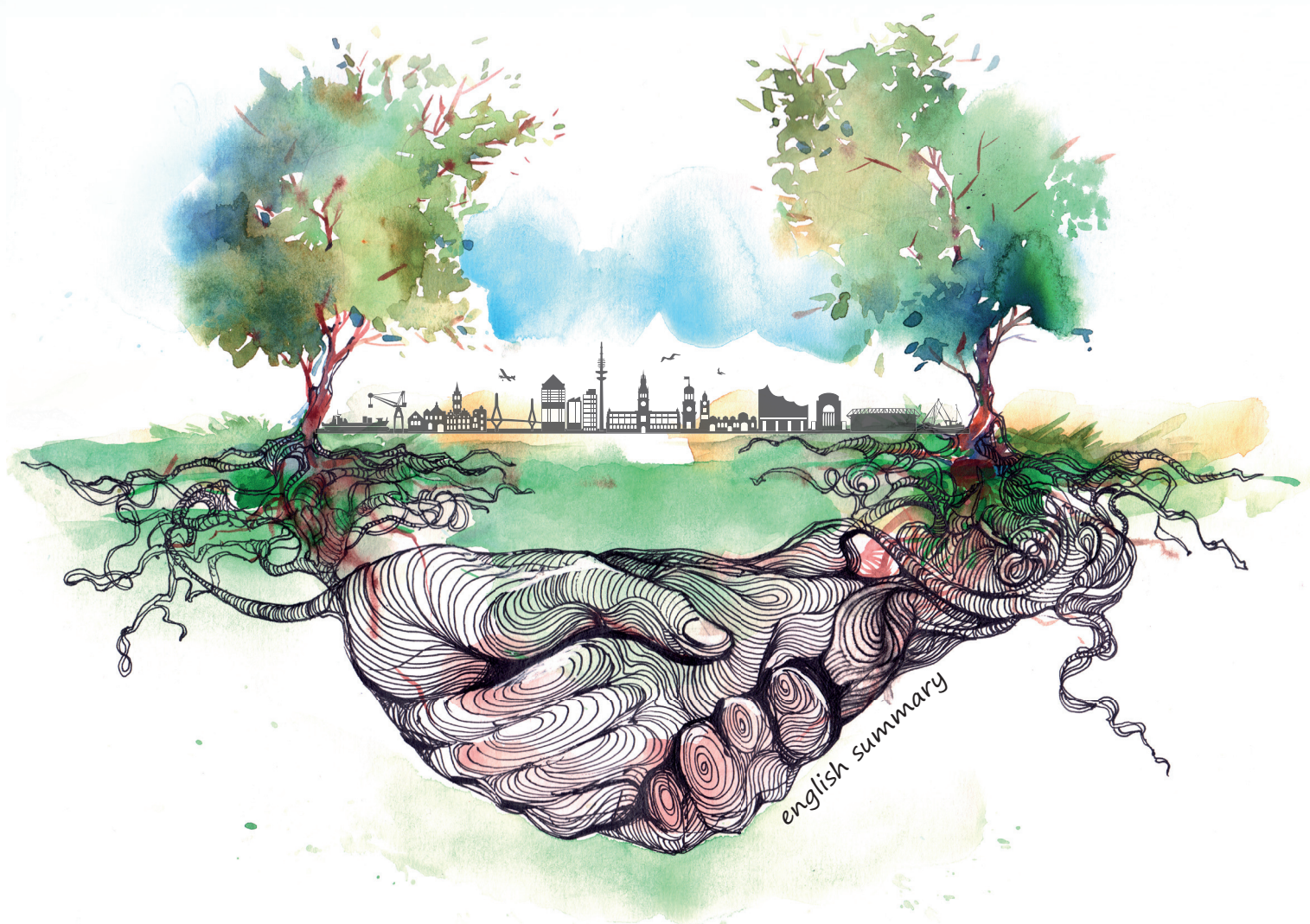


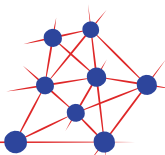
HAMBURG'S CLUSTERS

ANNUAL REPORT

2021



CO-LEARNING
SPACE



carried out by:



HELMUT SCHMIDT
UNIVERSITÄT
Universität der Bundeswehr Hamburg


funded by:



Hamburg



EUROPÄISCHE UNION
Europäischer Fonds für regionale Entwicklung



Dear Readers, Return.

Mostly we want things to move forward, and things rarely seem to move fast enough. Constantly being on the move, heading away from one point to another. Our society is characterised by an incessant forward drive. But in the last two years, many activities were put on pause and suddenly the word "return" became very important. The return to free movement, free decision-making, when to meet which person or how many, what to do in one's free time, and many even wished back their office and colleagues. A word, then, that acquired high significance at all levels of our society in 2021. However, it became clear quite quickly at the beginning of 2021 that the Corona pandemic would continue and that there would be no return to the usual daily routine any time soon, and so the term "new normality" was born.

By this return has not lost its meaning, however, but has gained even more prominence in the context of economic policy, because the term is also significantly linked to the topic of resilience, in this case the robustness of regional economies. The concept of resilience has been a much-discussed and studied concept since the far-reaching financial crisis of 2008, and has recently been brought back into focus by the Corona pandemic. Resilience is understood as the ability of a regional economic area to absorb external and, in particular, unforeseeable shocks or to recover from them and then return to a sustainable growth path. The question of what makes an economic area crisis-proof, i.e. resilient, is not trivial to answer. The resilience of regions to crises is difficult to measure and is subject to a multitude of different exogenous factors of a national and international nature.

A balanced portfolio of local industries, networking and innovation as well as the promotion of structural change are just some of the factors that increase resilience. Addressing resilience is an important task for Hamburg's regional policy. The Innovation Alliance, the Regional Innovation Strategy and the cluster policy in the sense of the Smart Specialisation Strategy are of central importance. Hamburg has a very strong and active cluster policy. What this actually means is made tangible in the annual report. Smart Specialisation means setting regional development priorities where existing knowledge and technologies promise success. In Hamburg, in the spirit of this strategy, eight successful industries are directly promoted via cluster policy, driving innovations forward in an active dialogue between business, science and politics. The project Co-Learning Space for Hamburg's Clusters, a joint project funded by the City of Hamburg and the European Commission and carried out by the University of the Federal Armed Forces Hamburg/Helmut Schmidt University, supports cross-cluster networking, exchange, joint learning and knowledge transfer as well as cooperation - also on specific topics. A diversified economy alone offers potential and increases resilience. Networking among each other increases the potential for innovation even more, as innovation increasingly takes place where different disciplines meet. This increases the competitiveness of a region and promotes technological and social transformation processes.

Established, well-functioning structures were set up both within the clusters and between the Hamburg clusters. These structures were very helpful during the time of the Corona pandemic. Hamburg as a location benefited greatly from the trust built up in clusters and networks and the relationships between the actors in times of difficult personal meetings. The close cooperation with the authorities has also made a valuable contribution to demand-driven political and administrative action. Within the sectors, cooperation between actors continued fruitfully.

It is impressive to see the activities that were launched again in 2021. New innovations and projects were initiated, founding and networking activities were pursued - many start-ups and established companies pointed out new opportunities, took advantage of them and held dialogues about the future. In addition, a large number of Hamburg actors set out together to build up a completely new branch of industry, the "hydrogen economy" in Hamburg, with the aim of mapping the complete value chain in the region and going into market ramp-up. To orchestrate this, instead of founding a new cluster, cooperation was sought and the topic of hydrogen was integrated into the already existing cluster Renewable Energies Hamburg. By using the established structures and thematic synergies, it was possible to take major steps along this path as early as 2021, and meanwhile four clusters and an industry network are cooperating in the field of the hydrogen economy. On a cross-cluster level, i.e. across all sectors, many other activities such as events and workshops have taken place. One example is the "Cross Innovation Lab" format, which provides answers to the question: What actually happens when you bring together companies from the aviation industry and creative minds?

It is always exciting and impressive to see what our Hamburg clusters and networks can achieve and how effective the instrument of cluster policy is. I would like to encourage you to take a closer look at the activities of the clusters and networks, to be inspired - and to enter into dialogue.*



A handwritten signature in blue ink, appearing to read "M. Westhagemann".

Senator Michael Westhagemann
Ministry for Economics and Innovation of
the Free and Hanseatic City of Hamburg

* note: This document is an english short version of the German original annual report and therefore slimmed down considerably.

BRIEFLY: REGIONAL ECONOMY & HAMBURG'S INNOVATION- AND CLUSTERPOLICY

The economic heart of Northern Europe beats in Hamburg. The metropolis with its approximately 1.9 million inhabitants (5.4 million within the metropolitan region) occupies a top position in the European location competition and is characterised by high economic and purchasing power.

The science and research location of Hamburg has more than 20 universities and colleges. Hamburg is an important innovation incubator. More than 50 science and research institutes in various fields have settled here, including Fraunhofer facilities (Additive Production Technologies IAPT, Applied Nanotechnology CAN, Wind Energy Systems IWES, IME Screeningport, Power Electronics for Regenerative Energy Systems AL, Maritime Logistics and Services CML), two institutes of the German Aerospace Center (DLR), Hamburg's Centre for Applied Aviation Research (ZAL), Max Planck Institutes, the Bernhard Nocht Institute for Tropical Medicine and the renowned DESY. There are over 110,000 students in Hamburg, and more than 26,000 scientists and scholars conduct research and teach here.

The study "Tier 2 Cities of the Future 2020/21" examined the performance capabilities of economic metropolises that are not capital cities. According to the study, Hamburg is among the top 5 economic locations worldwide after San Francisco, Montréal, Houston and Düsseldorf. The GDP for Hamburg in 2021 was around 126.7 billion euros. Hamburg currently has around 1.9 million inhabitants. The number of people

in employment was around 1.29 million in 2021.

The central guiding principles for Hamburg's innovation policy are the Hamburg Innovation Strategy. Hamburg has updated its Regional Innovation Strategy in a participatory, creative and structured process involving business and science. The new Regional Innovation Strategy for Hamburg adopted by the Hamburg Senate in 2021 follows the vision of "Working together for a liveable city through innovation" and creates the framework conditions for the development of innovative and sustainable solutions for important areas of society and the future. In the context of current societal challenges, the importance of social innovations and innovations from the cultural and creative industries is emphasised. The evaluation of innovations is essentially oriented towards the solution of societal challenges and the benefit for people and a liveable city.

Within this policy, the clusters act as strategic specialisation fields in the sense of a "Smart Specialisation Strategy". Cluster policy is an instrument of modern, efficient economic policy in certain innovative sectors. Cluster policy differs from classical economic policy in particular by the policy proactively approaching the actors from the business community at the location. Through participatory processes in the clusters, the senate aligns its policy directly with the formulated needs and perspectives of the industry players.

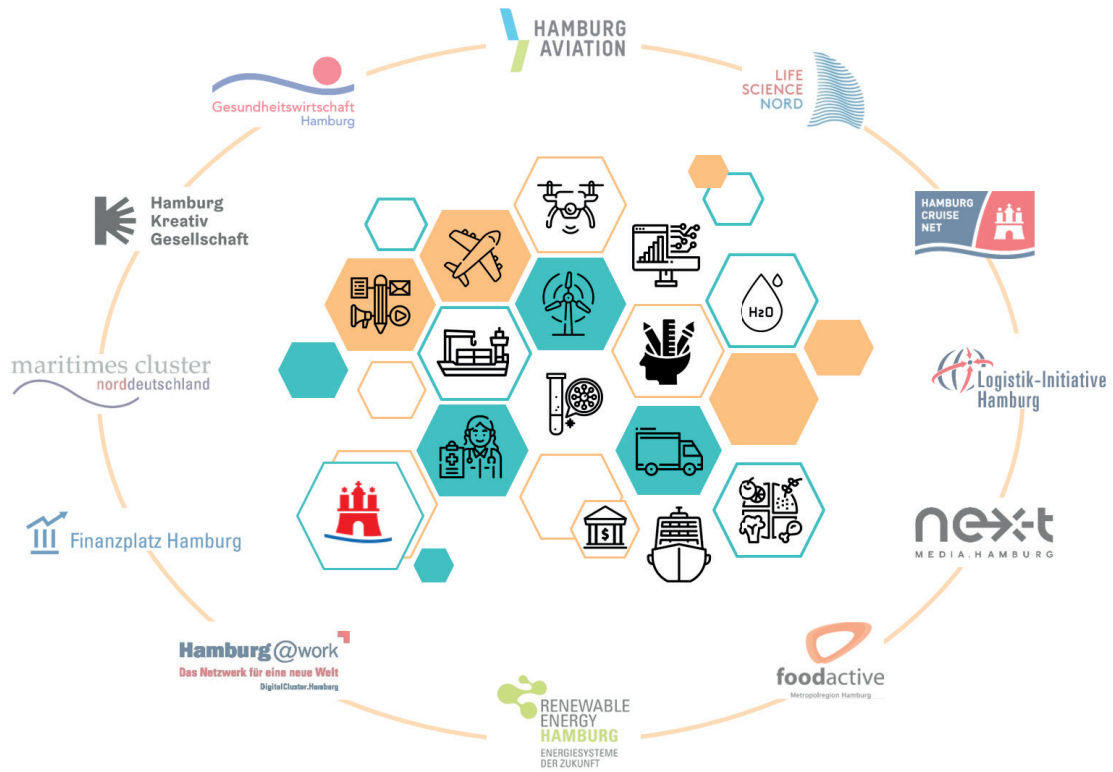
Hamburg's Clusters landscape

Eight successful clusters and numerous innovative networks help shaping Hamburg's economic future: Life Science Nord, Logistik-Initiative Hamburg, Gesundheitswirtschaft Hamburg, Hamburg Kreativ

Gesellschaft, Erneuerbare Energien Hamburg, Maritimes Cluster Norddeutschland, nextMedia.Hamburg and Hamburg Aviation.

Awarded as one of six European model demonstrator regions for modern cluster policy in 2014, Hamburg's cluster policy permanently strives to improve and promote interorganizational cooperation in the interest of competitiveness.

With their activities, Hamburg's clusters support a large proportion of Hamburg's companies with more than 750,000 employees in the metropolitan region.



©Co-Learning Space Hamburg; Icons from flaticon.com

HAMBURGS CLUSTERS AND NETWORKS

ERNEUERBARE ENERGIEN HAMBURG (RENEWABLE ENERGY HAMBURG) INCLUDING HYDROGEN

Founded in 2010, the Renewable Energy Hamburg Cluster (EEHH) has developed into the leading industry network for future energies in the Hamburg metropolitan region. Digitalisation, offshore wind energy, sector coupling, solar energy and renewable heat supply form its thematic pillars. In the past ten years, the EEHH cluster has distinguished itself through publications such as "Flexindustrie - Potenziale der Industrie Norddeutschlands als Mitgestalten der Energiewende" (engl: Flexindustrie - Potentials of Northern Germany's Industry to Help Shape the Energy Turnaround) or "Offshore Wind Energy from a Legal

Perspective" and participated in renowned



collaborative projects such as the EU Interreg project "Northern Connections" or the SINTEG project "Norddeutsche EnergieWende 4.0 - NEW4.0" funded by the Federal Ministry for Economic Affairs and Energy.

At the beginning of 2021, EEHH received a mandate from the City of Hamburg to develop a new hydrogen economy cluster segment within the existing cluster structures.

www.erneuerbare-energien-hamburg.de

GESUNDHEITSWIRTSCHAFT HAMBURG (HEALTH MANAGEMENT HAMBURG)

Gesundheitswirtschaft Hamburg GmbH (GWHH) was founded in 2009 as a subsidiary of the Free and Hanseatic City of Hamburg and the Hamburg Chamber of Commerce as an cluster agency for the health economy. It supports the establishment and expansion of sustainable cooperation structures and networks of providers and actors involved in the health industry. It also itself acts as initiator and sponsor of projects on important future topics such as digitalisation, healthy and self-determined living in old age and securing skilled workers. The

leitmotif is "Bundle competences, strengthen the health location."



Hamburg's health care industry is a major contributor to the overall regional economy and an important branch of the national economy that is becoming increasingly important. It takes a significant share in the generation of gross value added and secures employment opportunities and thus income for many gainfully employed persons.

www.gwhh.de

HAMBURG AVIATION + WINDROVE

Hamburg Aviation is the aviation cluster of the Hamburg Metropolitan Region and counts among its members Airbus, Lufthansa Technik, Hamburg Airport and more than 300 other companies. A total of 41,500 highly qualified professionals work here on the future of flying. Together, they cover the entire life cycle of an aircraft and the complete aviation value chain: from development, production and assembly to the air transport system, maintenance and recycling. In addition Hamburg has excellent

universities and training facilities as well as leading research institutes.



This makes the metropolitan region



the third largest location of the civil aviation industry worldwide. It has been awarded several times among others for its holistic strategy to make aviation even more economical, ecological, comfortable, reliable and flexible in the future and is ECEI GOLD

labelled by the European Secretariat for Cluster Analysis (esca).

Another specialty about Hamburg Aviation is its subnetwork Windrove. The Windrove network promotes the economic use of drones in the Hamburg metropolitan region. To this end, Windrove has been bringing

together users, designers and providers of drone-based services since 2017. Since 2018, the Hanseatic City of Hamburg has been a model region for Urban Air Mobility (UAM) and is one of the first European model cities to develop civilian uses for drones and other urban air transport technologies.

www.hamburg-aviation.com

HAMBURG KREATIV GESELLSCHAFT (CLUSTER FOR HAMBURG'S CREATIVE MINDS)

Hamburg Kreativ Gesellschaft is Hamburg's innovative business development agency for creative professionals. As an intermediary and impulse generator, it supports the creative industries in tapping their potential and meeting challenges in order to make the location more attractive and Hamburg fit for the future.

The creative industries are an important branch of Hamburg's economy and a significant driver of innovation. More than 90,000 Hamburg residents work in the creative industries and every fifth company in Hamburg can be classified as a creative industry. The sector is divided into eleven sub-markets: music industry, bookmarket, visual arts, film industry, broadcasting industry, performing arts, design industry, architecture market, press market, advertising market, software and games industry. Since 2010, Hamburg Kreativ Gesellschaft has been supporting Hamburg's creative industries

with tailor-made services in the areas of consulting and qualification, funding and financing, real estate brokerage and urban development, as well as innovation promotion. Since 2017, it has managed the urban submarket and location initiatives Gamecity Hamburg, nextMedia.Hamburg and the Design Zentrum Hamburg under its umbrella.



In response to the pandemic crisis, it has created a series of offers to expand the future viability of the creative industries. For example, with the Creative Future Academy, which helps creatives digitise their business models, or the Silver Lining Award, which promotes innovative ideas in the design industry. The Fast Mover Programme supports the content industry in developing sustainable solutions and getting them on the road quickly.

<https://www.kreativgesellschaft.org/>

LIFE SCIENCE NORD (LIFE SCIENCE NORTH)

Life Science Nord strengthens value creation in the region and has established itself as one of the leading life science networks in Europe. Around 500 players from industry and research are part of the biotechnology, pharmaceutical and medical technology sector in the cluster region of Schleswig-Holstein and Hamburg. With a complete value chain from basic and applied research to clinical trials and market-ready end products, the Life Science Nord cluster offers a unique infrastructure: hands-on researchers and clinicians cooperate closely

with industry partners to help innovative products and technologies achieve a breakthrough.



This commitment to the location is actively supported by Hamburg and Schleswig-Holstein. The cluster management coordinates a wide range of activities, organises and participates in events, informs about news within the cluster, offers advice and initiates strategic innovation projects for

the development of new health solutions. In addition, the cluster management brings business, research and politics together in the north of Germany, respectively the expertise of universities and research institutions as well as its own close contacts in the companies. More than 260 companies and regional institutions are organised in the Förder- und Industrieverein Life Science

Nord e. V. (Association for the Promotion and Industry of Life Science North). In cooperation with the cluster management, the association offers its members a partner programme with a wide range of activities and services. The cluster management obtained the ECEI GOLD Label by the European Secretariat for Cluster Analysis (esca).

www.lifesciencenord.de

LOGISTIK-INITIATIVE HAMBURG (LOGISTICS INITIATIVE HAMBURG)

Logistik-Initiative Hamburg (LIHH) is a company supported by the Ministry of Economics and Innovation of the Free and Hanseatic City of Hamburg and Logistik-Initiative Hamburg e.V. The aim of this public-private partnership is to further expand the role of the Hamburg metropolitan region as Europe's leading innovative logistics metropolis and to network logistics-related companies and institutions. It operates under the guiding themes of "Innovation and Value Creation" and "Network and Cooperation" in the fields of action "Intelligent Infrastructure", "Human Resources and Qualification" and "Sustainability". Together with its partners, the Logistics Initiative Hamburg is the first point of contact for companies, institutions and the general public in the Hamburg Metropolitan Region on all issues relating to the logistics-related economy. The network has been awarded the ECEI GOLD Label by the European Secretariat for Cluster Analysis (esca).

As in most industries, the logistics sector has to face enormous challenges within the COVID-19 pandemic. However, due to the society-wide realisation of the systemic relevance and responsibility of the logistics industry and the enormous boost for digitalisation, the Corona crisis also offers opportunities for the industry to reposition itself. New technologies, shared economy and data as well as agile working methods are becoming more and more popular. The network of the Logistics Initiative Hamburg forms the important foundation for reliable cooperation.



The focus of the work lies also on the field of sustainability, as new concepts are needed for a sustainable economy - especially after Corona - not only considering financial aspects but also ecological and social responsibility.

www.hamburg-logistik.net

MARITIMES CLUSTER NORDDEUTSCHLAND (MARITIME CLUSTER NORTHERN GERMANY)

Five North German States - One Maritime Cluster: Shipbuilding, suppliers, marine technology, shipping, offshore and more: the maritime economy has many facets - and enormous future potential. The Maritime Cluster Northern Germany (MCN) bundles the wide-ranging competences of business, science and politics from the five federal states of Hamburg, Lower Saxony and Schleswig-Holstein, Bremen and Mecklenburg-Western Pomerania. It also

creates platforms for dialogue among the actors and thus promotes interfaces with other sectors. The aim is to strengthen and promote cooperation in the Northern German maritime sector.



Since its foundation in 2011, this unique platform has existed to coordinate the states' interests in cluster development and as a moderator of the interfaces between

the sectors of the maritime economy and adjacent technology areas. As a member and partner, companies benefit from long-term cooperation between the public

NEXTMEDIA.HAMBURG

nextMedia.Hamburg is the first point of contact and innovation support for the media and digital economy in Hamburg. The location initiative focuses on sustainable business models at the interface between content and technology. It is part of Hamburg Kreativ Gesellschaft and is supported by the City of Hamburg. As a hub within Hamburg's media ecosystem, nextMedia's mission is to support the innovation-driven collaboration between media and digital companies, universities, their students, and local movers and makers.

sector, business and science and use a broad information and cooperation network to drive innovation.

www.maritimes-cluster.de

nextMedia.Hamburg has set itself the goal of further expanding Hamburg's top position as a media and digital location and making it visible. Its core tasks are to promote and support new, sustainable business models at the interface of content and technology. To this end, nextMedia offers various programmes, events, community offerings and concentrated thematic expertise in the business fields of tomorrow.

www.nextmedia-hamburg.de

FINANZPLATZ HAMBURG (BUSINESS NETWORK FOR HAMBURG'S FINANCIAL SECTOR)

Hanseatic, reliable, innovative. Under this motto, Finanzplatz Hamburg unites business, science, politics and administration as well as financial institutions, regardless of their character. Whether classically conservative or fintech, small or large, local or international. The association brings them all together in a strong network. Its declared goal is to strengthen the market participants in the financial industry, to make Hamburg more competitive internationally as a financial centre, and to give the location a distinctive image and communicate it. Above

all, close networking with politics and administration, as well as with education and science, is at the centre of the activities of the Finanzplatz Hamburg. To achieve this, companies from the financial sector took the initiative in 2007 and founded Finanzplatz Hamburg e.V. to strengthen their region. In Hamburg, around 50,000 people work in the industry, predominantly in small and medium-sized enterprises, many of which are among the hidden champions.



Finanzplatz Hamburg

www.finanzplatz-hamburg.com

FOODACTIVE

foodactive, the food network of the Hamburg metropolitan region and has regularly brought together the food industry on various topics for more than 10 years - experts, networkers, trend sniffers and creative minds. As a central and professional contact, impulse generator and information broker, foodactive drives processes and ensures a strong food industry within the region. The relevance of the food industry is not only evident in the recent

energy issue and the associated challenge of supplying people with food. The industry is also exposed to constant challenges against the background of constantly increasing and changing global challenges (keyword raw materials, energy, logistics, etc.) and the situations with retail. Foodactive gets to the bottom of these and



other typical and individual challenges of the food industry, as well as questions concerning the production of food, and discuss, develop and find solutions together.

HAMBURG CRUISE NET

Hamburg Cruise Net e.V. (HCN) is the cruise shipping network of Hamburg and manages an overarching network in the form of a public-private partnership, consisting of cruise shipping companies, port service providers, tourism suppliers and municipal organisations, among others. Its aim is to strengthen the attractiveness of Hamburg as a cruise location and to improve the general conditions for the companies operating here, to secure jobs and to increase the added value at the location. The association promotes exchange within the entire industry and at the same time represents its interests externally. Hamburg Cruise Net's activities focus on the four key areas: strengthening

Sustainability, packaging, purchasing, raw materials, Nutri-Score, food safety culture, carbon leakage, carbon footprint, etc. were the topics addressed and worked on in 2021.

www.foodactive.de

the added value of the cruise industry in Hamburg; improving the framework conditions for the industry; the operational level – that is improving and therefore contribute to a more positive experience for the customer and the marketing of Hamburg as a cruise location. The framework for the various areas of responsibility is provided by the network management, which promotes dialogue between companies in Hamburg's cruise industry and third parties, creates synergies and initiates new projects to ensure the successful, sustainable and innovative development of cruise shipping in Hamburg.



www.hamburgcruise.net

HAMBURG@WORK | DIGITALCLUSTER.HAMBURG

Hamburg@work was founded in 1997 and therefore has been one of the first networks on digital economy in Germany. It is a well established platform to share and discuss experiences, objectives and problems in the digitalisation of core business processes. The exchange of experiences at eye level is a core element of their corporate philosophy. As a „digital“ cluster, they bundle cross-sector expertise on the topic of digitalisation and can thus provide their members with very concrete support on issues relating to digitalisation and the associated cultural change. They provide a large, cross-sector and cross-cluster network

both in the Hamburg metropolitan region and at supra-regional and international level. The member companies include large established companies, scientists, creative lone wolves and medium-sized companies as well as new market drivers and start-ups. They also cooperate with numerous other clusters, networks, associations and universities. With their own networks within the network, such as the Women's Club, the Agile HR Club, the IT Executive Club or the AI.HAMBURG initiative offers a diverse, topic- and target group-specific range of services.



<https://www.digitalcluster.hamburg/>

SELECTED HAMBURG'S CLUSTERS HIGHLIGHTS

VISIT TO THE COPENHAGEN BUSINESS FORUM

Together with Schleswig-Holstein State Secretary Tobias Goldschmidt, representatives of the Hamburg Ministry of Economics and Innovation, Hamburg Airport, Hamburg Invest, Hamburg Port Authority, Hamburg Hafen und Logistik AG, Reederei F. Laeisz and Vattenfall, senator for economic affairs Michael Westhagemann and EEHH Managing Director Jan Rispens visited the

H a m b u r g
Copenhagen
Business Forum



Erneuerbare Energien
Hamburg

and an exclusive round table with Danish companies in August. The topic of hydrogen was at the top of the agenda. Senator Westhagemann underlined the importance of a Northern European hydrogen economy.

MEMORANDUM OF UNDERSTANDING WITH SCHOTTLAND AND GRONINGEN

To further expand the hydrogen economy in Hamburg, Hamburg is cooperating with strong partners and has sealed this partnership with Scotland and Groningen by signing Memorandums of Understanding. "Both partners - and especially our companies - will better exploit the economic and environmental opportunities of hydrogen technology and drive the scaling of our respective domestic green hydrogen economies," said Hamburg's Senator for Economic and Innovation, Michael Westhagemann, at the signing of the Memorandum of Understanding for hydrogen between Scotland and the Free and

Hanseatic City
of Hamburg
at the end



Erneuerbare Energien
Hamburg

of November. Scotland and Hamburg share common strategic goals in climate protection and innovation as well as export potentials of green hydrogen from Scotland to Northern Germany. Hydrogen from start to finish - Hamburg and Groningen want to map the entire chain of hydrogen and fuel cell technology in the future. Starting with offshore wind energy, through a suitable infrastructure to hydrogen applications in mobility and industry.

SECOND COVID-19-IDEAPITCH

At the beginning of 2021, the country was again in lockdown, with school and company closures, home office, short-time work and other contact restrictions having a variety of consequences for people's usual activities, routines and livelihoods. Therefore, the idea was quickly born to hold the second virtual COVID-19 idea pitch of the Hamburg health industry and the eHealth network under the topic "COVID-19 and mental stress". Under the question "What are possible ways to deal with increased loneliness, fear and anxiety?" and "How can mental stress or existing illnesses, such as depression, be treated and what digital solutions already

exist?", four start-ups presented their innovative ideas to the audience.



Gesundheitswirtschaft
Hamburg

After a short introduction by Prof. Anne Karow, Head of the Early Diagnosis Outpatient Clinic for Mental Disorders at the University Hospital Hamburg-Eppendorf, the virtual stage belonged entirely to the young entrepreneurs from HelloBetter, GET.ON Institut für Online Gesundheitstraining GmbH, Invirto, Sympatient GmbH, ACTitude and MindNet E-Health Solutions GmbH.

IMAGE CAMPAIGN "THAT'S CARE" ROLLS THROUGH THE CITY - ALSO SETS IN PUBLIC TRANSPORT PASSENGER TELEVISION

Since 2018, the Hamburg image campaign "Das ist Pflege" (That's care) has been promoting young people, re-entry and

lateral entry into the nursing profession. Since its launch, the



Gesundheitswirtschaft
Hamburg

campaign of the Free and Hanseatic City of Hamburg has been attracting steadily increasing attention, especially via the social media channels Instagram and Facebook. Following the award of the German Business Film Prize 2020, further video clips were shot in 2021 with Hamburg nurses who report on their everyday work and their great

motivation to care for people. These films were made available to a wide audience via social media channels and YouTube. However, in order to reach the target group even better, the passenger television of the public transport was used in underground and suburban trains.

FOCUSING ON THE FUTURE OF AVIATION: SUSTAINABLE AERO LAB LAUNCHES

Climate change will have a significant impact on the aviation industry. This is where the Sustainable Aero Lab, launched in February 2021, comes in, with the aim of strengthening and accelerating sustainable development opportunities. It is aimed on start-ups and innovation projects worldwide that are working to reduce aviation's "footprint" on the environment and relies on the transfer of knowledge between universities, start-ups, seasoned entrepreneurs and corporations.

The special feature: The approach is unique. Partners include the aviation cluster Hamburg



Aviation and ZAL Centre for Applied Aviation Research. The Sustainable Aero Lab is supported by the Hamburg Ministry of Economics and Innovation and funded by the Innovations- und Förderbank Hamburg (IFB).

HYDROGEN AVIATION LAB: HAMBURG MAKES AVIATION FIT FOR HYDROGEN

The aviation industry in Hamburg is preparing to fly with hydrogen. To this end, the go-ahead has now been given for the establishment of a new development platform. With funding from the Hanseatic City of Hamburg, Lufthansa Technik, together with DLR, ZAL and Hamburg Airport, will design and test extensive maintenance and

ground processes for handling hydrogen technology over the next two years. For this purpose, an aircraft of the Airbus A320 family will be converted into a static laboratory at the Lufthansa Technik base in Hamburg.



DRONIQ: HOW GERMANY'S FIRST DRONE TRAFFIC SYSTEM IS TAKING SHAPE IN HAMBURG'S SKIES

The European "U-Space" concept is being tested in the Port of Hamburg and provides the basis for expanding commercial drone use. The Federal Ministry of Transport and Digital Infrastructure is funding the establishment of Germany's first U-Space real laboratory in Hamburg with around 492,000 euros. Droniq GmbH, Germany's leading company for the integration of drones into the airspace, and the parent company DFS Deutsche Flugsicherung GmbH are putting the idea into practice for the first time. U-Space is considered a basic requirement for the commercial use of drones in the urban airspace of the future. It allows operators to conduct drone flights easily and at short

notice by creating a spatially delimited airspace element. In the U-Space, special rules and procedures coordinate drone traffic and enable drone flights to be carried out quickly, safely and without lengthy approval procedures - even beyond the pilot's line of sight. The U-Space real lab is being implemented with several project partners. These include the Hamburg Port Authority AöR (HPA), HHLA Sky GmbH, the Hamburg Ministry of Economics and Innovation, Hamburg Aviation and the project consortium UDVeO.



LAUNCH OF THE PROGRAMME "FREI_FLÄCHE: RAUM FÜR KREATIVE ZWISCHENNUTZUNG" (FREE_SPACE: SPACE FOR CREATIVE INTERIM USE)

The programme "Frei_Fläche: Raum für kreative Zwischennutzung" offers answers to two pressing challenges: the lack of affordable spaces for creative professionals and the vacancy of retail spaces, which has been drastically exacerbated by the Corona pandemic. These two seemingly disparate problems have one thing in common: vacant space. While owners and landlords have to deal with economically painful vacancies, free and experimental space is a rare commodity for creative businesses. Avoid vacancies AND create space for creative interim use? The funding programme makes it possible. The Hamburg Kreativ Gesellschaft brokers vacant retail space at 1.50 euros per square

metre to Hamburg's creative professionals for interim use at very



Hamburg
Kreativ
Gesellschaft

favourable conditions. In this way, urgently needed spaces are opened up for creative people and enriching uses for a lively and diverse urban development are identified. At the same time, vacancies that are detrimental to stationary retail are revitalised and shopping districts are revitalised with attractive, cultural offerings. By the end of 2021, 25 funding contracts were concluded and thus around 4,500 square metres were brokered to creative creators. More than 100 additional creative concepts were also submitted for interim use.

CROSS INNOVATION LAB - 7X SUSTAINABLE INNOVATIONS

Developing interdisciplinary innovations with future potential in the Cross Innovation Lab. We are in the middle of the climate crisis. It therefore takes more than just a green idea to save CO2 and operate in a climate-neutral way. In the Cross Innovation Lab, 22 Hamburg organisations have developed sustainable innovations together with creative people and scientists. The goal is to minimise the impact on the climate. Cross Innovation means that we bring together Hamburg organisations from the private and public sectors with creative people and lead them through an innovation process. The starting point for this is that good ideas are

not created in a quiet room, but through open exchange and



Hamburg
Kreativ
Gesellschaft

collaboration with others. In 2021, the Cross Innovation Lab was all about climate. For the first time, the teams were joined by scientists from fields such as urban development, sociology, computer science, environmental technology and business administration in cooperation with the science platform Science Scout. Companies benefit from the agile innovation process, while Hamburg's creative professionals can build new business fields and a broad network for themselves.

TAKING BIG STEPS TOWARDS PERSONALISED CANCER THERAPY

For more than 18 years, the company and Life Science Nord member Indivumed has collected and archived tissue samples from cancer patients, in a standardised format and flash-frozen after ten minutes at the latest, from a total of 35 cooperation clinics in North and South America, Europe and Asia. The team around Prof. Dr. Hartmut

Juhl, founder & CEO of Indivumed, has consistently pursued its own vision over the



years: To lay the foundations for personalised cancer therapies. With the possibilities of digitalisation available today, the realisation of the vision has become tangible.

MARINE RESEARCH FOR HEALTH - BLUEHEALTHTECH JOINT PROJECT GETS UNDERWAY

As part of the funding line Economic Change through Innovation in the Region! (WIR!) of the Federal Ministry for Education and Reserach (BMBF), a transdisciplinary alliance

of health care, business and science will harness potential from marine research for



application in medicine and "life sciences". The BlueHealthTech innovation alliance initiated from the Kiel area will be funded

by the Federal Ministry for Education and Reserach (BMBF) with up to 15 million euros over the next six years.

PROJECT SYNERGIES - UTILISING THE POTENTIAL OF HAMBURG'S CANALS AND CANALS FOR THE LAST MILE

Using the potential of Hamburg's canals and canals for the last mile. With this approach, 20 participants met in a joint event of the WaCaBa and AVATAR projects for a stakeholder workshop. WaCaBa is being carried out by Fraunhofer CML on behalf of the Ministry of Economics and Innovation, while the EU project AVATAR is being supported by LIHH in Hamburg. In addition to use cases that are already in operational use

in other European regions, the workshop also discussed



opportunities through innovations such as autonomous water transport. The results will now be used to develop approaches for a possible pilot as well as statements on the technical and economic feasibility of such concepts.

ITS HACKATHONS CULMINATE IN PRESENTATION AT ITS WORLD CONGRESS

The 5th and last ITS Hackathon in preparation for the ITS World Congress 2021 in Hamburg focused on the future of sustainable cities under the motto "ITS City Hack". Ideas around the question of how artificial intelligence can advance ITS with regard to new mobility and urban logistics were analysed for their "data foundation" and programmed into new implementation ideas. The four teams "Datenhafen", "A11Y", "LogistikÖffi" and "Bibo/ZF2" from the missions "Rad &

Anschlussmobilität", "Logistik auf der letzten Meile", "Hafen



und Land-Verkehre" and "Barrierefreiheit" were particularly successful in convincing the jury and were able to expand their ideas up to the ITS World Congress, where they were able to pitch their respective projects to the international audience of experts on the central Agora stage.

EU PROJECT GREENOFFSHORETECH

The Maritimes Cluster Norddeutschland (MCN) has been a partner in an international cluster consortium since 2021, receiving five million euros from the European Union's Horizon 2020 research and innovation programme to implement the EU project GreenOffshoreTech. The project was selected as the second best proposal in a call for a total of 132 applications.

the EU Commission's 'Fit-for-55' plan," says Jessica



Wegener, Managing Director of the MCN.

"With the GreenOffshoreTech project, we are developing sustainable, green innovations together in a European network. The project focuses on our small and medium-sized member companies, which contribute to the realisation of the Green Deal in the maritime sector with their innovative solutions. In this way, we are making an important contribution to implementing the goals of

The consortium includes partners from 15 regions and seven countries across Europe (Norway, Portugal, Latvia, Poland, Iceland, United Kingdom, Germany). The EU GreenOffshoreTech project aims to create a framework for cross-sectoral and transnational cooperation between small and medium-sized enterprises (SMEs), clusters and regions. The aim is to foster the emergence of innovative products, processes and services to make green offshore production and transport greener and move towards a resource-efficient "Blue Economy".

ZEROEMISSION@BERTH: CO₂-FREE DEMURRAGE IN PORTS

Through the use of sulphurous fossil fuels both in regular ship operation and for electricity generation during berthing, ships currently contribute significantly to air pollution and carbon dioxide emissions in and around ports. For certain port locations, shore power systems powered by green electricity offer a valuable opportunity to significantly reduce ship emissions in the port. However, this is far from being the ideal way to reduce emissions at all port locations. In 2021, the nine largest German seaports entered into a cooperation for the first time in order to promote CO₂-free berthing times in ports. The cooperation project consists of three work packages: a joint position paper (WP1), the organisation of an innovation competition to identify innovative solutions

for a CO₂-free laytime (WP2) and research to identify technology providers and best practice examples from other ports around the world (WP3).



In 2021, the joint position paper on ZeroEmission@Berth was developed. With this, the port infrastructure companies position themselves in favour of a level playing field, openness to technology and the polluter pays principle. The MCN office in Schleswig-Holstein accompanied and moderated this process and provided input. The joint position paper of the seaports was completed and made public in December.

SCOOPCAMP

In 2021, the scoopcamp took place for the first time over two days - digitally via livestream and in person at the Hamburg Design Zentrum. The media innovation conference started with a specialist day on the topic of "News Consumption and Competence in the Young Target Group", moderated by Tagesschau anchor Constantin Schreiber. Jointly organised with the #UseTheNews project and Netzwerk Recherche. What formats, channels and content can be used to reach young people sustainably? How can media professionals get young people excited about news? And how can Generation Z's understanding of journalism be improved? To answer these questions, journalists and influencers were joined by education experts. The keynote entitled "Why should they believe us?" was given by Pulitzer Prize winner Alan Rusbridger. "Every generation

is different, but Generation Z seems to be particularly



different," said the former Guardian editor-in-chief. On day two of the scoopcamp, which was moderated by Dr. Johanna Leuschen, head of the NDR Audiolab THINK AUDIO, media professionals discussed in keynotes, panels and workshops what the future of the media landscape could look like. Will journalists and content creators soon no longer work for large publishing houses, but become media brands themselves with tools and platforms like Substack? Pia Frey, founder of Opinary and winner of the scoop Award 2021, raised this question in her opening keynote speech - and appealed to media companies not to hide their entire offering behind paywalls, but to make individual channels subscribable.

#CLIMATEACTION - INNOVATIONS FOR BETTER CLIMATE COMMUNICATION

In November, the "Impact Night" of the nextMedia programme Fast Mover took place. Under the theme #ClimateAction, teams applied to make a valuable contribution in the fight against the climate crisis and for improved communication. "In order to actively influence the climate crisis, we need not only technologies and knowledge, but also targeted communication

in order to be able to offer practicable solutions and



proposals for change," says Dr. Nina Klaß, the head of nextMedia.Hamburg. Eight teams were selected, each of which received funding of 5,000€ and support from the initiative's network. The eight winners were presented at the Impact Night.

EUROPEAN ROUNDTABLE OF FINANCIAL CENTRES

In November 2021, the financial centre of Hamburg joined the European Roundtable of Financial Centres together with ten other financial centres from eight EU member states. Within the framework of a Memorandum of Understanding, the financial centres agreed, among other things,

to give the financial centres a common



voice, to exchange best practices and to strengthen the competitiveness of the European financial sector in the face of key challenges such as digitalisation and sustainable change.

FINTECH-WEEK

From blockchain and the capital markets, from social investing to live podcasts on a cashless society, from networking dinners to discussion panels on open banking and sustainable finance: a total of 23 events took place under the umbrella of the fifth Fintech Week in November 2021. In cooperation with Hamburg Invest, Finanzplatz Hamburg took a look at the conditions and experiences

of fintechs setting up in Hamburg under



the title "Sharing Expertise - how to enter the German market". In a second part, foreign fintechs reported on their plans for expansion to Germany in short pitches. Finanzplatz Hamburg supported the Fintech Week in terms of content and also financially as a silver sponsor.

WORKING MEETING "PURCHASING OF PACKAGING" AND "CARBON FOOTPRINT"

As increasingly central aspects in the food sector, the topics of sustainability and climate are increasingly being highlighted in joint working meetings. In order to stay up to date in the field of research and development for sustainability of (film) packaging, experts gave a professional insight into current sustainability aspects, technical product examples and innovative films as well as future developments of packaging. Sustainability, climate neutrality, carbon footprint, targets and key figures,

this and much more is on the minds of companies and is increasingly demanded transparently by trade and consumers.



In addition to quality, brand and price, the Footprint will also serve as a purchase and decision criterion for consumers. At the working meeting on production, the focus was on the carbon footprint, more precisely: the Corporate Carbon Footprint (CCP) and the Product Carbon Footprint (PCF).

FOOD SESSION "UK & BREXIT"

This webinar "UK & Brexit" looked at and discussed the challenges as well as the opportunities for the UK food and drink market in 2021. What are the key consumer trends and growth segments? How will Brexit affect the F&D market and trade with Europe? And how can German F&D companies benefit from building a local supply chain in Wales. An expert from the British Embassy

reported on how Brexit is affecting the market and trade, which trends are currently prevalent in the British food and drink market and how to build local supply chains to meet the demands of customers in the UK.



PUBLICATION OF THIRD ISSUE OF HAMBURG CRUISE NEWS

The cooperation project "Hamburg Cruise News", on which Hamburg Cruise Net, Hamburg Tourismus GmbH and Cruise Gate Hamburg GmbH work together, was continued in 2021. The YouTube channel provides various informations on Hamburg

as a cruise location and addresses topics such as sustainability, social responsibility and relevance of the industry in the videos.



In the mid-year edition, the focus was on the new start of the cruise industry after the previous lockdown-related restrictions. Many cruise-related Hamburg companies

participated in the video to ring in the new season and welcome the cruise ships back to the Hanseatic city.

<https://www.youtube.com/HamburgCruiseNews>

HAMBURG CRUISE CONCIERGE LAUNCHED ONLINE

Together with Cruise Gate Hamburg GmbH and Hamburg Tourismus GmbH, the "Hamburg Cruise Concierge" was developed - a digital guide that provides cruise guests with all the information they need about their stay in Hamburg: all the offers of member companies, current information on the terminals, attractive vouchers, an interactive city map and suggestions for shopping, restaurants and leisure activities are always available on the smartphone. There is also interesting information for locals and ship lovers: the Cruise Concierge

lists all ship calls, popular places for "ship spotting" and information on service providers in the industry.



The guide is especially designed for mobile devices and can be accessed at the Hamburg Cruise Net info counters at the three cruise terminals via NCF buttons or by scanning a QR code on corresponding roll-ups or buttons.

<https://productmate.de/concierge/hamburgcruise/main>

NORTH BY NORTHWEST

"How does Germany achieve a successful digital transformation and catch up with the world leaders in the 21st century?" This question was posed by moderator Stefanie Dreyer, German journalist and digital ambassador for Hamburg@work in Canada, to the talk guests as part of the virtual live panel discussion North by Northwest. This cooperation event was produced simultaneously in two TV studios, one in Hamburg and one in Düsseldorf, and broadcast live as an online stream. With

350 calls this overall societal issue has been discussed across the network, generating multi - perspective approaches. In addition, the hybrid live format enabled participants to ask questions to the experts or to contribute valuable opinions to the discussion. North by Northwest showed once again that a profitable exchange is also possible in the digital space!



WOMEN'S CLUB EVENTS

"If you want to go fast, go alone. If you want to go far, go with others", says an African proverb, which was declared the motto of a Women's Club event. Those who have mentors at their side in their professional careers will get further. This is proven by studies as well as empirical experiences of top executives. But how do I find a suitable mentor? Which questions and challenges are suitable for mentorship? And what makes

a good mentor? Participants discussed this with experienced mentors and mentees to find out what it takes to make the joint learning journey a success for both. At this event, it was once again clear how beneficial the networks within the Hamburg@work network are. Here experts come together at eye level for a target group-specific exchange.



CROSS-CLUSTER INITIATIVES

CO-LEARNING SPACE FOR HAMBURG'S CLUSTERS

Since the end of 2016, the project Co-Learning Space for Hamburg's Clusters has been developing and designing the space that enables Hamburg's clusters to engage in a productive exchange, identify common fields of action, use cross-cluster strategies to exploit common opportunities and meet common challenges. Synergy effects are being created at the level of operational cluster management and opens up new learning and development potential. In addition, industry experts are brought into a professional dialog about the future of their sectors. In this way, topics and developments that require interdisciplinary approaches to certain problems and challenges can be identified. The project aims to inspire cross-industry action through the purposeful development and design of cluster bridges in

order to meet future technological and social challenges. Hamburg's

cluster managements and networks are engaged in the Co-Learning Space. The COVID-19 pandemic recently illustrated that the Co-Learning Space is an important tool for the cluster economy, as well as crisis management. The Co-Learning Space is carried out by the Helmut Schmidt University/University of the Federal Armed Forces Hamburg and funded by the European Regional Development Fund and the Free and Hanseatic City of Hamburg.

CO-LEARNING SPACE



<https://www.co-learning-space.de/en>

CROSS INNOVATION HUB OF HAMBURG KREATIV GESELLSCHAFT

In search of new impulses for products, processes and workflows, companies, self-employed and people interested in setting up their own businesses are increasingly looking beyond their own domain to other sectors and markets. In so-called cross-innovation processes, it is especially the confrontation with new work cultures and solution approaches, such as those found frequently in the creative industries, that promises opportunities for changed process designs, new products, services and business ideas. In its Cross Innovation Hub, Hamburg Kreativ

Gesellschaft makes use of this approach to promote innovation at an early stage with a continuous flow of new offerings. The Cross Innovation Hub is a project of Hamburg Kreativ Gesellschaft and is co-financed over a period of five years with funds from the European Regional Development Fund.



Cross Innovation Hub | Hamburg Kreativ Gesellschaft

CROSS-CLUSTER PROJECTS IN THE AREAS OF HYGIENE, INFECTION & HEALTH AND EHEALTH

As part of the Hamburg Cluster Bridges initiative, the cluster organizations Life Science Nord Management and Gesundheitswirtschaft Hamburg are jointly working on two thematic areas under

one roof: Hygiene, Infection & Health and eHealth. The projects is funded by the European Regional Development Fund and the City of Hamburg.

HYGIENE, INFECTION & HEALTH (HIHEAL)

The sub-project Hygiene, Infection & Health (HIHeal) aims to establish a cross-cluster network in the areas of hygiene, infection & health along a joint value chain between the cluster agencies Gesundheitswirtschaft Hamburg and Life Science Nord. HIHeal interconnects players, including companies, scientific institutions and clinics in Hamburg. In addition to new "emerging diseases" such as Ebola, EHEC and MERS, the range of topics includes, also nosocomial infections



(hospital-acquired infections) as well as antibiotic resistance and hygiene measures.

<https://www.hiheal.de/home-2.html>

EHEALTH

In the field of eHealth, there is a continuing demand for new solutions for the primary and secondary healthcare market due to demographic change, increasing cost pressure in healthcare, and changes in citizens' health awareness. Digitalization offers support for this in many areas, but also confronts the players with many new challenges. Gesundheitswirtschaft Hamburg has established an open-access cross-cluster network, the eHealth Network Hamburg, as part of the cluster bridge project on the topic of eHealth. With its activities, the eHealth Network connects players from the fields of business, science, healthcare and politics in order to identify trends, recognize opportunities and drive innovative developments for the healthcare market. The eHealth Network involves not only members



of Gesundheitswirtschaft Hamburg and Life Science Nord but also members from the digital and creative industries clusters, companies from adjoining industries and other Hamburg stakeholders. The eHealth Network Hamburg is funded by the European Regional Development Fund and the Free and Hanseatic City of Hamburg; the project started in April 2016 and concludes in December 2021.

<https://www.ehealth-hamburg.de>

CROSS-CLUSTER ACTIVITIES

HAMBURG@WORK HAS ALWAYS RELIED ON STRONG PARTNERSHIPS AND CROSS-CLUSTER EXCHANGE

In 2021, for example, Hamburg@work continued its media cooperation with the other Hamburg clusters in order to support each other, especially during the difficult

time of the pandemic for everyone. By communicating and promoting each other's events and offers, they gain a wider reach that is profitable for all involved.

HAMBURG AVIATION AND HAMBURG KREATIV GESELLSCHAFT JOINTLY OFFER THE CROSS INNOVATION LAB "CLIMATE": CREATIVES, SCIENTISTS AND COMPANIES DEVELOP SUSTAINABLE INNOVATIONS TOGETHER

The Cross Innovation Lab sees itself as an open innovation process. A total of 22 well-known Hamburg companies are developing sustainable products and services in interdisciplinary teams with creative professionals. New: For the first time, scientists from different disciplines were also involved in this tried and tested format. With their know-how, they complemented the teams and stimulated valuable changes of perspective. The focus topic of the Cross Innovation Lab was climate neutrality:

the companies developed sustainable innovations and corporate strategies to reduce their impact on the climate.

From February to June, teams worked on a wide variety of innovation projects. From the resource-saving aircraft cabin ("Faircraft") to a sustainable construction site to a new mobility culture for the city of Hamburg: the variety of topics in this Lab was immense and the exchange of knowledge invaluable.

CROSS-CLUSTER EVENT ON THE CROSS-SECTORAL POTENTIAL OF DRONES AND KI

In cooperation with Hamburg's clusters, the Windrove network invited participants to learn about the spectrum of AI-based applications for drones in April. After keynote speeches by Alois Krtil (Artificial Intelligence Center Hamburg e.V.), Dr. Stefan Milz and Sebastian Süß (Spleenlab), David

Küster (Synergeticon) and Marius Eschen (homePORT/HPA project), the participants had the opportunity to contribute their own questions on the use of drones, develop application scenarios together and discuss them in an interdisciplinary plenary session.

SYNERGIES AT THE FUNDING GUIDE: CROSS-CLUSTER EVENT WITH IFB HAMBURG

The Logistics Initiative Hamburg's funding guide format regularly provides information on funding programmes and funding calls that are relevant to its network. In May, the series of events was opened widely and, at the invitation of the Logistics Initiative Hamburg and in cooperation with the other Hamburg clusters and networks Hamburg Aviation, Maritime Cluster Northern

Germany, Life Science North, Hamburg Cruise Net, Hamburg@work as well as the Hamburg Kreativ Gesellschaft, members of all initiatives were able to find out about the current support and funding opportunities around Corona. IFB Hamburg provided an overview of the various grants, participation programmes and loans.

HYDROGEN FOR HAMBURG'S INDUSTRIAL CLUSTERS

The future potential of hydrogen in Hamburg's industrial clusters was the topic of a virtual event in May 2021, to which

the clusters Renewable Energy Hamburg, Hamburg Aviation, Maritime Cluster Northern Germany, Logistics Initiative Hamburg and

Hamburg Cruise Net had invited. The event focused on cross-industry exchange on hydrogen-related innovation projects and

topics in the Hamburg Metropolitan Region. Around 230 interested parties took part.

HIHEAL IS GOING TO BE EXTENDED!

The HIHeal project, which started in 2016 and spans clusters, networks regional companies, scientific institutions, clinics and funding agencies in the north in the areas of infections and hygiene. Through stronger networking, synergies are optimally

used to address issues and challenges more efficiently. These goals are being pursued with success and sustainability: In April 2021, the originally planned 5-year project duration was extended by 12 months.

ONLINE UPDATES HYGIENE & INFECTION PREVENTION

Looking back to the beginning of the year 2020: The spread of SARS-CoV-2 becomes a global pandemic with a development until today that only few have expected or could have expected. Increasing demand for information and cancelled information events: What now? Two things quickly became clear. First, major congresses on hygiene and infection prevention were cancelled or postponed and could not be transferred directly to online formats. Secondly, the need for information among life science stakeholders and, more generally,

among companies and their crisis teams increased exponentially. This was the hour of the HIHeal network! The "Online Update Hygiene and Infection Prevention: COVID-19" was launched in an uncomplicated manner and with a short start-up phase. The concept of the online updates is as simple as it is successful: the cooperation partners invite three to four experts to talk about current research (results), digital solutions, best practices or political assessments of the situation.

HYDROGEN TECHNOLOGY CENTRE FOR AVIATION AND SHIPPING

In September 2021, the Federal Ministry of Transport and Digital Infrastructure gives the go-ahead for the establishment of a hydrogen technology-focused Innovation and Technology Centre (ITZ) for aviation and shipping in Northern Germany. The ITZ North is to be established as a new type of service centre in the future network of the "German Centre for Future Mobility".

The ITZ North thus complements the three other innovation and technology centres in Germany that have other mobility focal points, including rail or road transport. The ITZ Nord is designed for aviation and shipping and will provide its services at the Bremen/Bremerhaven, Hamburg and Stade locations. Maritimes Cluster Norddeutschland supports the ITZ Nord and provides relevant contacts.

MARITIME CHRISTMAS MARKET

Despite "Hamburg's bad weather", around 180 participants came to the premiere of the first Maritime Christmas Market in December 2021. In the 2G-Plus model, the four organisers Hamburg Cruise Net, Hafen Hamburg Marketing, the Association of Hamburg and Bremen Shipbrokers and Logistics Initiative Hamburg welcomed their guests outdoors to this first joint networking

event in Sierich's Winterzauber in Hamburg's Stadtpark. Unfortunately not 100% sheltered from the wind, but with warming mulled wine, lard biscuits and roasted almonds and many other delicacies, the guests were not put off by gusts of wind and rain and listened to the HHLA shanty choir in addition to the long-awaited personal conversations.

ON THE WAY TO EFFECTIVE HYGIENE STRATEGIES IN CLINICS

On the initiative of the Life Science Nord cluster, experts for infectious diseases in

the north of Germany are working together under the umbrella of the HIHeal network.

Among other things, they evaluate both the effectiveness of disinfectants with regard to the latest antibiotic-resistant strains and the validity of reference strains. The efficacy testing of disinfectants is an important prerequisite for successful hygiene measures in the clinical environment. The Hygiene, Infection & Health (HIHeal) network offers the ideal starting point for joint projects in the Life Science Nord cluster and brings

together numerous players. Coordinated by the analysis experts of the Institute for Hygiene and Microbiology of Dr. Brill+Partner GmbH, clinicians of the University Medical Center Hamburg-Eppendorf (UKE) and the disinfectant specialists Bode Chemie and Dr. Weigert are investigating the relevance of clinically isolated antibiotic-resistant bacteria and the effectiveness of surface disinfectants on these germs.



IMPRESSUM

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