)**

Deadline: 14.03.2019

<https://www.bmbf.de/foerderungen/bekanntmachung-2166.html>

- **Wissenschaftlich-Technische Zusammenarbeit mit der Islamischen Republik Iran (BMBF)**

Deadline: 15.04.2019

<https://www.bmbf.de/foerderungen/bekanntmachung-2178.html>

- **FONA3: CLIENT II – Internationale Partnerschaften für nachhaltige Innovationen (BMBF)**

Dealine: 31.05.2019

<https://www.bmbf.de/foerderungen/bekanntmachung-2211.html>

- **Wissenschaftlich-Technologische Zusammenarbeit mit der Türkei (BMBF)**

Deadline: Anträge können jederzeit eingereicht werden

<https://www.bmbf.de/foerderungen/bekanntmachung.php?B=741>

- **DWIH – Sao Paulo**

Deadline: 31.05.2019

Leibniz-Gemeinschaft am Deutschen Wissenschafts- und Innovationshaus (DWIH) in São Paulo

Leibniz-Institute, -Forschungsverbünde und –WissenschaftsCampi können im Rahmen der Mitgliedschaft der Leibniz-Gemeinschaft am Deutschen Wissenschafts- und Innovationshaus (DWIH) in São Paulo Projekte zur Netzwerkbildung, Seminare, Workshops, öffentliche Diskussionen oder andere Veranstaltungen durchführen.

Die Unterstützung durch das DWIH kann sowohl finanzieller wie auch organisatorisch-logistischer Art sein. Zudem kann das DWIH beim Bewerben, Knüpfen von Kontakten oder durch das Einbinden in weitere Veranstaltungen und Anlässe unterstützen.

Gerne nimmt die Leibniz-Gemeinschaft bis zum 31.05.19 Vorschläge für solche Veranstaltungen entgegen. Veranstaltungen am DWIH São Paulo sind grundsätzlich

themenoffen. Ein Bezug zur (Anwendung von) Künstlicher Intelligenz, zu Digitalisierung in all ihren Ausprägungen und zu Biodiversität sollen im Jahr 2019 besondere Berücksichtigung finden. Anbei finden Sie zudem eine Übersicht zu beachtender Kriterien.

Individuelle Förderung

- **Global Biobased Businessplan Competition (G-BiB)**

The Global Biobased Businessplan Competition (G-BiB) is a competition for Master and PhD students in Germany and Belgium. The objective of G-BiB is to stimulate entrepreneurship and innovation producing a bio-renewable chemical, material and/or fuel products. The challenge is to write an innovative business plan based on a design for sustainable production of bio-renewable products such as biofuels and biomaterials or partial solutions that will support developing those products.

Deadline: 17.03.19

<http://www.nweurope.eu/projects/project-search/bio-innovation-support-for-entrepreneurs-throughout-nwe-regions/events/apply-for-our-global-bio-based-business-plan-competition/>

- **IQ Innovationspreis Mitteldeutschland**

Mit dem IQ Innovationspreis Mitteldeutschland fördert die Europäische Metropolregion Mitteldeutschland neuartige, marktfähige Produkte, Verfahren und Dienstleistungen in fünf branchenspezifischen Clustern. Ziel ist es, eine nachhaltige Entwicklung und Vermarktung der traditionsreichen Wirtschafts-, Wissenschafts- und Kulturregion Mitteldeutschland zu schaffen.

- Cluster Chemie/Kunststoffe
- Cluster Energie/Umwelt/Solarwirtschaft
- Cluster Informationstechnologie
- Cluster Automotive
- Cluster Life Sciences.

Das Cluster Life Sciences umfasst ein breites Innovationsfeld. Hierzu gehören unter anderem Neuheiten aus allen Bereichen der Biotechnologie, wie bspw. innovative Verfahren zur biologischen Produktion von Chemikalien und Wirkstoffen oder zur Verbesserung von Lebensmitteln mit gesundheitsfördernden Eigenschaften (Functional Food). Aber auch als Innovator mit neuen molekular- und zellbiologischen Erkenntnissen für die Entwicklung und die Produktion neuer Therapeutika sowie Diagnostika können Sie sich in diesem Cluster bewerben.

Deadline: 18.03.19

<http://www.iq-mitteldeutschland.de/startseite/>

- **Women&work-Erfinderinnenpreis**

Ab sofort können sich Frauen ab 18 Jahren bewerben, die eine Erfindung in Deutschland entwickelt und/oder beim Deutschen Patent- und Markenamt oder beim Europäischen Patentamt angemeldet haben.

Der women&work-Erfinderinnenpreis wird in vier Kategorien vergeben:

- Technologie
- Service und Sozial
- Geschäftsmodell und Organisation
- Sonderpreis: Humanismus 4.0

Deadline: 10.04.19

www.Erfinderinnenpreis.de

- **Projekte für inter- und transdisziplinär arbeitende Nachwuchsgruppen in der Sozial-ökologischen Forschung (BMBF)**

Aus der Perspektive einer gesellschaftswissenschaftlichen Nachhaltigkeitsforschung, die die Natur- und Ingenieurwissenschaften (Interdisziplinarität) sowie Erkenntnisse und Problemstellungen der Praxis (Transdisziplinarität) einbezieht und ihnen gegenüber offen und anschlussfähig ist, werden Nachwuchsforschungsgruppen gefördert, die den im Folgenden dargestellten grundsätzlichen Kriterien genügen. Das zu behandelnde Forschungsthema der jeweiligen Nachwuchsgruppe muss sich grundsätzlich mit einer gesellschaftlichen Entwicklung hin zu Nachhaltigkeit im Rahmen der Sozial-ökologischen Forschung befassen, ist ansonsten aber frei wählbar. Es ist ein inter- und transdisziplinärer Forschungsansatz zu wählen, der ökologische, ökonomische, soziale und technische Aspekte in einer problembezogenen Perspektive miteinander verknüpft.

Die Zuwendungen können im Wege der Projektförderung für einen Zeitraum von bis zu fünf Jahren als nicht rückzahlbare Zuschüsse gewährt werden.

Deadline: 29.04.19

<https://www.bmbf.de/foerderungen/bekanntmachung-2346.html>

Erinnerungen:

- **Förderpreis Nachwachsende Rohstoffe und Ernst-Pelz-Preis (10.000 Euro)**

Deadline: 30.04.2019

<https://www.carmen-ev.de/infothek/c-a-r-m-e-n-e-v/symposium/preisverleihungen/2697-bewerbungsauf-ruf-auszeichnungen-fuer-die-foerderung-nachwachsender-rohstoffe>

TAGUNGEN

- **Workshop: Interdisziplinäre Forschungsverbünde - Ergebnisse und Schlussfolgerungen des Prozessmonitoring am Beispiel des Leibniz Forschungsverbunds INFECTIONS'21, Berlin, 21.03.19**

Geplant ist, sowohl die Präsentation der Ergebnisse und Schlussfolgerungen dieses Prozessmonitorings als auch eine Diskussion Ihrer Erfahrungen in den Forschungsverbänden.
Deadline: 15.03.19

- **Nature Based Solutions (NBS), Paris, 4.-5.04.19**

https://platform.think-nature.eu/paris-forum?utm_source=ThinkNature+Newsletter&utm_campaign=95f257ae6c-EMAIL_CAMPAIGN_2019_02_12_01_14&utm_medium=email&utm_term=0_9081da2640-95f257ae6c-75136099

- **Biobased Economy Conference, Potsdam, 11.-12.04.19**

Das Motto lautet: keine Zuschauer – nur Teilnehmer! Anders als bei einer Konferenz, setzen die Veranstalter bei einem Barcamp lediglich den Rahmen. Die Inhalte eines Barcamps entstehen am Tag des Geschehens vor Ort durch die Teilnehmenden – auf Augenhöhe und durch offenen Austausch.

Deadline: 31.03.19

<https://biobased2019.b2match.io/>

- **Bio-based Industries Joint Undertaking BBI JU, Brüssel, 12.04.19**

Infotag zum neuen Arbeitsprogram, zu dem ca. 600 Teilnehmer erwartet werden. In vergangenen Jahren wurde der Infotag auch als Brokerage Event genutzt, um neue Netzwerke zu bilden.

<https://www.bbi-europe.eu/events/bbi-ju-info-day-2019>

- **CROP Innovation & Business conference, Amsterdam, 14.-16.04.19**

During CROP Innovation & Business 2019 the most influential trends that will affect crop innovation and value chain strategies will be addressed including indoor farming, whole genome sequencing, artificial intelligence, precision agriculture, consolidation, economic growth and sustainability.

<https://www.cropib.com/>

- **Brokerage Event für die Gesellschaftliche Herausforderung 2 und Key Enabling Technology – Biotechnologie, Brüssel, 03.07.19**

Im Zusammenhang mit dem Informationstag zur Gesellschaftlichen Herausforderung 2 findet am Tag zuvor, den 03. Juli 2019, in Brüssel ein „Brokerage Event“ des NKS-Netzwerkprojekts BioHorizon statt. Ziel des Brokerage Events ist es, Interessierte bei der Suche nach Projektpartnern für die kommenden Ausschreibungen 2019 in der

Gesellschaftliche Herausforderung 2 und Key Enabling Technology - Biotechnologie zu unterstützen.

- **7. International Conference on Sustainable Development, Rom, 04.-05.09.19**

- economic sustainability
- environmental sustainability
- socio-cultural sustainability

<http://ecsdev.org/conference/7icsd-2019>

- **International symposium Plant BioProTech, Marrakesh, 19.11.19**

- Beneficial micro-organisms
- Biocontrol
- Biostimulants
- Elicitors
- Evaluation under field conditions
- Plant Immunity
- Regulation of biocontrol agents
- Resistance
- Sustainable agriculture technologies

Should you be interested in speaking please consult our abstract submission tab.

Deadline: 31.05.19

<https://www.univ-reims.fr/plantbioprotech/plant-bioprotech/welcome,19493,34243.html>

Erinnerungen:

- **Kolumbientag des BMBF, Bonn, 25-26.03.2019**

<https://secure.pt-dlr.de/pt-conference/conference/BMBFKOLUMBIENTAG>

- **Deutschen Biotechnologietage 2019, Würzburg, 09. -10.04.19**

<https://www.biotechnologietage.de/de/>

- **WCH and BioEconomy Cluster 8th International Bioeconomy Conference, Halle (Saale), 13-14.05.2019**

<https://www.bioeconomy-conference.de/startseite/>

- **15. BMBF-Forum für Nachhaltigkeit, Berlin, 13-14.05.2019**

<https://www.fona.de/de/save-the-date-15-bmbf-forum-fuer-nachhaltigkeit-13-14-mai-2019-berlin-24116.html>

- **Plant Based Summit 2019, Lyon (Frankreich), 22.-24.05.19**

<https://bioket.us16.list->

[manage.com/track/click?u=14ed55a9a4edf4bc88114f78a&id=7bb1ec6846&e=b18d646e49](https://bioket.us16.list-manage.com/track/click?u=14ed55a9a4edf4bc88114f78a&id=7bb1ec6846&e=b18d646e49)

- **TERPNET 2019, Halle (Saale), 26-30.08.2019**

SONSTIGES

• **Kostenlose Beratung zum Schutz geistigen Eigentums - 2. Quartal 2019**

Die Beratung zum Schutz geistigen Eigentums wird als gemeinsames Angebot der IHK Halle-Dessau und der TGZ Halle GmbH im Technologiepark Weinberg campus in Halle (Saale) durchgeführt. Die Termine sind wie gewohnt an jedem 3. Mittwoch im Monat im TGZ I, Weinbergweg 23 in Halle (Saale).

- 17. April 2019
- 15. Mai 2019
- 19. Juni 2019

• **Workshopangebote an der MLU**

- Förderung für Forschung der Europäischen Union: Grundlagen und Einstiegsmöglichkeiten, 20.03.19
- Principles of Good Scientific Practices, 21.03.19
- "Die dunkle Seite der Wissenschaft": Umgang mit Prokrastination, Perfektionismus, Zweifel und Sackgassen, 21.-22.03.19
- Auf dem Weg zur Professur: Wissenschaftskarriere sinnvoll strukturieren, 15.04.19
- Karrierewege außerhalb der Hochschule: So finden Sie einen passenden Job - Stellensuche auf dem außerakademischen Arbeitsmarkt, 16.04.19
- Wissenschaftliches Schreiben für Promovierende und PostDocs, 06.-07.05.19
- Alleinstellung und Geistiges Eigentum schützen - Patente, Marken & Co., 13.05.19
- Wissenschaft und Elternschaft erfolgreich vereinbaren, 17.05.19
- Vom Master zum Doktoranden* zur Doktorandin: Wie gelingt der erfolgreiche Promotionsstart?, 23.-24.05.19