

# Germany's North Rhine-Westphalia

Center of Excellence of Production Technologies and the Manufacturing Industry



# Business location NRW

EUROPE'S HEARTBEAT

Area

34,112qkm

Population

18,1 million

Capital

Düsseldorf

GDP

794 billion €

Imports

314,8 billion €

Exports

233,6 billion €

1.000 km

500 km

• Düsseldorf

• Cologne

\*Data of 2022

# North Rhine-Westphalia at a glimpse

## Location

Right in the center of Europe reaching **160 million** consumers within a radius of **500 km**

## Qualified professionals

Around 750,000 students enrolled in universities of which approx. 300,000 students are from STEM fields annually

## Germany's No.1 Investment Location

20.7 % (roughly 22,000) of international companies in Germany are located in NRW, creating 1 million jobs



## Research & Development

Densest R&D network in Europe with its around **70** universities and research institutes and **14** clusters of excellence

## Germany's economic powerhouse

Almost 700,000 companies are calling North Rhine-Westphalia home and 19 of the 50 top-selling companies in Germany are based in NRW

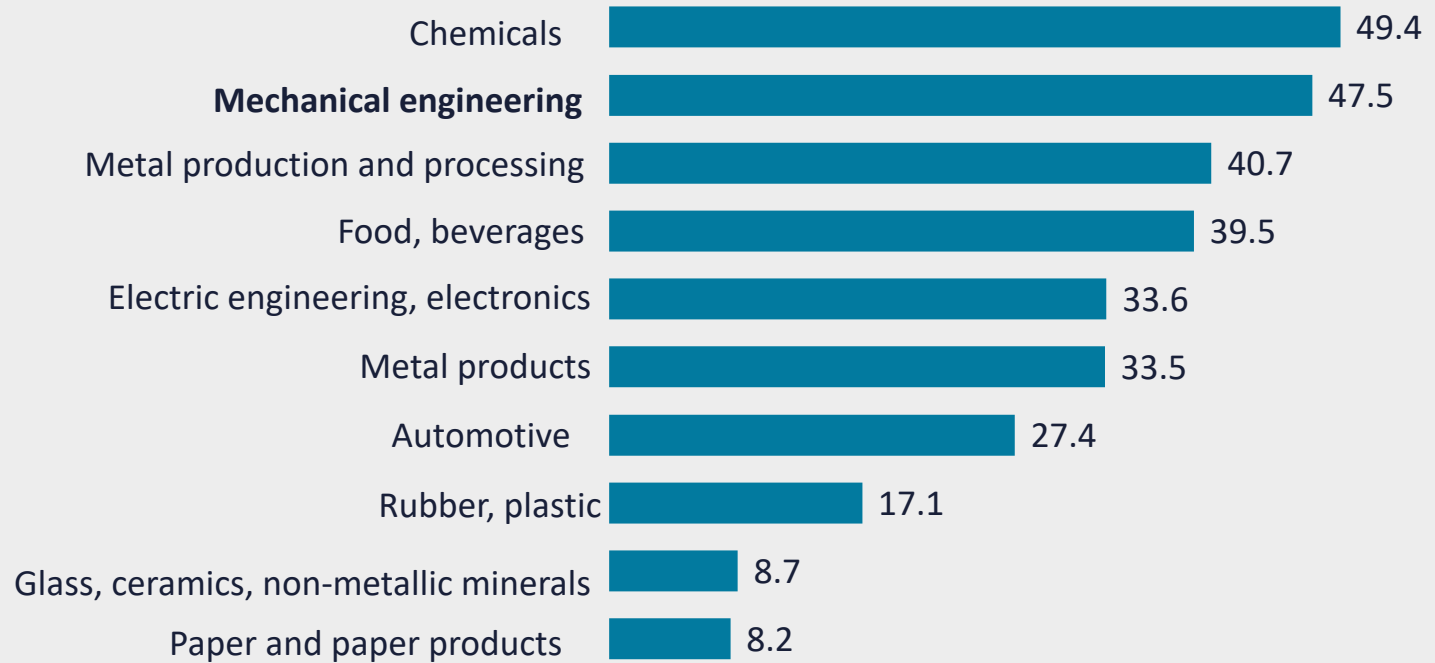
## Europe's largest sales and sourcing market

14.8 % of German exports are "Made in NRW"

## Logistics

2 International airports and the world's largest inland port

# Top location for manufacturers and suppliers – Sales 2021 (in € bn)



# Smart Industry in North Rhine-Westphalia



# Smart Industry in NRW: Key Facts

**1.2 million**

people are employed in industry in NRW

**1/3**

of all German ICT sales are generated in NRW

**9**

of the top 50 robotic producers of Germany are located in NRW

**18.1%**

of German industrial sales are generated in NRW.

**>93,000**

students in computer science, electrical engineering & information technology

# The economic importance of Smart Machinery



Sector sales in NRW:

**7,8 billion €**



Machine building companies in NRW:

**750**



Sectoral sales in Germany:

**26,8 billion €**



Workforce in NRW:

**35.100**

- The machine building industry in NRW is a driver of Smart Manufacturing
- Companies generate more than one third of the sectoral sales in Germany
- The most important export markets of the sector are in Asia, Europe and North America
- A well developed science landscape in NRW supports the development of innovative technologies at a high level

# Artificial Intelligence

(AI is KI in German)

- AI is a key technology for smart manufacturing and for smart logistics.
- Politics, science and industry work hand in hand to reach excellence in development of AI and AI applications



KI. NRW is the central networking initiative in the field of artificial intelligence in NRW initiated and funded by the NRW government.

As a central point of contact, KI.NRW supports small and medium-sized enterprises in particular in taking advantage of the opportunities offered by artificial intelligence.

KI.NRW runs AI lighthouse projects funded by NRW:

Large companies, SMEs and start-ups work closely with universities and research institutions to solve socially relevant issues.



# Clusters and networks for Smart Manufacturing

## Mittelstand-Digital Zentrum Ruhr-OWL

Location: Dortmund

[www.mittelstand-digital-ruhr-owl.de](http://www.mittelstand-digital-ruhr-owl.de)

## Zentrum für Produktionstechnologie Dortmund

Location: Dortmund

[www.zfp-do.de](http://www.zfp-do.de)

## ProduktionNRW Cluster Maschinenbau/Produktionstechnik

Location: Düsseldorf

[www.produktionnrw.org](http://www.produktionnrw.org)

## WZL RWTH Aachen

Location: Aachen

[www.wzl.rwth-aachen.de](http://www.wzl.rwth-aachen.de)

## Internet of Production

Location: Aachen

[www.iop.rwth-aachen.de](http://www.iop.rwth-aachen.de)

## FIR RWTH Aachen

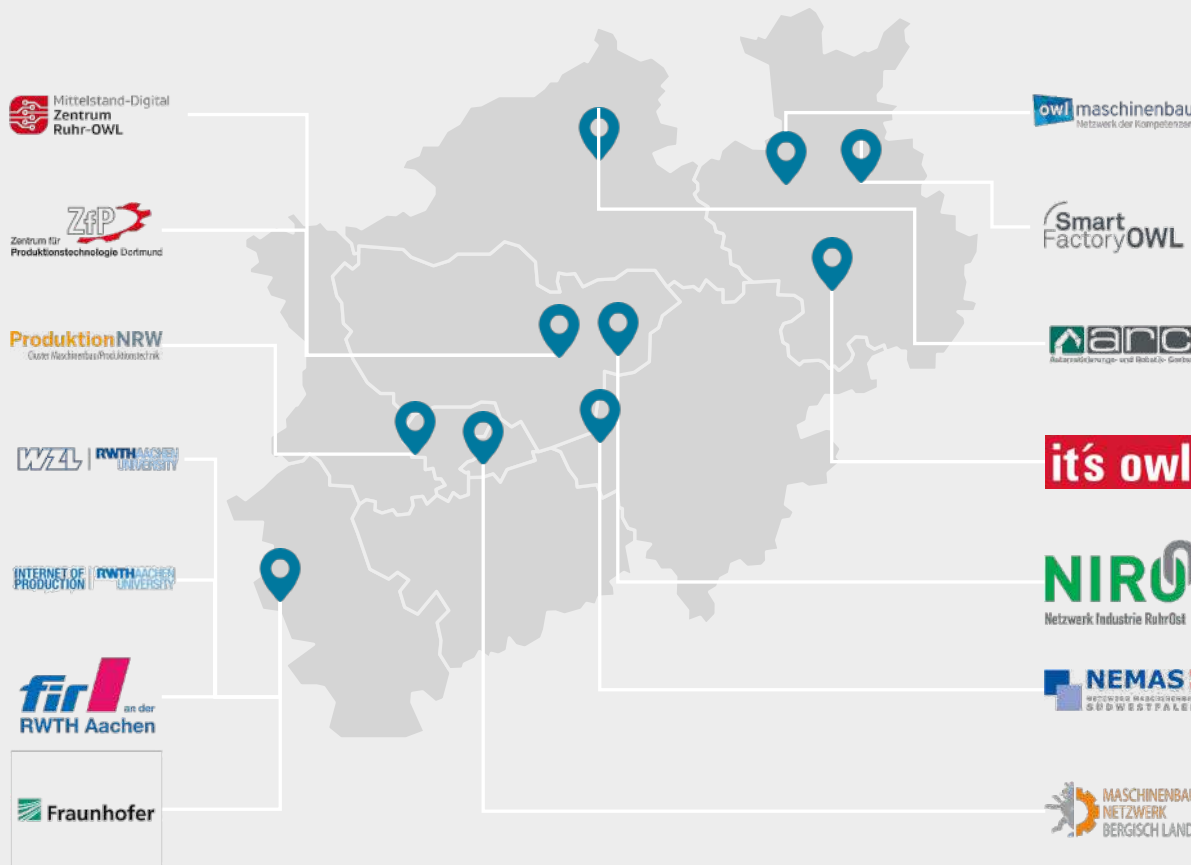
Location: Aachen

[www.fir.rwth-aachen.de](http://www.fir.rwth-aachen.de)

## Cluster WEST - Fraunhofer-Institut

Location: Aachen

[www.rokhy.de](http://www.rokhy.de)



## owl maschinenbau

Location: Bielefeld

[www.owl-maschinenbau.de](http://www.owl-maschinenbau.de)

## SmartFactoryOWL

Location: Lemgo

[www.smartfactory-owl.de](http://www.smartfactory-owl.de)

## ARC – Automatisierungs- und Robotik-Center

Location: Greven

[www.muensterland.com](http://www.muensterland.com)

## it's owl

Location: Paderborn

[www.its-owl.de](http://www.its-owl.de)

## Netzwerk Industrie RuhrOst e. V. (NIRO)

Location: Unna

[www.ni-ro.de](http://www.ni-ro.de)

## Netzwerk Maschinenbau Südwestfalen (NEMAS)

Location: Altena

[www.nemas-sw.de](http://www.nemas-sw.de)

## Maschinenbaunetzwerk Bergisch Land

Location: Solingen

[www.maschinenbaunetzwerk.de](http://www.maschinenbaunetzwerk.de)

# Excellent R&D-landscape for Smart Manufacturing

## Leading research Institutes:



Research focus in NRW: Smart Factory (intelligent sensor systems, big data platforms), human-machine systems/robotics

## Universities and technical colleges:



Study programs in NRW (selection): Mechanical Engineering, Production Engineering, Innovative Production Systems, Automation and Robotics

# A rapidly growing startup – ecosystem for Smart Manufacturing

## Automatisation and Robotics



## Additive manufacturing (3D-printing)



## Digital Platforms and Solutions



## AI and Data-Analysis



# NRW: Business Hub No.1 for Japanese Companies in Europe

# NRW and Japan: A long standing and important economic relationship

Japanese Companies in NRW

~650

Employed in Japanese Companies

~53,000

Annual Turnover

~ 38 billion €

Pure subsidiaries

67%

Japanese Companies with HQ in NRW

More than 50%

Key industries

automotive suppliers, mechanical engineering, telecommunications, electronics, chemicals and pharmaceuticals



# NRW's capital city Düsseldorf: Center of Japanese business and life in Germany

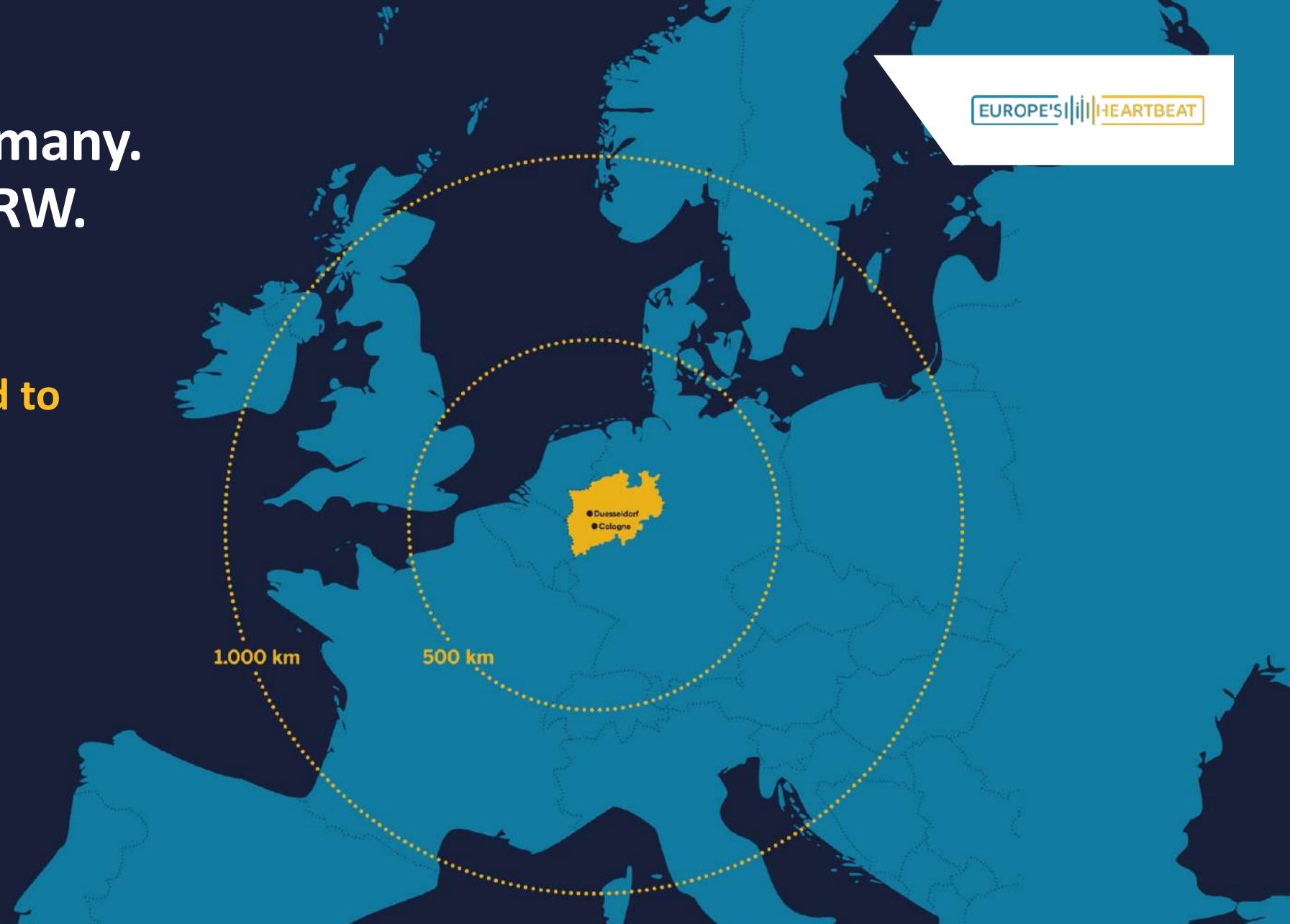
- 8,500 Japanese live in Düsseldorf
- Japanese Consulate General
- Japanese Chamber of Commerce and Industry
- Banks, forwarding agents, insurers, lawyers, tax consultants, HR consultants
- Japanese medical doctors, Japanese supermarkets, book shops, hairdressers
- More than 20 Japanese restaurants in Düsseldorf
- Japanese Club with many cultural activities
- 4 kindergartens and a Japanese International School (up to high school)
- Yearly “Japan Day” – the biggest Japanese-German cultural festival in Europe
- The yearly German – Japanese Business Symposium attached to the “Japan Day” is the largest in Germany



If Europe, then Germany.  
If Germany, then NRW.

North Rhine-Westphalia  
(NRW), is looking forward to  
welcoming you!

Thank you for your  
attention!



# Contact



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