

WEBINAR

3D PRINTING IN GERMANY

Why is Germany such an attractive investment location?

Formnext Digital Days, 30th November 2021

Mr. Jerome Hull
Senior Manager Investor Consulting
www.gtai.com



Things to know for participants



Participants are muted



Webinar is recorded and is available for retrieval after the webinar



Questions via chat window possible at all times



Q&A session at the end of the presentation



Short survey after the webinar

Speakers



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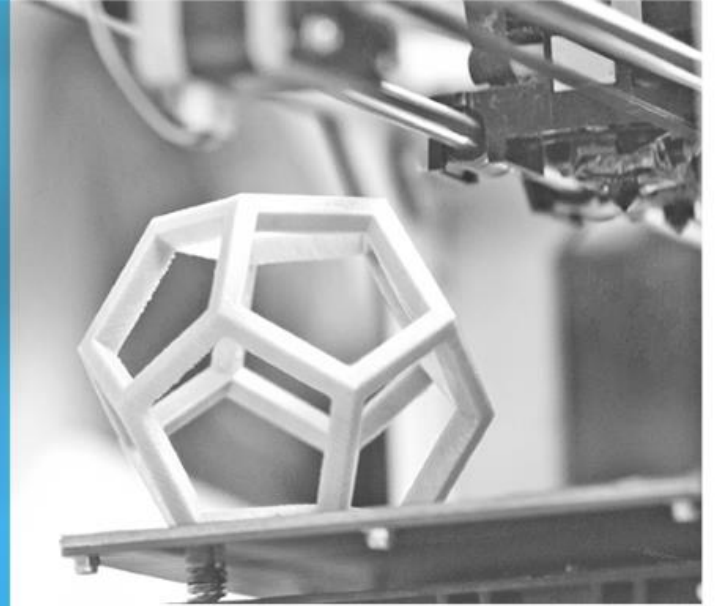


3D Printing in Germany

Agenda

1. About GTAI
2. 3D Printing Market in Germany
3. Project Examples
4. Financing options in Germany
5. Q&A Session

*Investor
Consulting*



1. ABOUT GTAI



Germany Trade & Invest (GTAI) is the economic development agency of the Federal Republic of Germany.



***Export
Promotion***



***Investor
Consulting***



***Location
Marketing***

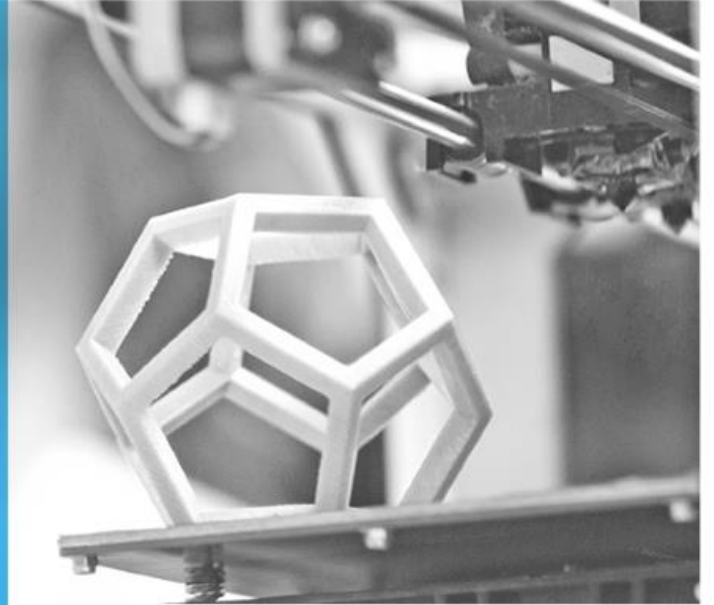


***New Federal
States & Structural
Transformation***

Business Location Germany

- Market and industry analyses
- Market entry analyses
- Extensive legal information (tax, labor law, etc.)
- Funding and financing information



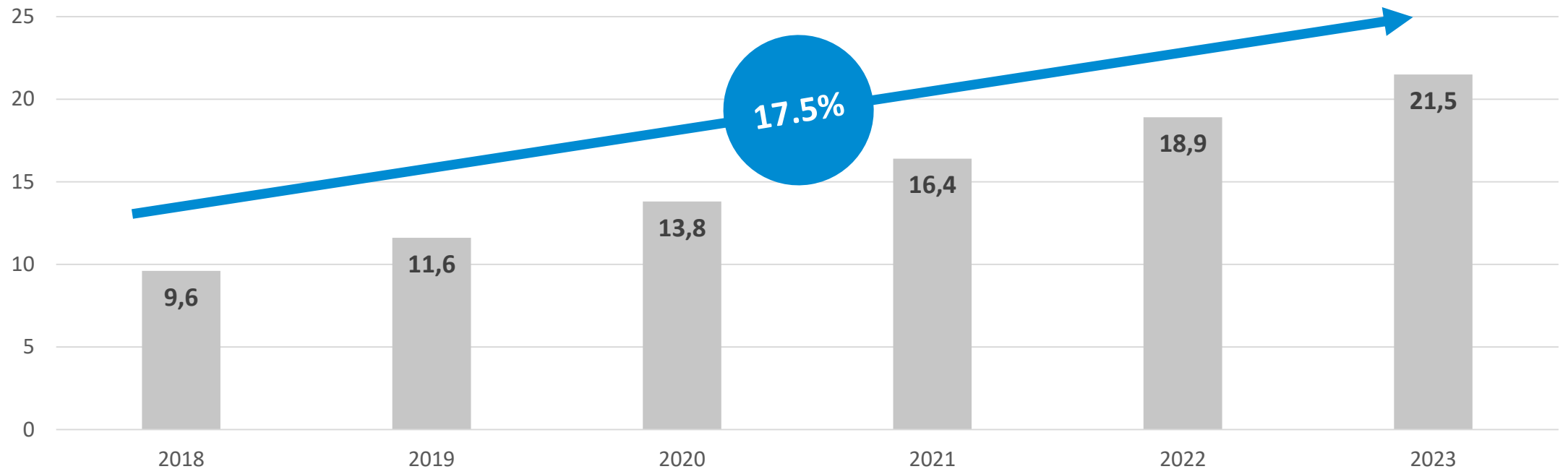


2. 3D PRINTING MARKET IN GERMANY

3D Printing Market in Germany

The 3D Printing industry is a hugely growing sector around the world

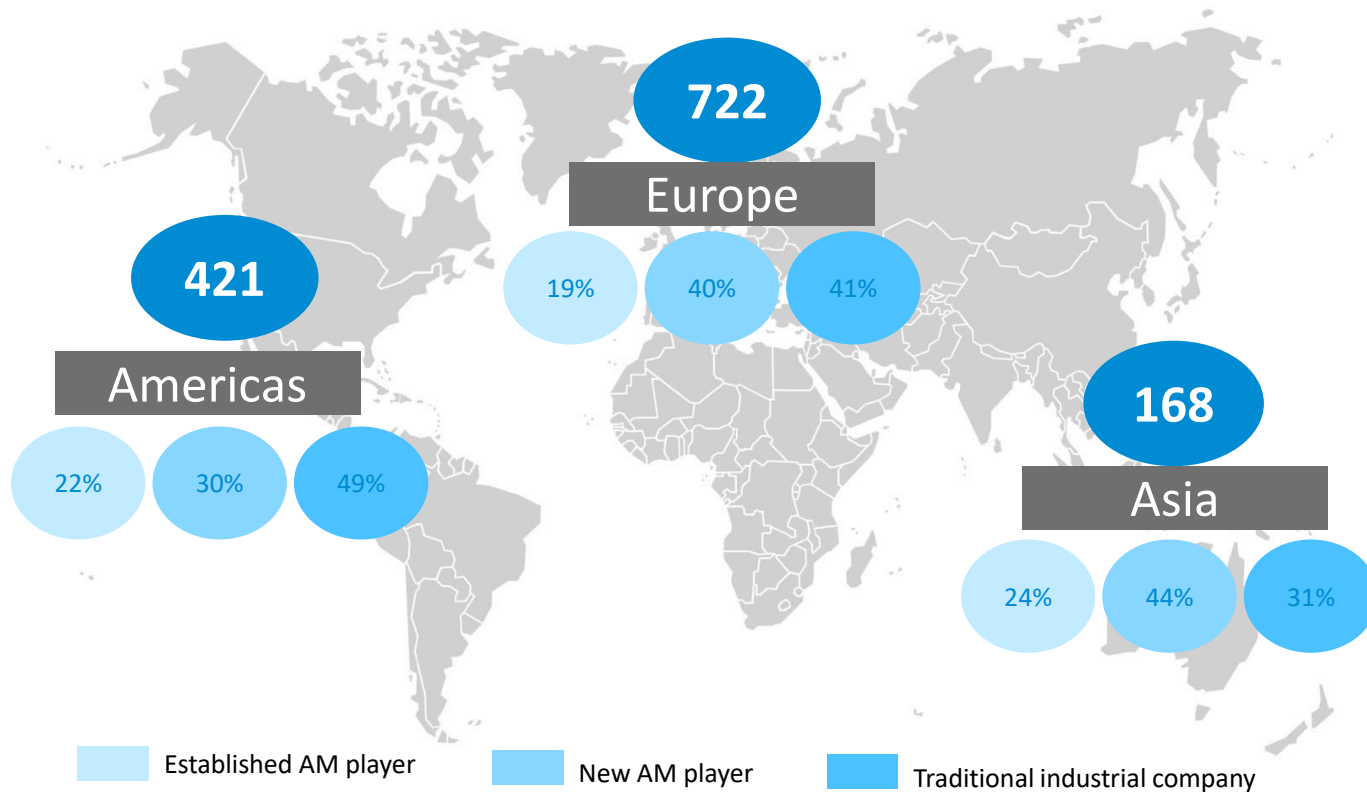
Market Value of 3D Printing in the World
(in EUR billions, 2018 - 2023, incl. CAGR)



Note: Data and forecasts are based on information available as of July 2020 EITO in collaboration with IDC
Source: Bitkom Research 2021

3D Printing Market in Germany

Overview of global players in Additive Manufacturing



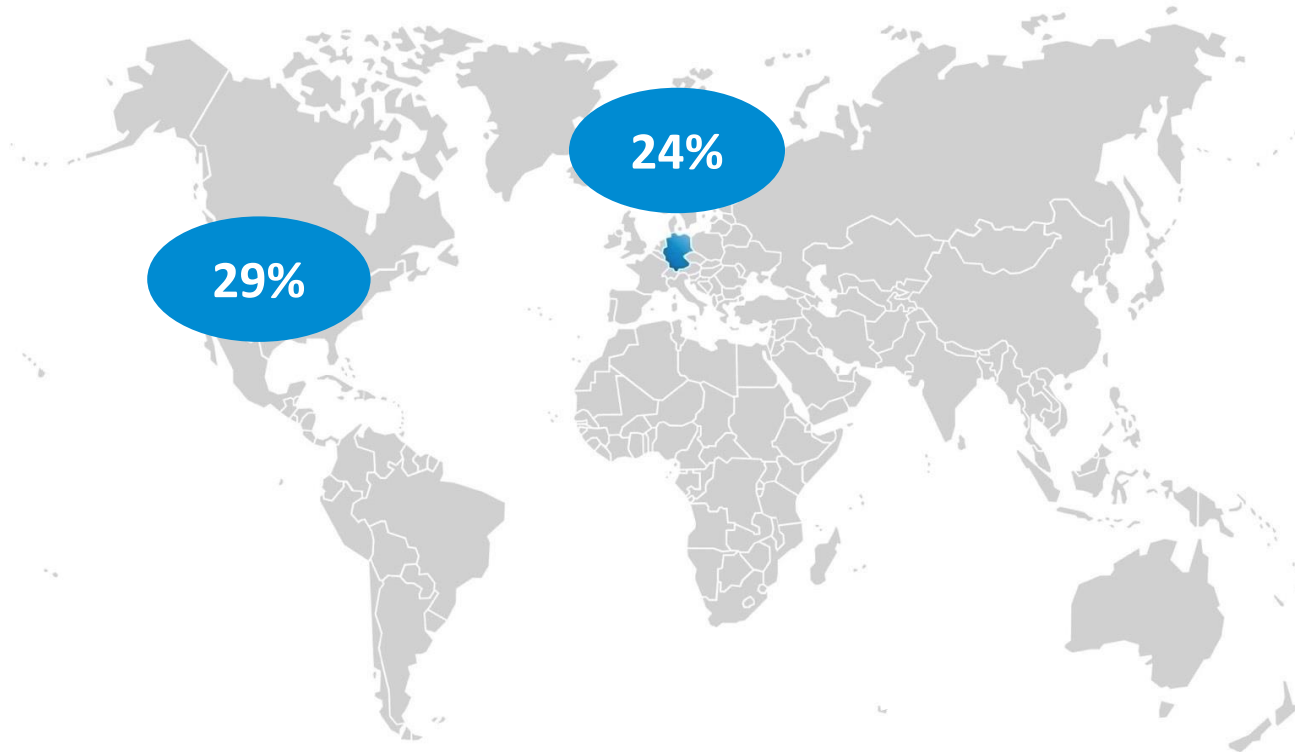
Source: EY Global 3D Printing Report 2019

55% of AM companies worldwide are based in Europe

Germany accounts for 24% of all AM companies worldwide

3D Printing Market in Germany

Overview of global players in Additive Manufacturing

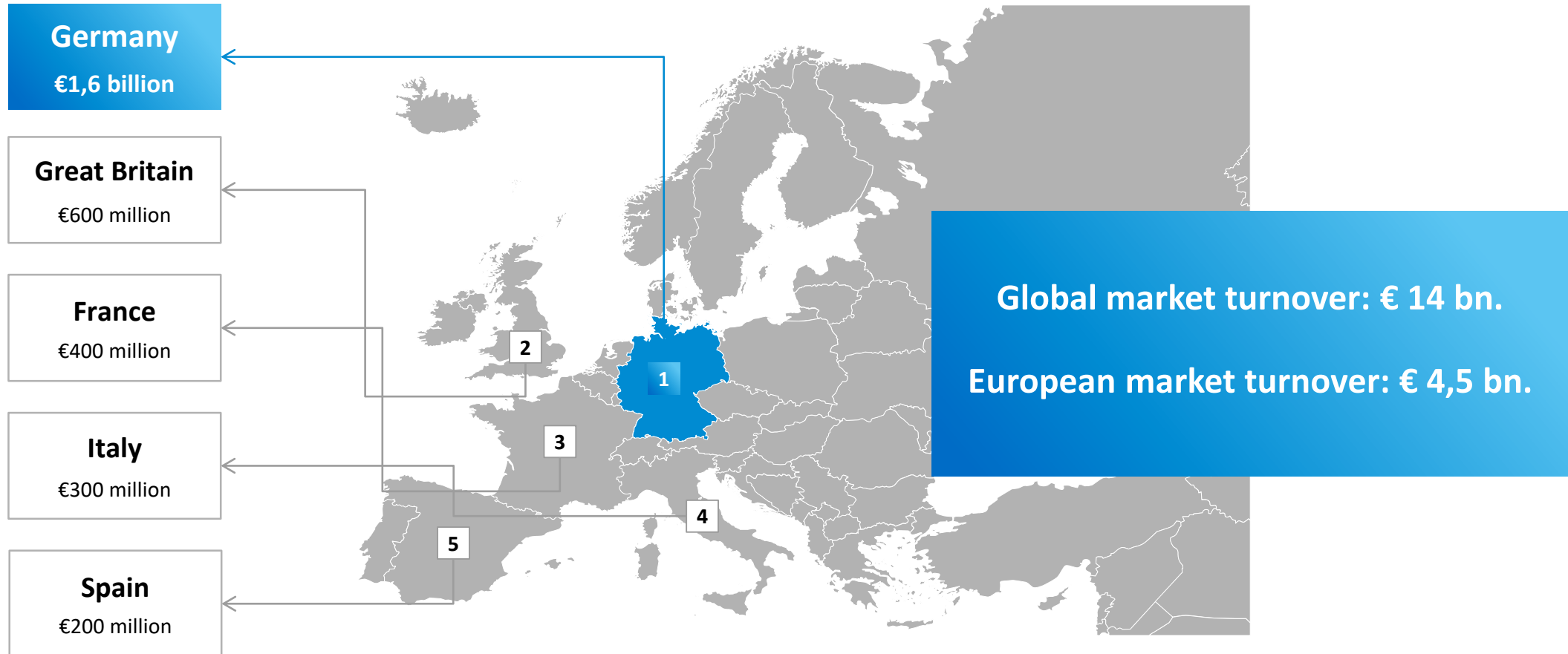


55% of AM companies worldwide are based in Europe

Germany accounts for 24% of all AM companies worldwide

3D Printing Market in Germany

Germany is Europe's number one market for industrial and consumer 3D printing

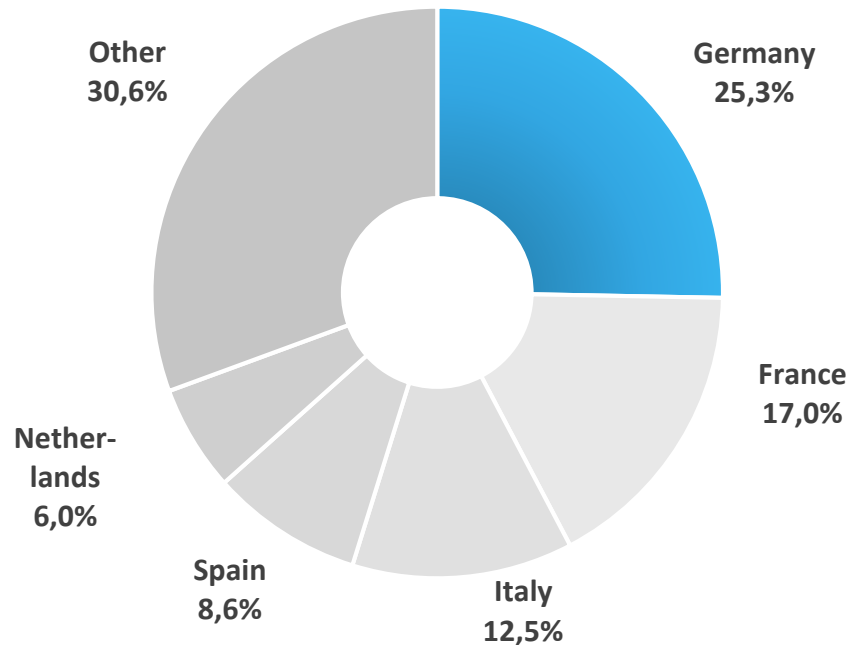


Note: Figures represent market turnover in 2020
Source: Bitkom Research 2021

3D Printing Market in Germany

Germany's share of GDP from industrial production is comparatively high

Gross Value Added in EU Manufacturing by Country (2020, in percentage)



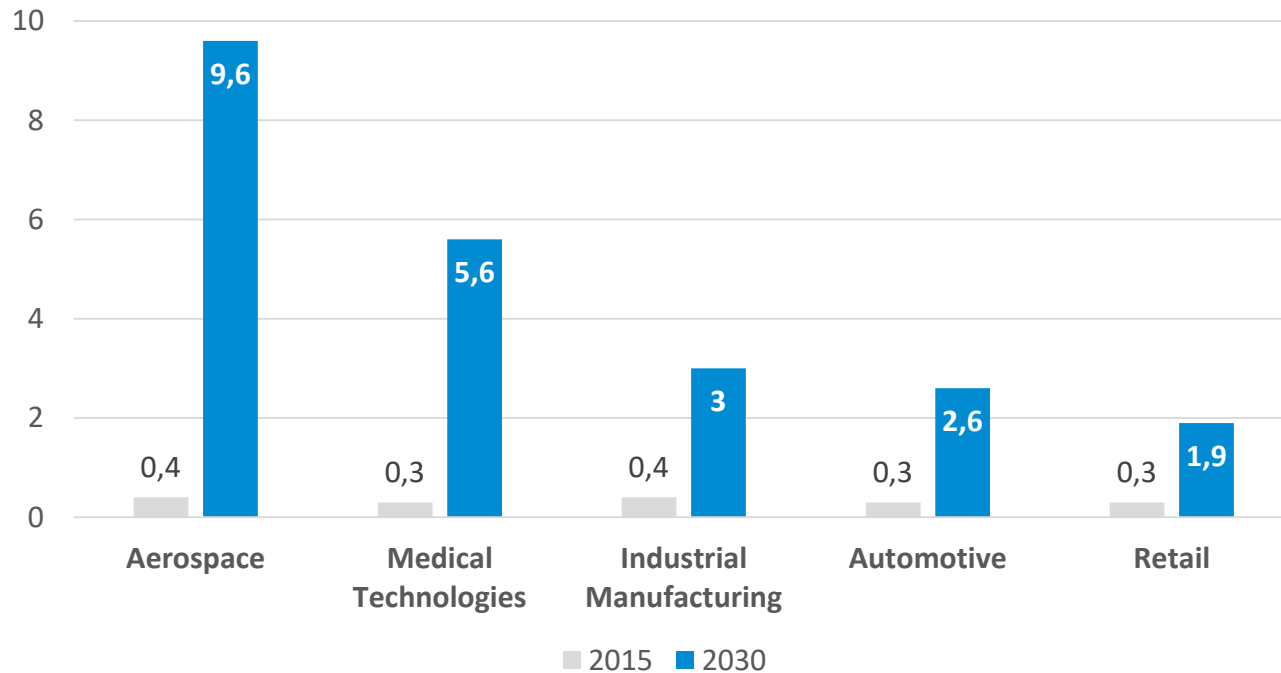
Germany is the largest manufacturing country in the EU

In Germany, a population of more than 7,5 million is employed in manufacturing

3D Printing Market in Germany

The 3D Printing industry is a hugely growing sector around the world

**3D Printing Application Markets Global Turnover
(in EUR billions, 2018 - 2030)**



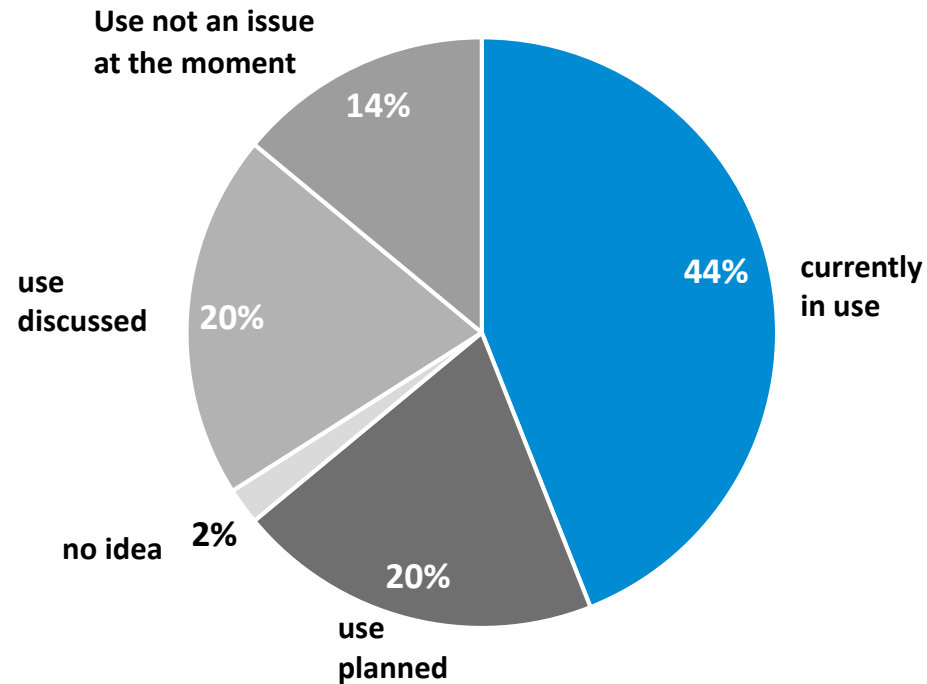
European spending in 3D printing grew at a rate of just over 15% year on year in 2020

Global spending on 3D printing will rise by just over 18% in 2021 and just over 15% in 2022

3D Printing Market in Germany

The 3D Printing industry is a hugely growing sector in Germany

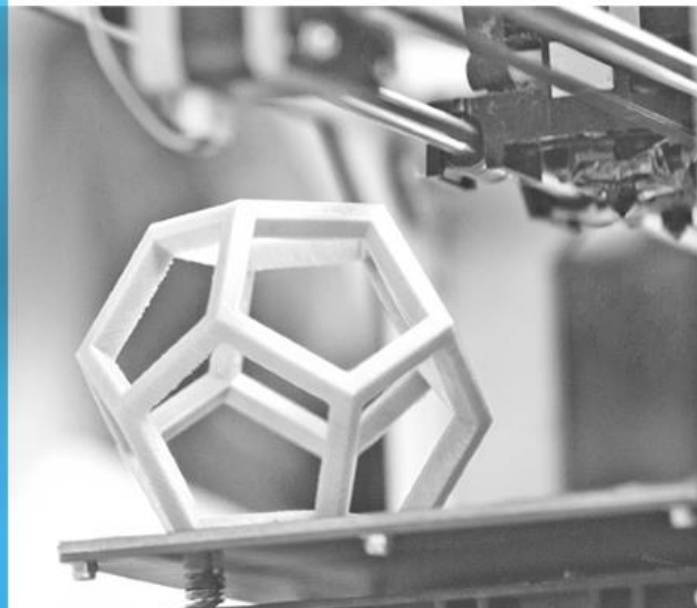
Industry survey: Is your company using AM technologies?



4 of 10 manufacturing companies already use AM technologies

20% of manufacturing companies are planning to use AM technologies

Note: 551 manufacturing companies from 100 employees in Germany; resp. 242 manufacturing companies in Germany that already use 3D printing technologies
Source: Bitkom Research 2021



3. PROJECT EXAMPLES

Project Examples

3D Printing success story: Formlabs (Berlin)



Desktop
3D Printers

founded 2011 by team of
engineers and designers
from MIT Media Lab and
Center for Bits and Atoms

set-up of European HQ:
first office outside of USA to
service and support
European customers

record-
breaking \$3
million
Kickstarter
campaign
in 2012



Source: Formlabs

1

Sept 2014 First contact

2

Sept 2014 Kick-off phone conference

3

Oct 2014 Consultation on market entry strategies, legal and tax issues, incentive schemes. Information on the 3D Industry and analysis of different cities in Germany.

4

Oct 2014 Connecting with state agency Berlin Partner

5

Mar 2015 Office Opened

Project Example

3D Printing success story: SPEE3D (Lübeck)



SPEE3D is an Australian Metal-3D-Manufacturer.
The company's 3D printers can work at three times the
speed of sound

Anti-Covid-19
application of
cold-spray 3D-
printed copper
coating



Source: SPEE3D

1

Q4 2017 First contact in Berlin, Germany

2

Q4 2017 First meeting at the formnext show in Frankfurt (D.)

3

Q1 2018 Consultation on market entry strategies, legal and tax issues, incentive schemes. Information on the 3D Industry and analysis of different cities in Germany.

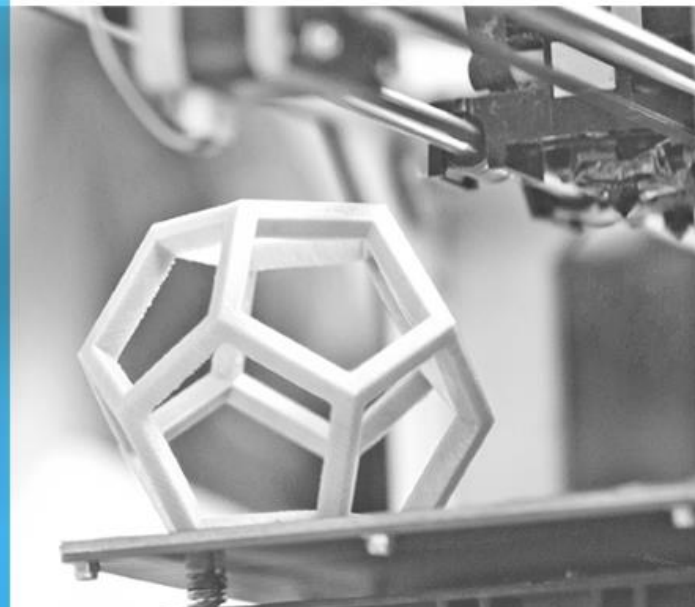
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Q4 2019 Second meeting at the formnext show in Frankfurt (D.) Established contact to the federal state of Schleswig Holstein (WTSH)

5

Q2 2020 Establishment of SPEE3D GmbH in Lübeck

4. FINANCING OPTIONS IN GERMANY



Variety of incentives

Funding instruments:

- Grants
- Equity
- Mezzanine capital
- Loans
- Loan collaterals

Funding



Required Funding for:

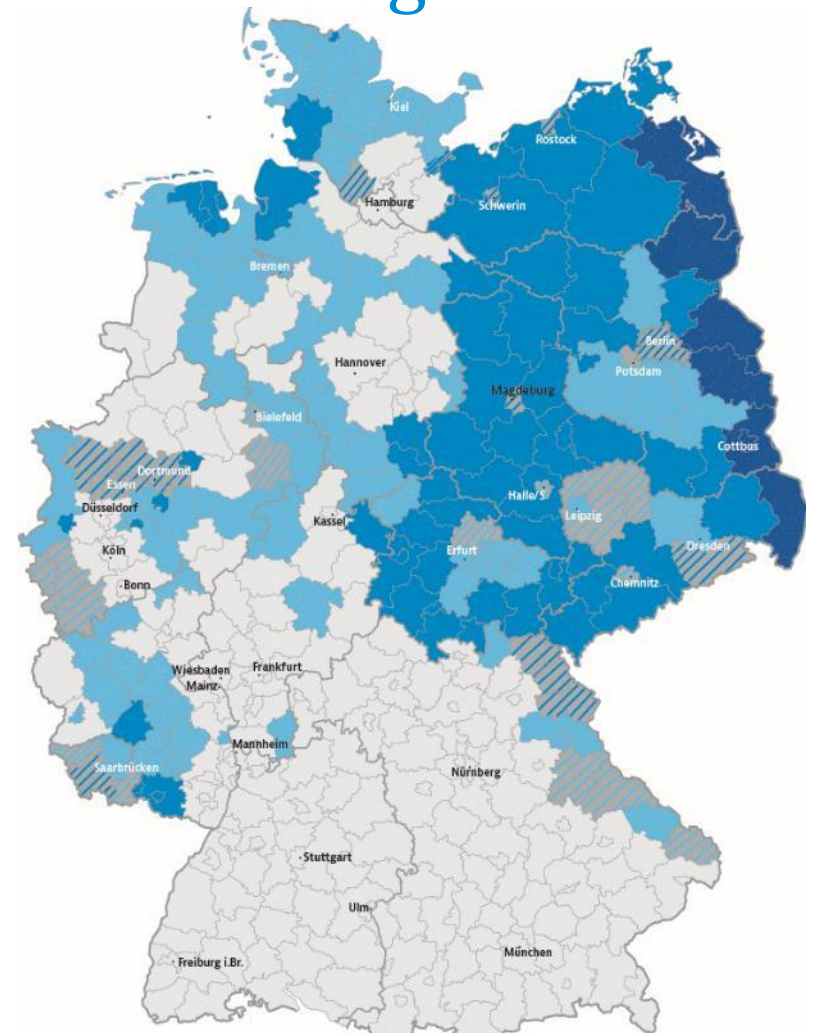
- Investments
- Working Capital
- Research & Development
- Specific Purposes
- Personnel

Germany offers a broad range of funding instruments to support the capital needs of investors. A combination of funding instruments is usually possible.

Incentives - Investment Grants

GRW Program offers up to 40 percent investment grants.

*Until end of 2027	Small enterprises	Medium enterprises	Large enterprises
C region w. bonus	max 40%	max 30%	max 20%
C Region	*max 35%	*max 25%	*max 15%
D Region	max 20%	max 10%	max EUR 200k



*Grant intensities awaiting EU sign-off

*C region w. bonus *not* restricted to border area

*Shaded areas mixed, defined after EU sign-off

*Map will be valid 2022-27

*Sign-off either December 2021 or June 2022

Incentives - Investment Grants

GRW Program – necessary conditions:

- Investment projects run to a max of 36 months
- 25% of eligible cost threshold must be provided from non-subsidized source
- Jobs created, and facilities put into operation as a part of the investment must stay in place for five years (sometimes three for SME)
- Capex eligibility limited to €750,000 per job created
- For larger projects (>EUR 50m) aid intensity reduces incrementally; aid intensity halved after €50m threshold
- Companies must be in financial good health prior to the investment
- Eligible cost threshold based either on capex or two years' wage cost to company

Grants for Research & Development

European Level:

- Horizon Europe – The EU Framework Program for Research and Innovation

National Level:

- Technology-specific programs: High-Tech Strategy 2025:
- Technology-open programs: Central Innovation Program for SME (ZIM)
- Research Tax Credit Act

Regional Level:

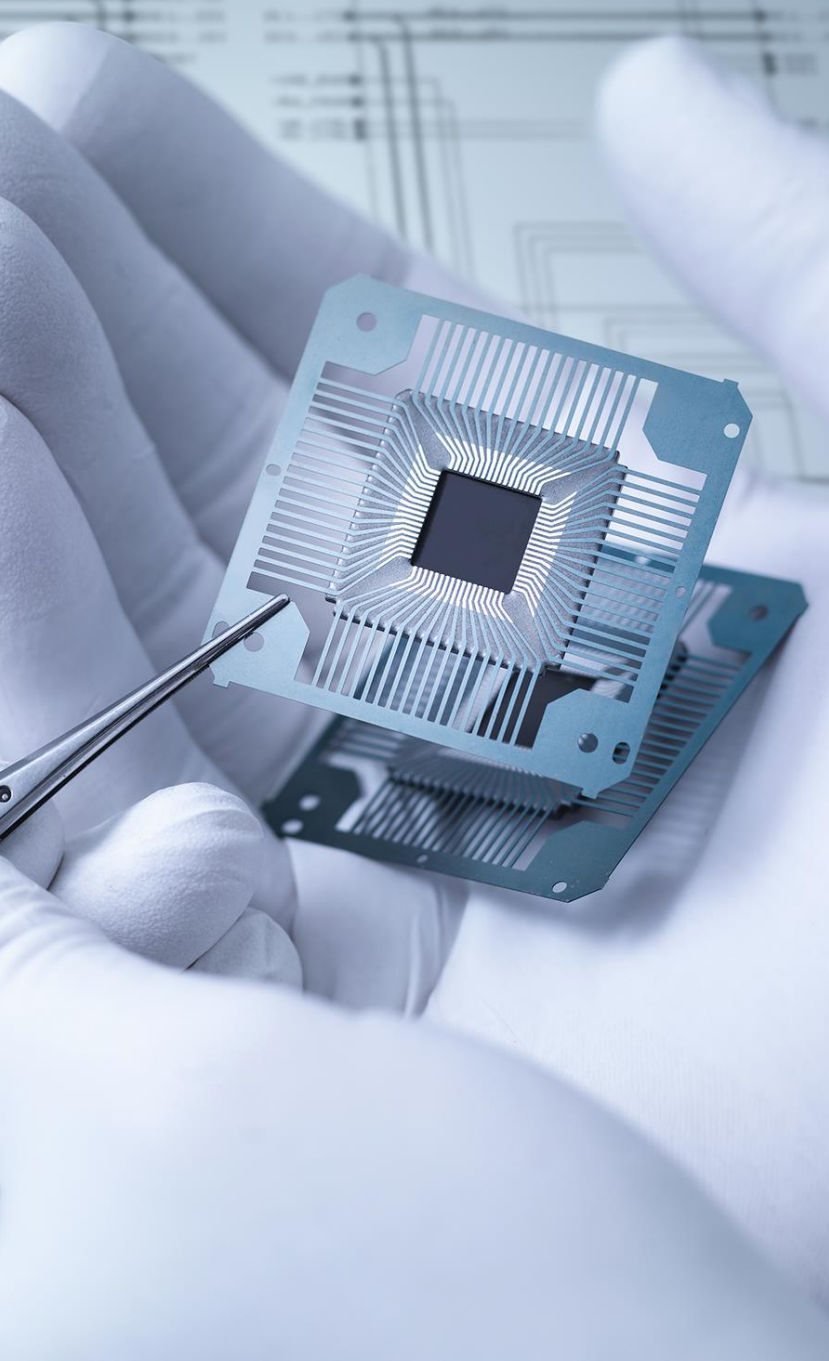
- Programs available in all German Federal States



Tax Credit Act 2020

- Possible Tax Credit up to €1m = 25% of eligible costs up to €4m.
- €4m is the limit per company per project.
- Companies can cooperate on larger projects, up to a maximum eligible cost level of €20m per project.
- The limits are valid until the end of 2026 and are currently double the limits stipulated in the act, as a part of the corona economic stimulation package.

High-Tech Strategy 2025



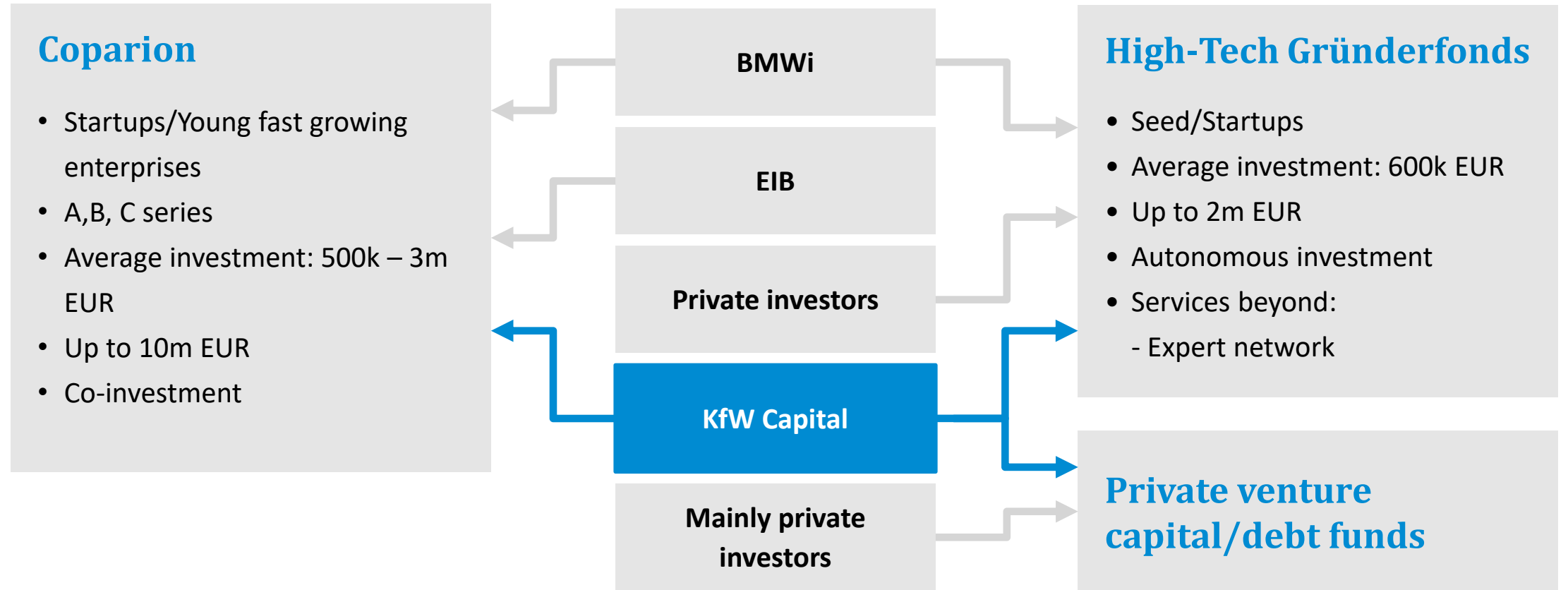
- Seven key areas of research and development:
 - Health
 - Sustainability
 - Climate protection
 - Mobility
 - Urban areas
 - Safety and security
 - Economy and Work 4.0

- On basis of calls for proposals
- Grants up to 50% of eligible costs for projects

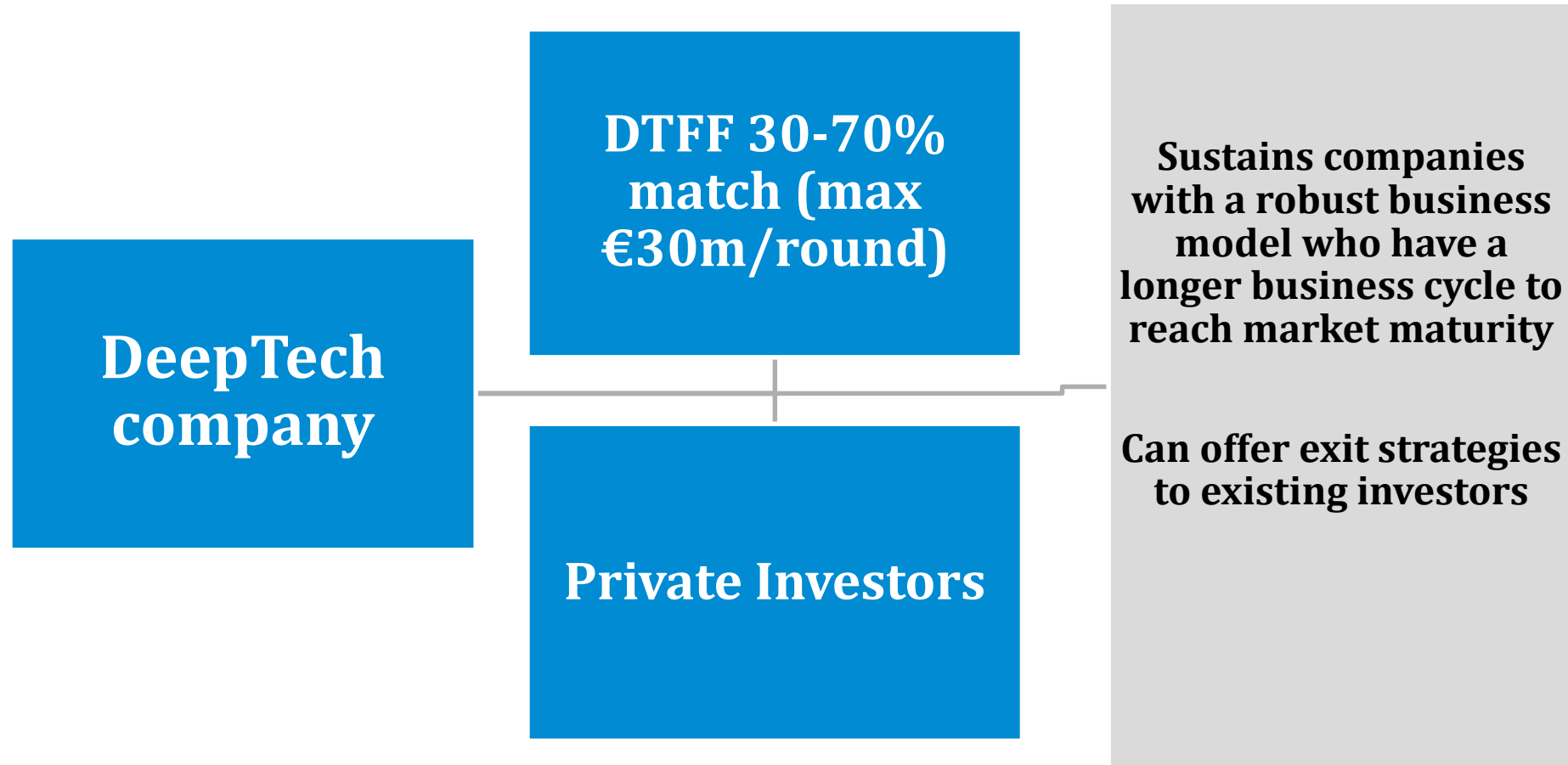
Central Innovation Program (ZIM)

- For small to medium enterprises (max. 1000 emp.)
- Technology open, no call for proposals
- Max. eligible costs €550k per project.
- Grant rates for enterprises: between 25% and 60% (depending on company size, cooperation degree and location)
- Up to end 2024
- No specific technological focus

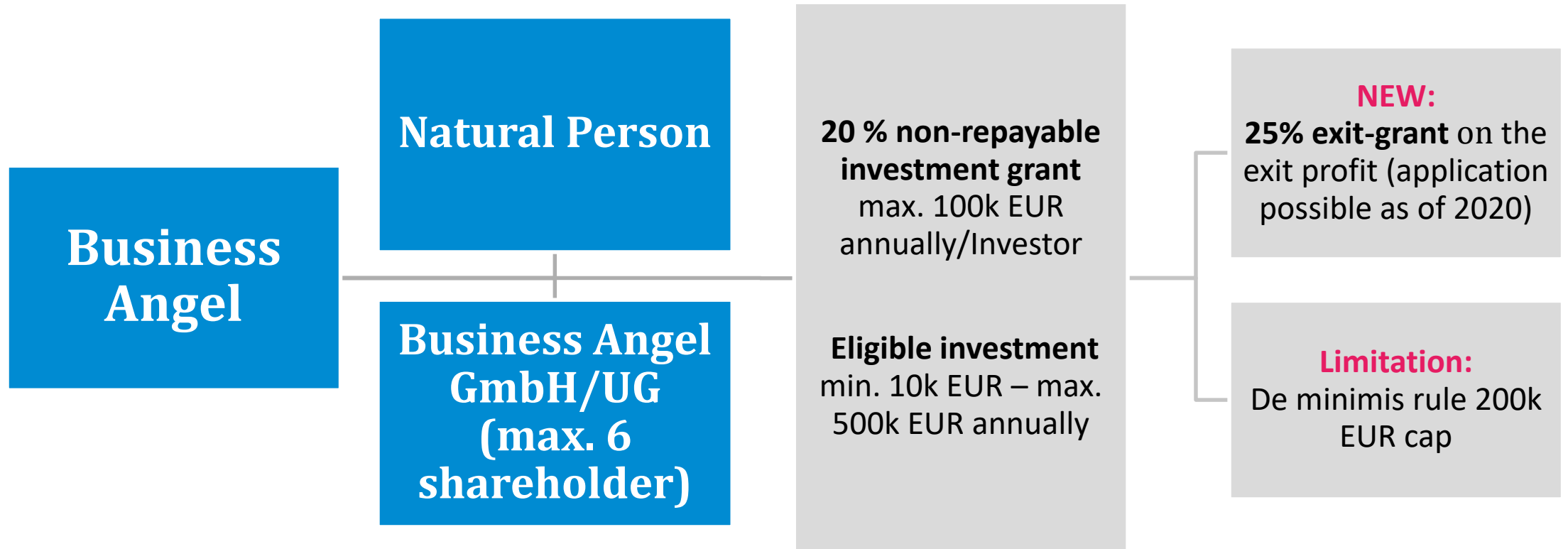
Public sources for young innovative enterprises by KfW-Group




DeepTech Future Fund



INVEST 2.0: Mobilizing startup investments





Although we are not able to meet you in person for the time being, Germany Trade & Invest will continue to provide its full portfolio of “virtual” services during the current crisis.



Q&A Session

Contact us



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