

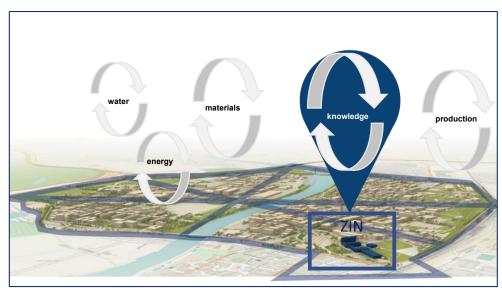




# We support the industry in its sustainable development

For 150 years, industrial park Höchst has been a symbol of innovation and change. But how do you design a sustainable industry? We see ourselves as a think and do tank for a sustainable, future-proof industry. We develop new knowledge, organise knowledge cycles and create a platform for knowledge exchange.

In our innovative research and education projects, we develop practical solutions for the sustainable development of companies. We empower people to integrate sustainability into their business strategy and to transform their organisations. However, in order to achieve profound change and address the major challenges of our time, such as climate change, a supportive ecosystem is required. With the vision of a CO<sub>2</sub>-neutral process industry in Hesse, we founded the Process4Sustainability cluster with companies at industrial park Höchst. We believe that a sustainable industry can only be achieved by working together, which is why our activities are based on close cooperation with national and international partners from science, business, and the public sector. Therefore, in addition to companies, research institutes and social innovation partners are also part of our cluster.



We are embedded in the Provadis School of International Management and Technology, an University of Applied Sciences, and industrial park Höchst.

We believe that the power of well-ordered markets, interdisciplinary collaboration and a long breath will make sustainability work.

Contact: Prof. Dr. Hannes Utikal

### Want to know more about us? Watch our ZIN videos:



Introduction ZIN



Introduction Cluster



Transformation as a task for society as a whole



Services Cluster



Transformation at industrial park
Höchst



# **Topics and outcomes**

## **Transforming Industries**



We are supporting the industry to become more sustainable, reduce CO2 emissions and benefit from digitalization. Through our projects we identify options for industry defossilization and new business development.

#### **Accelerating Sustainable Businesses**



We conceptualized the EIT Climate-KIC cleantech accelerator and managed it both regionally and internationally. We offer start-ups mentorship and support with sustainable business model development. For organizations we develop business creation and matchmaking formats.

#### **Educating Change Makers**



We create learning opportunities for national and international change makers. Our formats (e.g., workshops, trainings, summer schools) focus on reallife challenges and bring latest knowledge in effect. We make knowledge work!

20+ high-impact projects on regional, national and global scale with partners from academia, industry and public authority.

#### **Kev Facts since 2016**





Cooperations with 50+ companies CO2-Neutrality: Cluster Process4Sustainability







350+ start-ups in 13 countries supported Management of European Cleantech Accelerator





2.500 +participants in our education formats Sustainable Industrial Area (SIA) Management Courses with GIZ









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Activities with a funding of 18 million euros



Projects with impact in 30+ countries



# **Center for Industry and Sustainability – Projects since 2016**

Project name	Responsibility	Time	Supporter	Partners	Links		
	Transforming Industries						
Cluster for a climate- neutral process industry in Hesse (Cluster Process4Sustainability, P4S)	Founding and management of an industry cluster	Since 2020	Land Hessen (WI-Bank)	Founding partners, e.g., Caphenia, Clariant; DECHEMA; House of Energy; INERATEC; Infraserv; Kuraray; TU Darmstadt and VCI.			
4 <sup>th</sup> International Workshop on Innovation and Production Management in the Process Industries	Conception and organisation of a two-day international academic expert workshop at industrial park Höchst	2022	Land Hessen (WI-Bank)	Presentations e.g., of Caphenia; Celanese; Covestro; HYBRIT; KIT; Mitsubishi Chemical; Procter & Gamble; Remondis Recycling; Sanofi-Aventis.  Co-organizers: Institut für Betriebswirtschaftliches Management im Fachbereich Chemie und Pharmazie der Universität Münster; Mälardalen University and VCW.			



Connected Clusters	Success factors for building and managing effective innovation ecosystems	2018 - 2019	EIT Climate-KIC	Asociación Valenciana de Empresas del Sector de la Energía (AVAESEN), Valenvia, Spain; Edinburgh Centre for Carbon Innovation (ECCI), Edinburgh, Scotland; Energy Capital (EC), Birmingham, UK.	
Sustainability ecosystem in Hesse	Establishment and management of a multi-stakeholder community of business, science, politics and society for climate protection-related innovations (product, process, social innovations)	2015 - 2018	EIT Climate-KIC	GRADE Goethe University; City Frankfurt; TU Darmstadt	
Industry 4.0 and sustainability in industrial parks	Investigation of application potentials of Industry 4.0 in industrial parks	2018	GIZ	GIZ	



Be Circle	Development of a tool for the visualisation of material flows in industrial parks	2017 - 2018	EIT Climate-KIC	Engie, École Polytechnique	
Journal of Business Chemistry (JoBC)	Co-editor of an open access journal for management issues in the chemical industry	Since 2016		Institut für Betriebswirtschaftliches Management im Fachbereich Chemie und Pharmazie der Universität Münster	
Climactio	Development of climate strategies together with 11 medium-sized chemical companies	2015 - 2016	EIT Climate-KIC	Future Camp Climate; LATMOS; Sorbonne University; VCI.	



Accelerating sustainable businesses							
TransRegBio (BioBall)	Identification and visualisation of biogenic residues in the RhineMain Metropolitan Region	2020 - 2022	BMBF	DECHEMA; Thünen-Institut, TU Darmstadt; right; Senckenberg.			
Accelerator Programme	Establishment and implementation of a European accelerator programme for 350+ clean-tech start-ups	2015 - 2019	EIT Climate-KIC	EUROPA: Building Global Innovators (Portugal): Chamber of Commerce (Romania); Chamber of Commerce and Industry of Serbia & Startit Centar (Serbia); Chrysalis LEAP (Cyprus); Cleantech Bulgaria (Bulgaria); Cleantech ForEst (Estonia); Riga Technical University (Latvia); Timis Co NOT (Slovenia); uni Fund (Greece); Vilnius Tech Park (Lithuania) and ZICER (Croatia).  DEUTSCHLAND: DEUTSCHLAND: DECHEMA; Deutsche Bank; Deutsche Telekom; EY; FIZ Biotechnologie; HIGHEST (TU Darmstadt); Infraserv Höchst, PricewaterhouseCoopers; Science4Life and Science-Park Kassel (Uni Kassel).			



Circular economy and innovative business models	Investigation of business models for a circular economy (with companies from different sectors and participation of cities and regions).	2018 - 2019	EIT Climate-KIC	Cleantech Bulgaria; CSCP; ECCI; Wuppertal Institut.	
Re-Industrialize	Analysis of opportunities to promote innovation in (former) European coal regions	2018 - 2019	EIT Climate-KIC	e.g., University of Bologna; Wuppertal Institut.	



- <u>\</u>	Educating Change Makers						
Education programms							
Virtual Academy on Sustainable Industrial Area Management (Nachhaltiges Industrieparkmanagem ent), GIZ	Conception and implementation of a sixmonth, practice-oriented educational programme on the development of sustainable industrial parks in the Global South.	2021 - 2022	GIZ, Integration	e.g., Atlantis SEZ (South Africa); Beluluane Industrial Park (Mosambik); ITP Prizren (Kosovo); Kigali SEZ (Ruanda); TEDA (China) and WestPark (Ghana).			
Innovation Summit	Organisation of an international conference with 400 participants from business, science, politics and society	2018	EIT Climate-KIC	Allianz; Potsdam-Institut für Klimaforschung and Imperial College London.			
Climathon	Conception and implementation of innovative 24h hackathons for regional climate protection challenges together with industry and administration	2015 - 2017	EIT Climate-KIC	Energiereferat City Frankfurt			



"Pioneers into Practice"- Education programme	Conception and implementation of an educational programme lasting several months with integrated national and international practical assignments (implementation in Hesse and management of the programme in various European countries)	2014 - 2017	EIT Climate-KIC	Agentur Auf!; Architektur im Dialog; Bettervest GmbH; Consulting GmbH; Goethe Universität; GIZ; GreenDelta GmbH; Infraserv Höchst; KlimaAktiv Wuppertal Institut; Lust auf besser leben gGmbH; Science Park Kassel; Shout Out Loud e.V.; Science Park Kassel; Shout Out Loud e.V.; City Birmingham; City Frankfurt; City Kelkheim; Tech Quartier Frankfurt.	
PhD Summer Schools	Conception and implementation of international, interdisciplinary doctoral summer schools on the topic of energy transition in Frankfurt as well as open innovation in the chemical industry	2014 - 2017	EIT Climate-KIC	City College London; Goethe University; Infraserv; Lufthansa; Siemens; City Frankfurt; City Birmingham; University of Gothenburg.	
Programme management and learning materials					200
Certified Professional	Development of a certification system for transformation competences acquired in practice	2015 - 2018	EIT Climate-KIC	University of Valencia	



International expert network "Make Transition Happen"	Establishment and management of an international think tank on the topic of societal transformation in Brussels; establishment and further development of a network of European trainers (selection; services)	2014 - 2018	EIT Climate-KIC	
Transition Cities	Analysis of local climate protection policies in different European cities (measures; impact analysis; rationality)	2014 - 2016	EIT Climate-KIC	
Learning Materials	Development of learning materials for the teaching of transformation skills	2014 - 2018	EIT Climate-KIC	





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