

# CleanTech & Energy in Bavaria

November 2017



invest  
in  
bavaria



# Bavaria

## your ideal location for growth in EMEA



### Market Overview:

### CleanTech in Bavaria

#### Key Success Factor #1:

Strong economy in the heart of the EU

#### Key Success Factor #2:

Powerful and diverse company landscape

#### Key Success Factor #3:

Europe's leading innovation hub

#### Key Success Factor #4:

Supportive government and politics

#### Key Success Factor #5:

High quality of living

# CleanTech in Bavaria

Bavarian Companies in the Cleantech field



**SIEMENS**



And many more...

# CleanTech in Bavaria Events



## Digital Energy Innovation Forum – Sector Coupling November 16<sup>th</sup>, Munich

The forum is aimed at entrepreneurs and decision-makers from all the energy sectors, who focus on the latest technologies in Simulation Technology, Sensor Technology, Big Data, AI, Blockchain and Cyber Security. Additionally the event tries to gather the best **startups** from Europe and neighboring countries.

[LINK](#)



## IFAT Trade Fair for Environmental Technologies May 14<sup>th</sup> – 18<sup>th</sup>, Munich

The **world's leading** Trade Fair for Environmental Technologies boasts a high international presence and an impressive number of exhibitors and visitors from the water, sewage, waste and raw materials industries: 3097 exhibitors from 59 countries (45% international exhibitors), 136,885 visitors from 168 countries (47% international visitors) and over 230,000 square meters of exhibition space.

[LINK](#)



# CleanTech in Bavaria

## CleanTech Clusters & Organizations



### Environmental Cluster Bavaria

Connects companies, research institutions, municipalities and policy-makers. More than 200 members, fosters **international collaboration** in the fields of Waste management & Recycling, Water & Wastewater treatment, Site remediation, Air pollution control, Energy from waste & biomass and Resource efficiency.

[LINK](#)



### KUMAS – The Bavarian network of environmental expertise

The network promotes innovative environmental technologies and the cross-linking of Bavarian competencies. Around 200 members from the economy, municipalities, chambers, research and education institutes.

[LINK](#) (just in German)



### Cluster of environmental technologies Bavaria

The cluster intensifies the co-operation of companies and research institutes on the following topics: renewable energies, energy efficiency in power generation, consumption and on energy storage systems. Services include initiating business-relevant joint projects by involving **supra-regional partners**.

[LINK](#)

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# #1 Strong economy in the heart of Europe

Bavaria at a glance



**27,200 sqm**

Germany's largest Federal State

**12.8 mn**

inhabitants (16% of Germany)

**3.6%**

unemployment (2015)

**€ 549 bn**

GDP (2015) / #7 in EU

**12.3%**

growth (2010 to 2015)

**€ 179 bn**

export volume (2015)

# #1 Strong economy in the heart of Europe

In the center of Europe



**Well connected to 500 mn customers within the EU**



**1,554 miles Autobahn**  
making Bavaria a **hub** for east-west and north-south trade

## **International Airport Munich**

**250 destinations** to **68 countries** in the world

→ Daily nonstop flights to **11 airports** in the US



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## #2 Powerful and diverse company landscape

Potential clients & partners



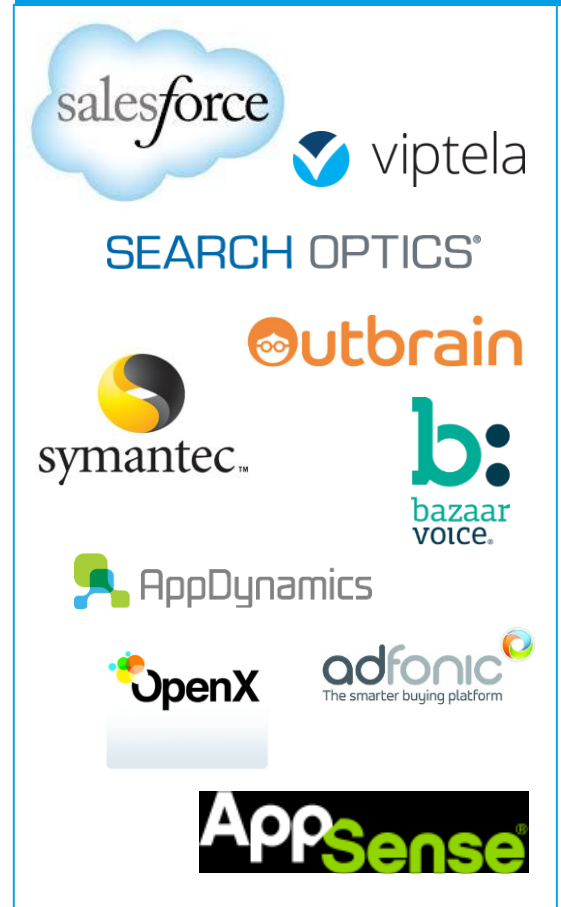
### Native Global Players



### Global Giants



### Attraction for New Tech



## #3 Europe's leading innovation hub

### Munich – the hub for IoT



May 2014, Intel opens its **first IoT Ignition Lab** in Munich.



December 2015, IBM announces that Munich will be **Watson IoT Global HQ**, as well as its first European Watson innovation center. This was IBM's largest investment in Europe in more than two decades.



April 2017, Microsoft opens its **1st European and 3rd Global IoT & AI Insider Lab** in Munich.



March 2017, Huawei unveils **Munich Openlab** at CEBIT to accelerate digital innovation and industry ecosystem in Europe.

***Munich has developed into an international center for the Internet of Things***



November 2014, **Volkswagen** opened its Data Lab in Munich.



April 2017, Accenture opens its worldwide first **IIoT Innovation Center** in Munich.



July 2016, the big data & M.L. leader opens **1st office in DACH** (German-speaking Europe) in Munich.

# #3 Europe's leading innovation hub

## Incubators and Accelerators in Bavaria



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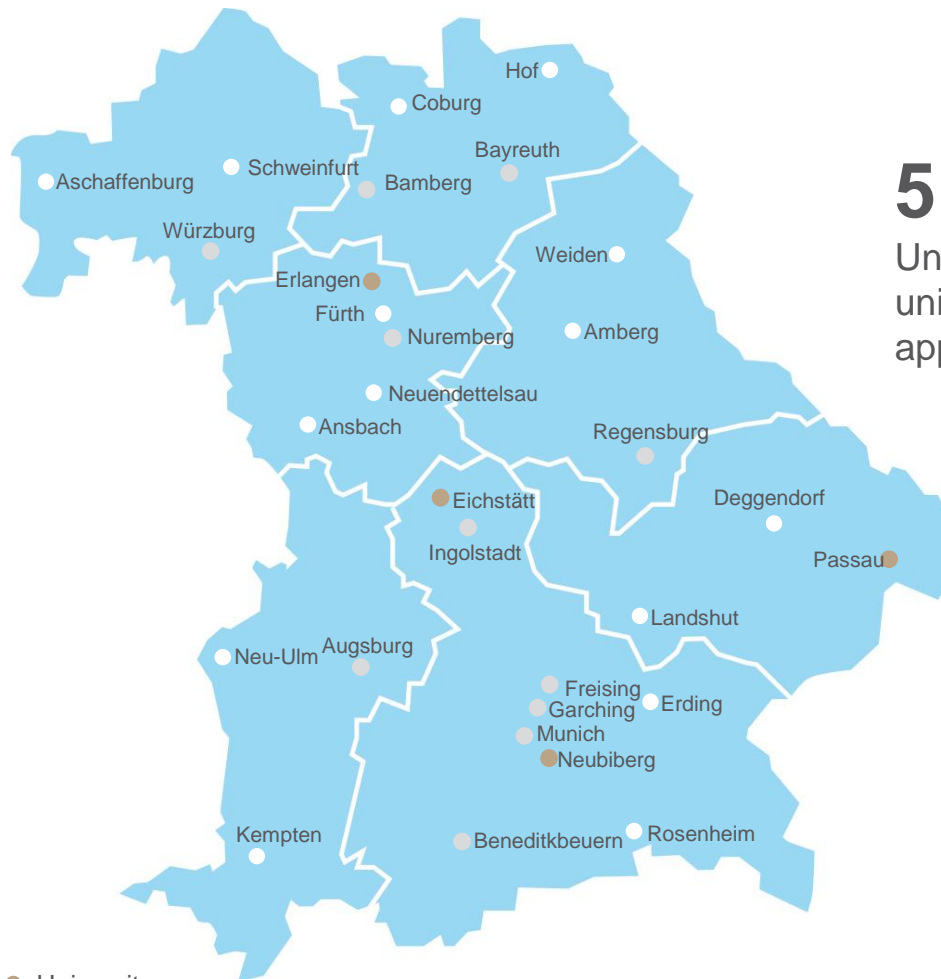
Supportive government and politics

### Key Success Factor #5:

High quality of living

# #3 Europe's leading innovation hub

## Developing talent and know-how



- University
- Location with multiple universities
- University of applied sciences

**51**

Universities and  
universities of  
applied science

**377,700**

Students in Bavaria  
(2015/2016)

**28,000**

STEM Graduates (2014)

**25**

national research  
institutes

**32.4 %**

of all German  
patent applications (2015)

**15,341**

patent applications (2015)



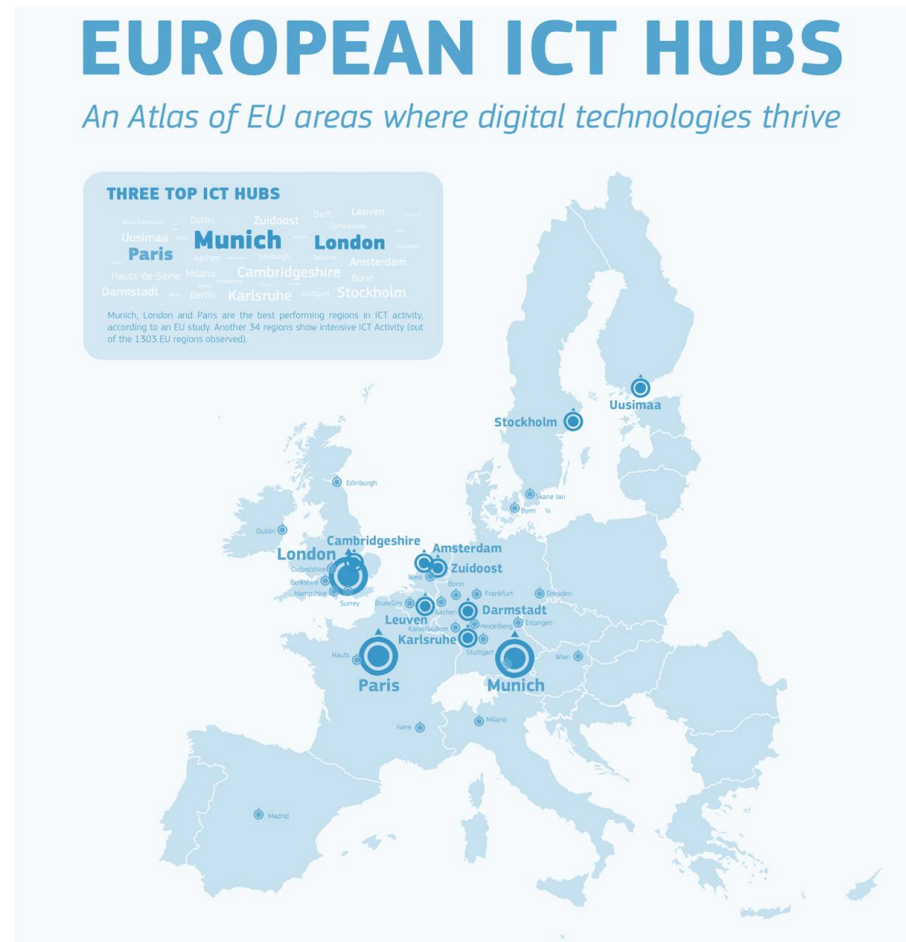
# #3 Europe's leading innovation hub

IT and Communication at its best

## European Commission ranks Munich # 1 hub for IT and communication in Europe

Munich has it all:

- ✓ high-level R&D at universities and institutions,
- ✓ innovation networks
- ✓ a large ICT business community



Munich scored 100 Points at Composite Indicator European  
ICT Poles of Excellence  
London 97 Points, Paris 95 Points

# #3 Europe's leading innovation hub

## Related CleanTech Clusters



### Strategic Partnership for Sensor Technology

Officially manages the Bavarian cluster for the competence field of sensor technology. 70 member companies and institutes from science and industry including businesses, developers, and other service providers as well as universities and research institutes.



### M-A-I Carbon Cluster

Top cluster in the Munich-Augsburg-Ingolstadt trio of cities. Focus on the implementation of carbon-fibre-reinforced plastics (CFRP) in the user industries.

[LINK](#)



### Chemie-Cluster Bayern

Chemie-Cluster Bayern promotes product and process innovations for new, usually international markets. The cluster is part of [WIINTECH](#), the European Union initiative for **clean tech clusters**.

[LINK](#)

AND MANY MORE:



# #3 Europe's leading innovation hub

## Energy & CleanTech Research Centres



**Bavaria – one of Europe's most important research hubs**



**The Helmholtz Institute  
Erlangen-Nürnberg for  
Renewable Energy**

[LINK](#)



**Max Planck Institute for  
the Science of Light**

[LINK](#)



**Fraunhofer Institute for  
Reliability and Microintegration**

**IZM**  
[LINK](#)



**Bavarian Center  
for Applied  
Energy Research**

[LINK](#)



**Research Institute  
for thermal  
insulation**

[LINK](#)



**Research  
Center for  
Energy sector**

[LINK](#)

# #3 Europe's leading innovation hub

## Universities



### Universities that offer studies and are active in the field of CleanTech R&D



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## #4 Supportive government and politics

Digitization Initiative “Bayern Digital I + II”



# 5.5 Billion € (2015-2022)

### “Bayern Digital I + II”

Bavarian Government’s Digitization Initiative  
Investment program until 2022

- Projects include high speed internet infrastructure (Gigabit speed in all Bavarian regions), grants and new facilities for research in various fields, and projects promoting digital education
- The Munich ICT hub will gain a massive boost and increase its scope for business
- International companies are more than welcome to tap into these resources and are invited to become a partner



## #4 Supportive government and politics

Our services for you

Planning & Preparation	Location Search & Site Selection	Implementation	Growing in Europe
<ul style="list-style-type: none"><li>• Market and business environment</li><li>• Sector and technology networks</li><li>• Legal and taxation issues</li><li>• Brokering of contacts</li></ul>	<ul style="list-style-type: none"><li>• Presentation of ideal locations in Bavaria</li><li>• Organizing of site visits</li><li>• Networking with local partners</li></ul>	<ul style="list-style-type: none"><li>• Coordination with all project partners</li><li>• Appointments with support and financing partners</li><li>• Human resources</li></ul>	<ul style="list-style-type: none"><li>• Information about programs</li><li>• A worldwide network of Bavarian offices for economic development</li><li>• Invitations to networking events</li></ul>

**free of charge**



**confidential**



**without obligation**

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## #5 High quality of living

Bavaria ranks first in Germany



Germany's favorite **tourist destination**



Unmatched **leisure** and **recreation** opportunities



Breathtaking landscapes, **historic cities**, rich culture



**Safe**, secure, **financially stable**





CULTURE



SPORTS



NATURE



RECREATION



OKTOBERFEST



Do you want to learn more?



<https://www.youtube.com/watch?v=-rckHpEUnKg>

# Any Questions?

Your contact in the US (West)



**Antonia Zierer**  
Executive Director

Bavarian U.S. Offices for Economic Development, LLC  
388 Market Street, Suite 1050  
San Francisco, CA 94111  
T: +1 415-362-1001  
E: [azierer@bavaria.org](mailto:azierer@bavaria.org)



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