

Leitbild WaBe

FOR SUSTAINABLE GROWTH & EMPLOYMENT IN THE EUROPEAN METROPOLITAN REGION OF NUREMBERG





SUSTAINABLE GROWTH AND EMPLOYMENT

The Leitbild WaBe (model of sustainable growth and employment) has been establishing the guidelines for the economic, technological and scientific orientation of the European Metropolitan Region of Nuremberg since 2010. It identifies seven areas of competence in which the region displays economic and technological strengths. The extensive know-how in each of these seven areas has been pooled since 2015/16 in the areas of activity and systematically used to address technological and social issues.

WE WANT ...

- ... to strengthen bridges between the areas of competence, and therefore promote the areas of activity being used to more intensively position the Metropolitan Region as a prominent location!
- ... a Metropolitan Region which works across disciplines, carries out joint projects, and provides room for innovations!
- ... to further perpetuate the knowledge transfer between science and business!
- ... to achieve an optimum international network and lasting economic success!
- ... to develop future-proof employment, and increase prosperity for everyone in the region!

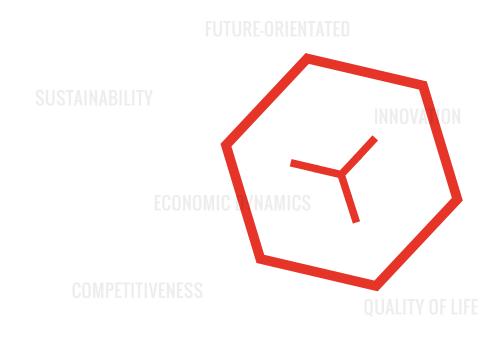
EUROPEAN METROPOLITAN REGION OF NUREMBERG

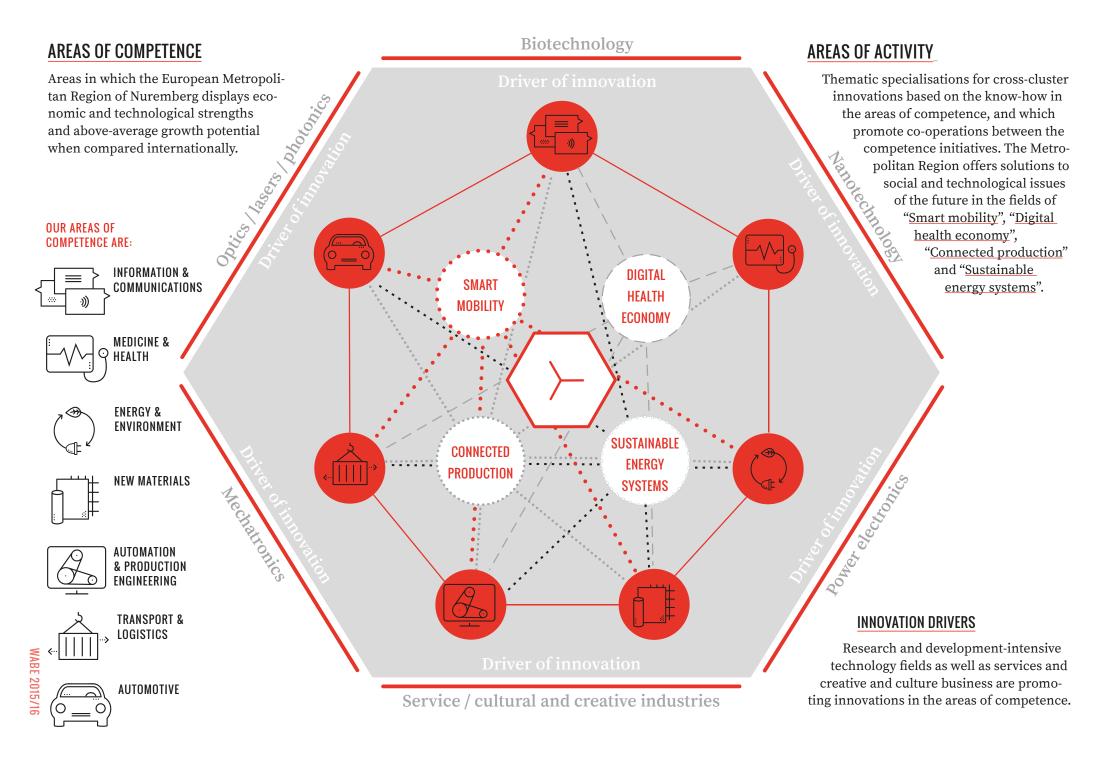
THE LEITBILD WABE IS A ...

COMPASS For the Metropolitan Region, the Leitbild WaBe is part of the larger regional strategy and serves as a compass. By identifying areas of competence and areas of activity, it provides guidance: For internal and external decision-makers, regarding the founding, sponsoring and orientation of companies, universities and research institutes.

PROFILE The Leitbild WaBe shapes the way the region is perceived and the way it perceives itself by establishing a clear profile in an economic and technological context. As such, it provides positive impetus for image-building and hones the Metropolitan Region's domestic and international profile as a dynamic, innovative economic area.

NETWORK The Leitbild WaBe establishes the framework in which the regional economy's players network and promote the intensification and expansion of regional value chains and innovations. Its primary principle revolves around consensus on a broad regional basis.





DIGITAL HEALTH ECONOMY

CHALLENGES Demographic change will lastingly shape healthcare. The ageing population will see a rise in non-transmittable diseases, such as diabetes, cardiovascular disorders and cancer. The increasing cost pressure in the health system will then require innovative approaches to maintain the country's extensive care services at a high level. The rise in digitalisation will create an opportunity to ensure adequate care, even in remote areas, with the so-called Healthcare IT gradually penetrating the entire health system.

MISSION The "digital health" sphere of activity is based on the Metropolitan Region's excellent medical technology. Combined with the various specialisations in the individual areas of competence, the region is setting the pace for the future of medicine.

CO-OPERATIVE PROJECTS (examples):

- Imaging diagnostics
- Implants and orthoses
- Telemedicine

- Prevention
- Logistics

MINIATURISATION

DEMOGRAPHIC CHANGE

PREVENTION

PREVENTION

TELEMEDICINE

DIGITALISATION

AUGMENTED REALITY

SMART MOBILITY

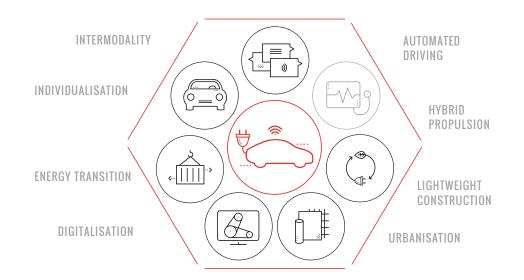
CHALLENGES Transport infrastructures are the basis of modern societies and their business activities. The systemic understanding of mobility which covers both passenger and goods transportation locally and long-distance is gaining importance. The electrification of drive trains and the digital interaction of vehicles with one another and/or the infrastructure are shaping the development of vehicle technology. Carsharing models and the emerging possibilities of automated driving are currently giving rise to new forms of mobility, and this will also see fundamental changes in drive systems. Demographic change will similarly alter mobility requirements.

MISSION As a Metropolitan Region, we stand for connected, intermodal mobility. We offer smart logistics concepts which redefine CO2 efficiency through the latest drive technology!

CO-OPERATIVE PROJECTS (examples):

- Automated driving
- Environmentally friendly logistics

- Age-based mobility
- Smart networks
- Hybrid drive systems



SUSTAINABLE ENERGY SYSTEMS

CHALLENGES Climate protection requirements, nuclear phase-out, the development of renewable energies, and the necessary energy-efficiency increases in terms of consumption are all leading to a revamp in the energy system. Energy technologies are also heavily influenced by other field of technology, such as ICT or production and materials technologies. Systemic aspects are currently gaining importance in the development of energy technologies. These include the issue of network infrastructure, and particularly also energy storage.

MISSION As a Metropolitan Region we provide answers to the challenges posed by ambitious climate-protection targets. We exemplify the integration of renewable energies and define standards in storage technology.

CO-OPERATIVE PROJECTS (examples):

- Storage technologies
- Alternative drive systems
- Europeanisation

- Energy production
- Energy-efficient infrastructure

DIGITALISATION

SMART
NETWORKING

FLEXIBLE
ELECTRICITY
DEMAND

INCREASING

ENERGY TRANSITION

ENERGY STORAGE

INTERNET
OF THINGS

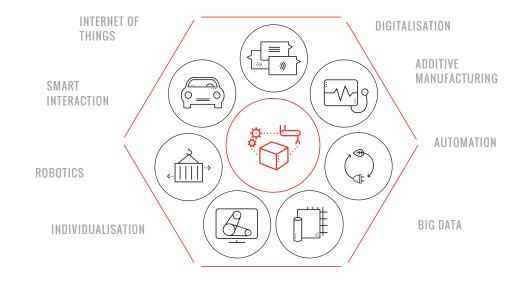
CONNECTED PRODUCTION

CHALLENGES The interlinking of industrial production systems with modern information and communication technology is sparking an extensive transformation in existing processes and value chains. Digitalisation in the industrial sector is often described as Economy 4.0 or Industry 4.0, denoting the smart interaction of products and processes in industrial added value. Industrial production, automation technology and ICT are merging to form a holistic approach, enabling completely new prospects for growth.

MISSION Due to our leadership in the area of electrical automation, we provide impetus for new innovations and establish the Metropolitan Region as an important industrial hub. The production processes are interlinked and perfectly co-ordinated through smart technologies, including at an international level.

CO-OPERATIVE PROJECTS (examples):

- Human-machine co-operation
- Efficient production technologies
- Digital Production
- Personalisation
- Inter and intralogistics



CONSCIOUSNESS

COMPETENCE INITIATIVES

Research and project work enable the initiatives to invigorate the areas of competence. The initiatives are the central platform for the thematic networking of companies and research institutes in the region.



»The Metropolitan Region is one of Europe's top I&C regions. According to the European Commission it is distinguished by a successful corporate landscape, innovative products and approaches and high research intensity. We're proud of this, and are building on it!«

FRANZ-JOSEF NAGLER, Chairman of NIK e.V. Head of internal data processing & organisation, member of the management board, DATEV eG www.nik-nbg.de

»In order to keep surviving on the market, you need specialists who are always up to date and familiar with the latest methods. Through a special competence offensive we have been able to systematically train over 250 staff from more than 30 companies in the Metropolitan Region in the "Six Sigma" approach alone.«



TIMO PIWONSKI, Chairperson of ofraCar - Automobilnetzwerk e.V.

Managing partner of Iprotex GmbH & Co. KG, Münchberg

www.ofracar.de



»Thanks to the Development Centre for X-Ray Technology (EZRT) led by the Fraunhofer Institute for Integrated Circuits (IIS) in Fürth, the Metropolitan Region is home to the world's largest computerised tomography, and therefore a beacon in the field of materials research.«

DR. ELFRIEDE EBERL, Nuremberg Chamber of Commerce & Industry THOMAS DREYKORN, Fürth City Department of Economic Affairs www.ihk-nuernberg.de/KINEMA



»42% of all Germany's initial patent applications in the fields of diagnostics, surgery and identification come from the Metropolitan Region. We are a model region for digital health, and, since early 2010, a national leading-edge cluster for medical technology – Germany's only cluster in this field.«

 $\mbox{\bf PROF.}$ DR.-ING. ERICH R. REINHARDT, Chairperson of Medical Valley EMN e. V.

www.medical-valley-emn.de

»The Metropolitan Region has a long tradition of expertise in transport and logistics. The automatic subway system and test field for hybrid shunting locomotives are excellent current examples of this. The CNA e.V. is a platform for synergies and the driving force for innovations in specialist field of transport and logistics.«



NORBERT SCHÄFER, Chairman of CNA e.V., Managing director of AEbt Angewandte Eisenbahntechnik GmbH www.c-na.de



»With 3 universities and 6 non-university research institutes with expert knowledge in all areas of the energy sector, the region boasts first-class facilities. A beacon of energy research in the Metropolitan Region, already visible right across Germany, has been created in the form of the Energie Campus Nürnberg (EnCN), as an interdisciplinary platform.«

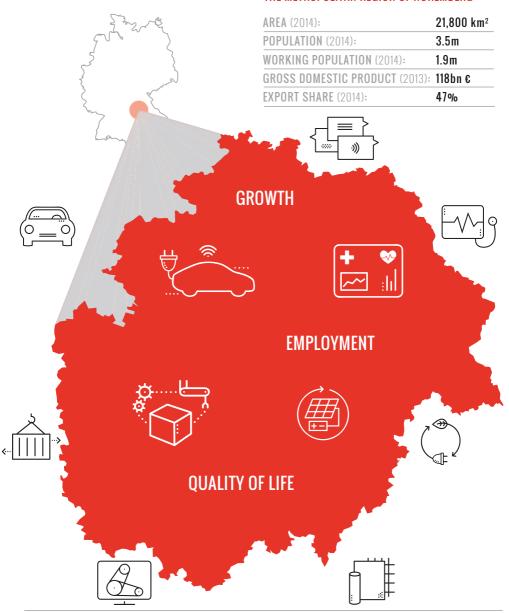
DR. JENS HAUCH, Chairperson of ENERGIEregion Nürnberg e.V. www.energieregion.de

»Siemens' Amberg electronics factory is an example of the connected, automated production of the future. Production volume has increased eightfold here, while maintaining the same production space and hardly changing the number of staff.«



DR. RONALD KÜNNETH, Head of Automation Valley Nordbayern Nuremberg Chamber of Commerce & Industry www.automation-valley.de

THE METROPOLITAN REGION OF NUREMBERG



IMPRINT

Publisher:

Nuremberg Chamber of Commerce and Industry

www.ihk-nuernberg.de

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Realisation: www.klok-agentur.de





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