

Mitteldeutschland

<http://www.mitteldeutschland.com/>

European metropolitan region of central Germany

"Metropolitan regions are motors of social, economic, social and cultural development with good access to European and international level and continue broadcasting to the region."

- Ministerial Conference on Regional Planning (MKRO) 1995

Our vision

"Central Germany is one in 2020 to the most attractive and innovative economic, scientific and cultural regions in Europe, combining dynamic growth with a high quality of life."

Our Mission

- We are the transnational Platform for Action means German companies, local authorities, chambers and associations as well as universities and research institutions in the form of a pioneering private-public-partnership model.
- We strengthen the transnational communication and enhance the region's image.
- We develop projects for sustainable growth of innovation and competitiveness.
- We are the drivers for an efficient and responsible central German economic, scientific and cultural region.

Fields of action / implementation projects

- **Improve Image** / location marketing for Central Germany, EXPO REAL: Metropolitan Region booth
- **Promoting innovation** / IQ Central Innovation Prize, Industry Project "hypos"
- **Strengthening strengths** / initiation of Central German clusters (chemicals, automotive, solar, IT)
- **Professionals and managers** / Graduate Fair Central Germany
- **Sustainability and family-friendly** / project "V-Factor - Conducting business responsibly in Central Germany"
- **Transport and Infrastructure** / Project "rai passenger traffic concept"
- **Culture and Tourism** / Central German Culture Guide
- **Space management** / web based industrial real estate management



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Economic base for the cluster strategy of Mitteldeutschland

Organisation

The European metropolitan region of central Germany is a registered charity with an office as an operational unit. In club is structure-directing companies, cities and counties, chambers and associations as well as universities and research institutions from Saxony, Saxony-Anhalt and Thuringia with the common goal of sustainable development and marketing of the traditional economic, scientific and cultural region of Central Germany involved.

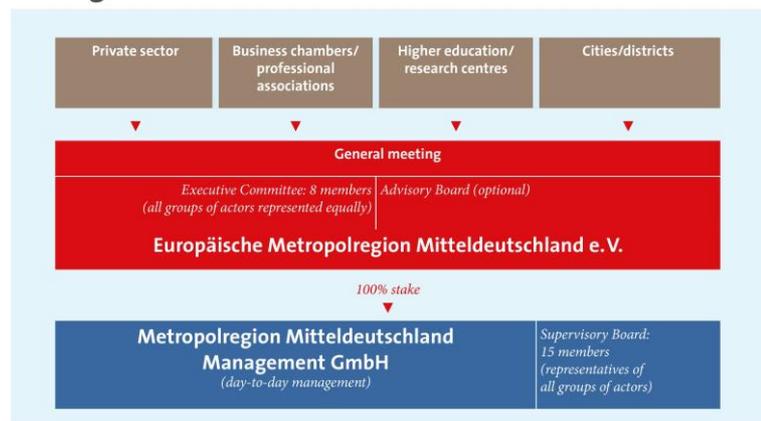
Working Groups of the metropolitan region of central Germany

In the working groups, the areas of activity of the metropolitan region of central Germany are processed in the form of concrete projects. At the same time they form the central interface for collaboration with stakeholders from the public administration, the economy, science and culture. As such, they are open to all interested actors in the region.

- AG Business and Location development (including the thematic area of sport)
- AG Science and Research
- AG Demographics and Education
- AG Culture and Tourism
- AG Transport and Mobility
- AG Strategy and Communication



Organizational Structure



Cluster strategy of the metropolitan region of Central Germany

The metropolitan region of central Germany supports clustering processes in the interconnected industries (and beyond) have at the level of the three federal states of Saxony, Saxony-Anhalt and Thuringia above average concentration of companies and research institutions. The goal is to increase innovation and competitiveness as well as the development of an internationally competitive profile perceptible.

Effects of Cluster

Effects for companies

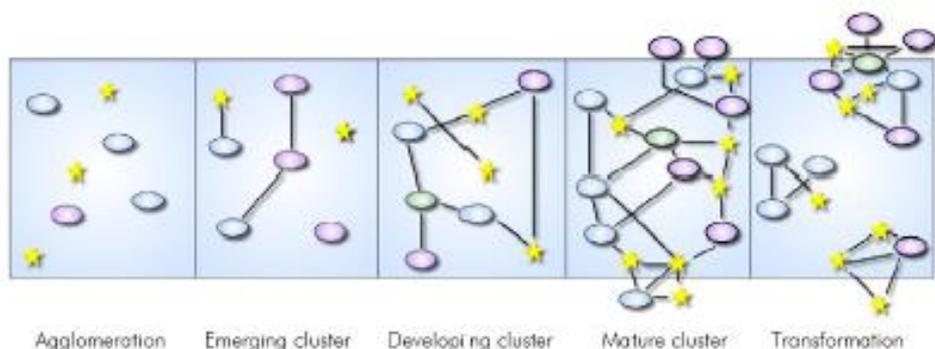
- Clusters strengthen the companies, because they can achieve cooperation gains.
- Due to the proximity of suppliers, service providers and research & training institutions logistical costs can be reduced.
- The proximity of the actors allows another new, innovative forms of cooperation both between companies and between companies and research institutions. Even companies that are in direct competition with each other can identify common areas of cooperation and the fact specialize more.

Effects of research and science institutions

- Through the coordinated cooperation of all institutions, they will better align to the local company and cooperate with them in the context of new research and development projects.

Effects for the State Governments

- As a result of an organized flow of information within the cluster growth and innovation-friendly conditions for the cluster industries can be created.
- Successful clusters can increase economic growth and attractiveness, as well as the standard of living of the inhabitants.
- The strengthening of existing clusters can promote the development of new clusters.
- Rural regions also benefit from a sectorally oriented economic policies.



Example of Innovation

Hypos

Hydrogen Power and Storage Solutions Germany East

www.hypos-eastgermany.de

The project "hypos Hydrogen Power & Storage Solutions East Germany" is working on a way that will transform the varying degrees resulting from weather dependent electricity from wind and solar power plants in the storable chemical energy carrier hydrogen. Consumers should be made available on demand always the necessary energy and material quantities. To achieve this, the excess current is to be converted by specific chemical process in hydrogen, stored, transported and used continuously.



© Hypos
Renewable energy storage

Hypos should preferably manage the surplus: The

concept involves the conversion of the excess current into hydrogen with intelligent networking of power grid, hydrogen pipeline, gas grid and gas storage facilities. With the further expansion of renewable energies, the problem of the surplus will dominate.

The cross-regional and interdisciplinary hypos consortium pursues the fulfillment of its vision a multidisciplinary concept and project approach: The planned research and development activities are geared towards the optimal conversion and storage of electricity from renewable sources in the chemical energy of hydrogen. At the same time the economic and socially acceptable integration of these renewable energy sources is being driven into the supply infrastructure.

Renewable excess electricity must be baseload

The German economy needs to be powered at all times stable electricity. More and more will help renewable energy. The consortium came together on the implementation of hypos project, therefore the following vision pursued:

"Renewable surplus electricity to be integrated into the energy system through innovative combination of technology of hydrogen production with the existing infrastructure of gas pipelines and gas storage facilities. To be used as the "green" hydrogen for fuel conversion of chemistry, for the needs of electric vehicles and as an energy source. In order for a breakthrough for the success of the energy transition is not only achieved, but there are triggered far-reaching social and economic effects of large".

The vision is the hypos mission, through the "green" hydrogen is the chemical material flow network to connect the natural gas grid and the electricity supply network in East Germany model and thus achieve missing system and network innovations for economy of safe green hydrogen. It is expected that this economic growth in East Germany produced, will be involved in the particularly small and medium enterprises.

Hypos provides a bundle of opportunities and possibilities

We place our initial concept at the right time the right solution. Hypos has the following powers:

Hypos is mains, hydrogen generation, hydrogen pipeline, natural gas network, gas storage and the material use of the hydrogen in the chemical industry, the energy use for electric vehicles and other applications combine so that the economic exploitation and long-term storage of renewable electricity comes first here.

innovative management of the electricity network at short notice to take advantage of changes in the offer for water electrolysis.

- The opportunity to integrate new systems for generating renewable electricity directly, thus reducing additional costs for power grid expansion.
- Provides the opportunity to open up the given natural gas grid and existing gas storage stepwise for hydrogen technology.
- The chance to progressively establishing the use of natural gas for the material use of hydrogen to substitute that correspond to an average power of about 450 MW of electrolysis in the central German chemical triangle and thus the CO2 emissions would reduce by about 700,000 t / a.
- The advantage that for the transitional period of technological development and market launch of the Green hydrogen always fossil hydrogen generated remains available as a back up.
- The chance to further research projects "Power to Gas" and in particular the CO2 usage which are still in a basic stage, then engage when the technical maturity is reached.
- The possibility of gradually introducing a "green chemistry", produced CO2-poor in both conventional products, but also new product developments are made possible and thus a future vision for the Central German chemical triangle is created.

Renewable energy in Mitteldeutschland

Hypos offers

- The chance to lead the recent research results on water electrolysis with a scale up to profitability.
- The opportunity with an

