

Public

**ASML**

**From smoking chimneys to clean rooms**  
Being ready for the next generation of Dutch industries

Peter Wennink, President and CEO ASML

Dag van de Industrie & Verkiezingsdebat 2017

7 February 2017

“We’re at the beginning of a revolution that is fundamentally changing the way we live, work and relate to one another. It’s unlike anything humankind has experienced before.”

— *Klaus Schwab, WEF*

# Industry seeks to tackle society's big challenges



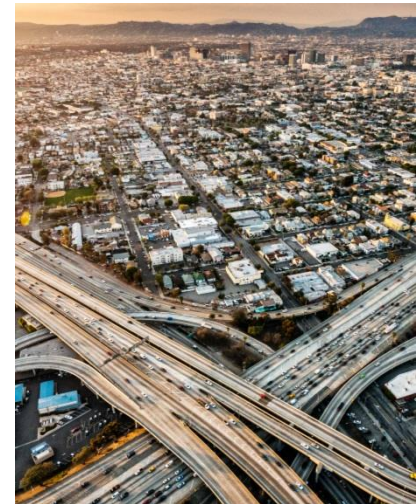
Global warming  
and sustainable  
energy



Aging  
populations



Sustainable  
food and water  
supply



Growing global  
population

# Already, tech transforms healthcare and agriculture

Examples both in high-value markets and in emerging economies



# The self-driving car merges automotive and IT

Artificial intelligence, high-performance computing, online services



*“The average autonomous vehicle, by 2020, will produce 4,000 gigabytes per day.”*

Intel CEO Brian Krzanich

*“This is high-performance computing done in real time.”*

Nvidia CEO Jen-Hsun Huang


# Integrating competences creates strong solutions

**ASML**

Public  
Slide 6

7 February 2017



The background of the slide features a series of light blue, wavy lines that flow from the left side towards the right, creating a sense of movement and depth. The lines are thin and closely spaced, fading out as they move towards the right edge of the slide.

Integrating competences  
creates strong solutions

# Fusion of competences is at the root of ASML's success

**ASML**

Public  
Slide 8

7 February 2017





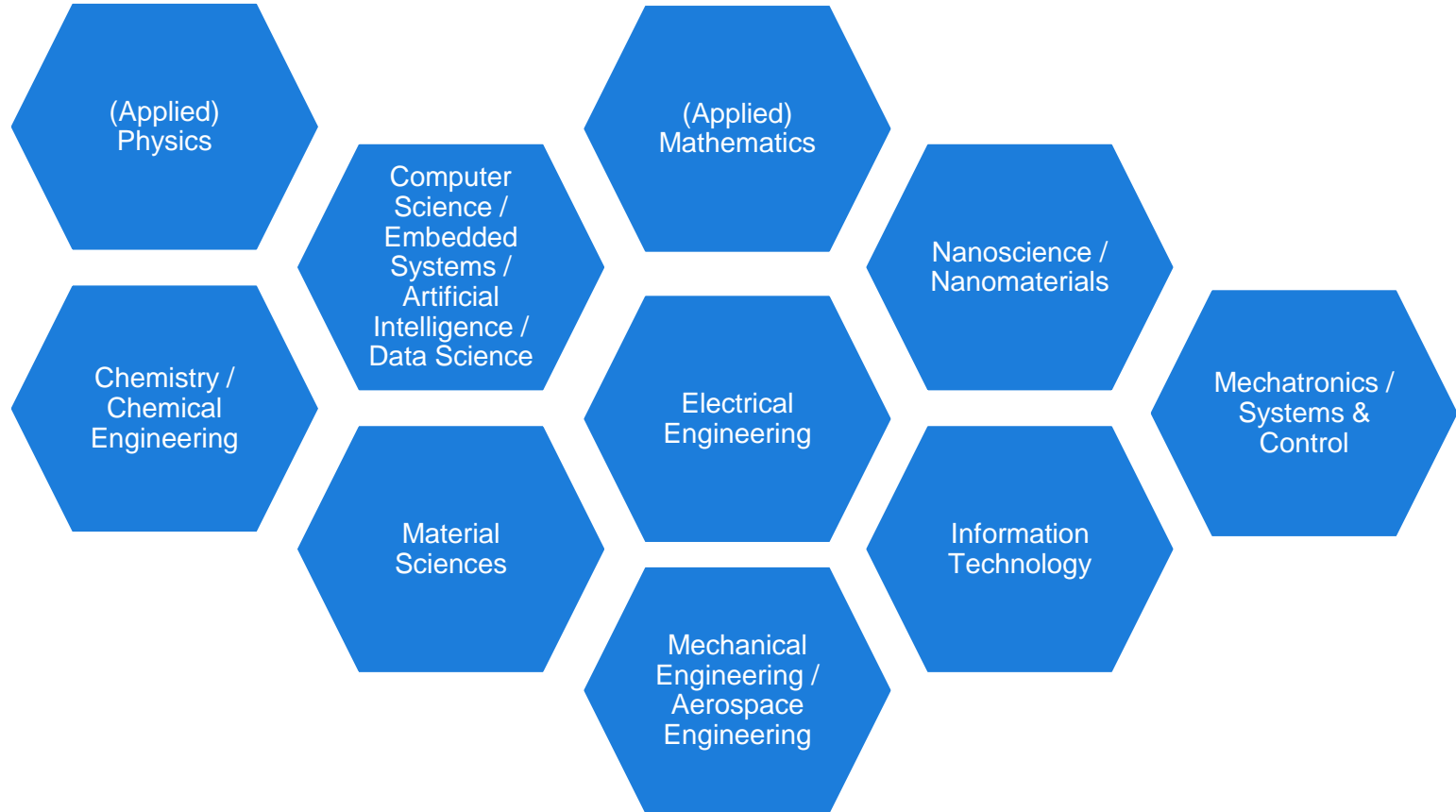
# A €100 million precision instrument



Extreme Ultraviolet (EUV)  
lithography will enable faster  
and more energy-efficient chips  
for the next decade and beyond



# Bringing dozens of technical competencies together in our ecosystem

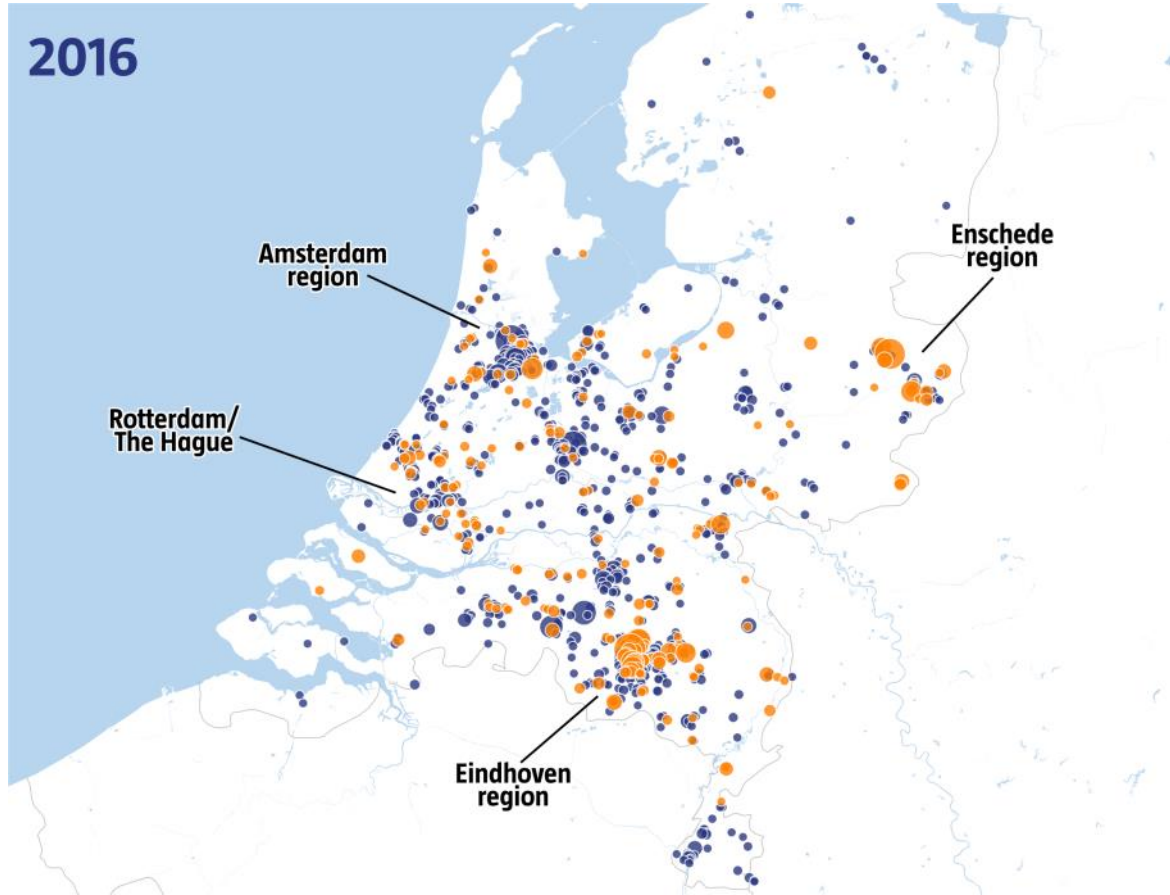



# We need the combined talent of people inside and outside of ASML



# Working closely with a network of suppliers

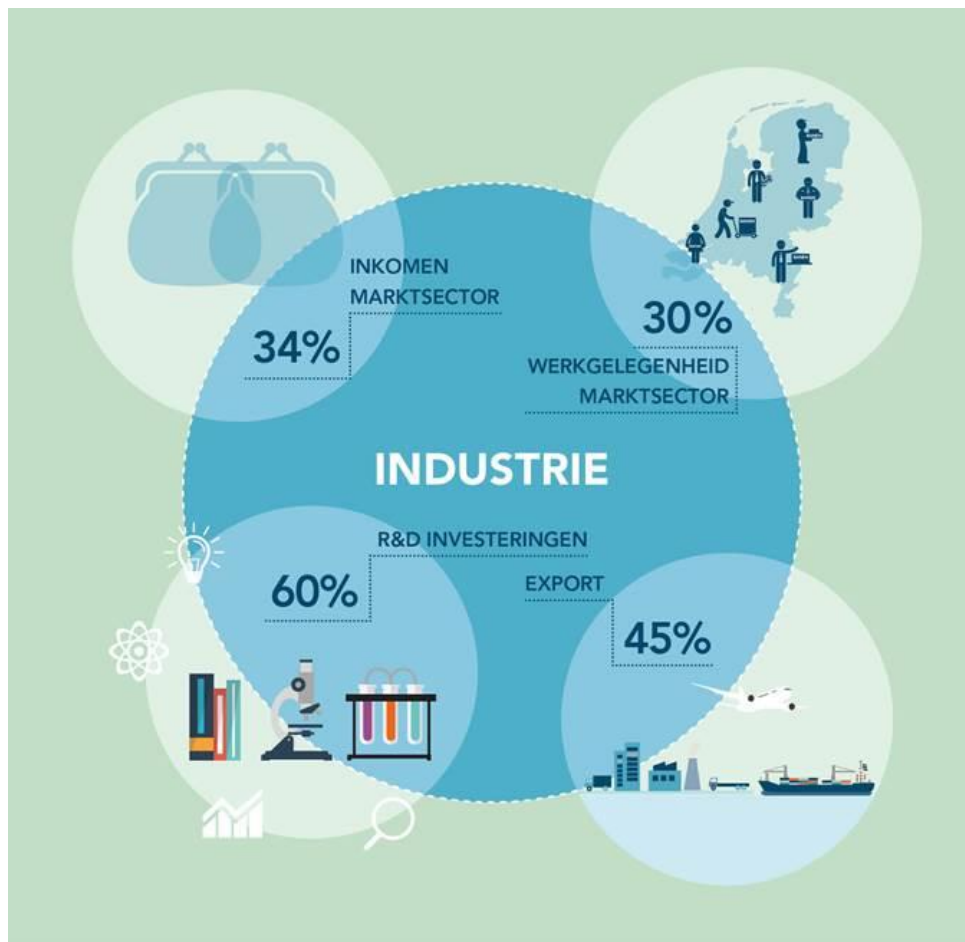
## ASML supply chain in the Netherlands



The background of the slide features a series of light blue, wavy lines that flow from the left side towards the right, creating a sense of movement and depth. The lines are thin and closely spaced, fading out as they move towards the right edge of the slide.

What does this mean for the  
Netherlands?

# Industry is a strong contributor to the Dutch economy



# What do we need?

We have the building blocks

Regional  
ecosystems

Industrial  
expertise

Government  
vision and  
incentives

Top  
education  
and research

Vibrant living  
environment

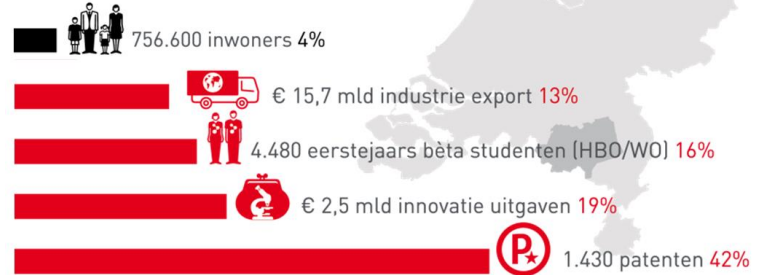
Collaboration  
mentality

# Regional ecosystems

It's hard work to build up ecosystems – it can take decades



## BRAINPORT AANDEEL NEDERLANDSE CONCURRENTIEKRACHT





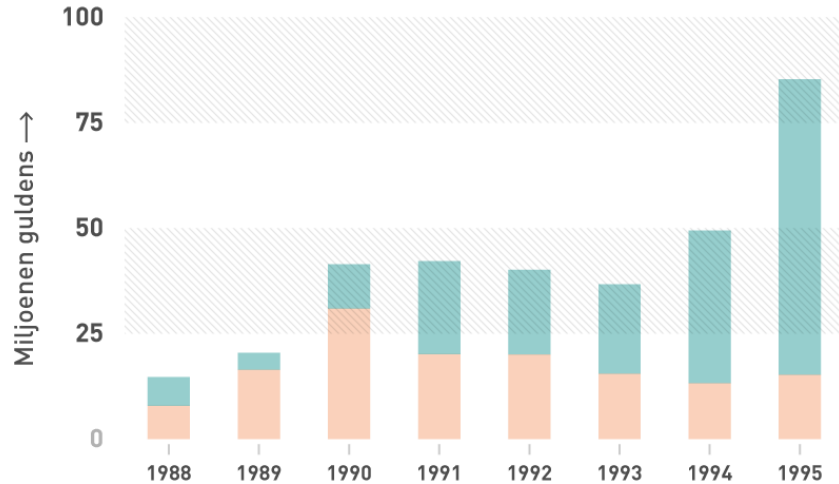
# The Netherlands has strong industrial clusters



# ASML would not exist today without the support of founding companies and the Dutch government

## R&D: public and private funding

ASML's early years



Large innovation projects take time – industrial policy needs to be long-term and consistent

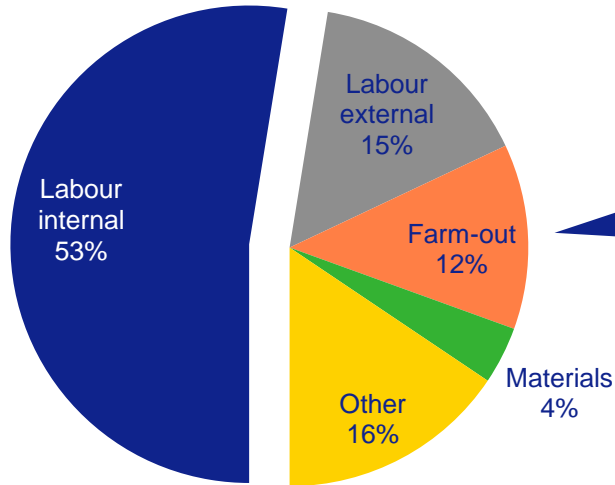
# Government vision and incentives

Maintain policy instruments that foster innovation and create jobs

WBSO and Innovation Box stimulate spending on Research & Development...

... which ends up in large part with suppliers, partners, universities

ASML R&D spending 2016: €1.1 billion and growing



~80% companies  
~20% universities, institutes

Supports a start-up ecosystem

# Turning big ideas into viable businesses

**ASML**

Public

Slide 20

7 February 2017

**MAKE NEXT  
PLATFORM**



**STARTUP  
AMSTERDAM**

**StartupDelta**

Brightlands

**YES!Delft**



**Innovation  
Quarter**

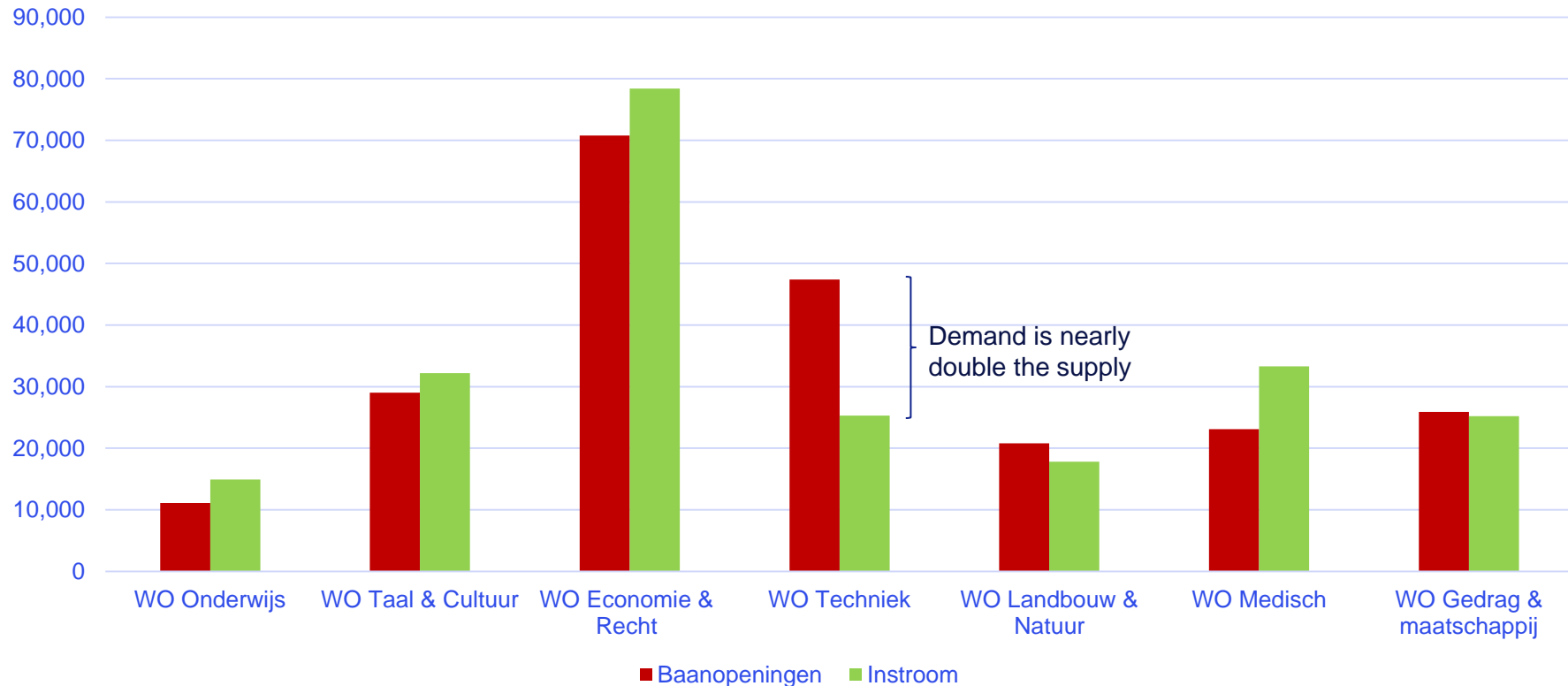
**HIGH  
TECH XL**

**Kennispark Twente**  
Innovate & Accelerate

**BRIGHTMOVE**

# Start-ups and established firms need technical talent

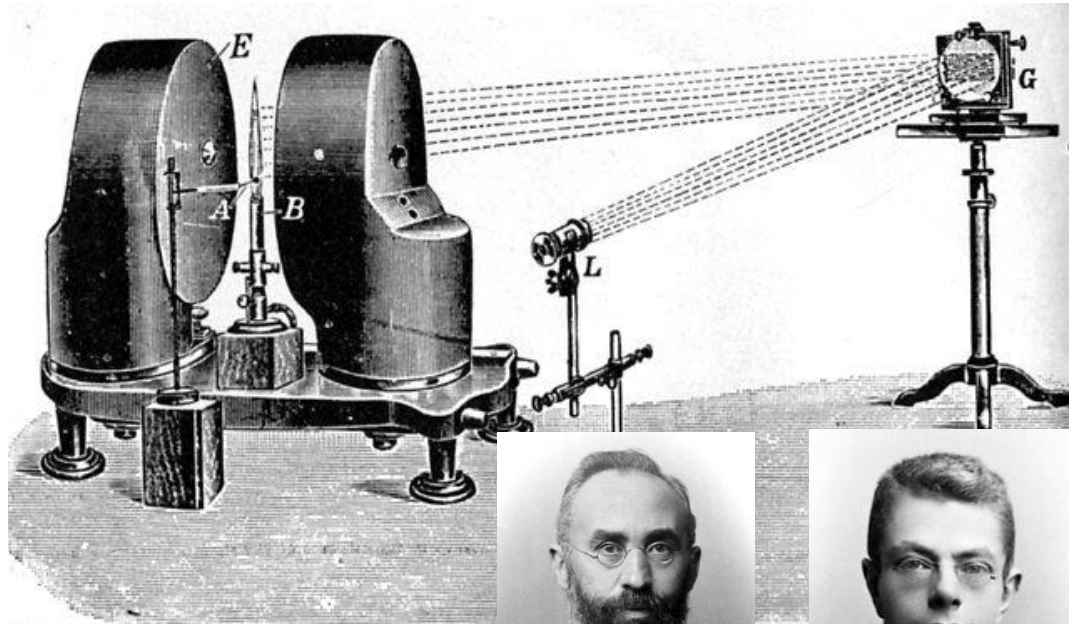
## Technical universities need support in supplying the demand for excellence



# Fundamental science is the basis for innovation

Technology used today in our machines

It's important to invest in science to lay the foundation for future innovation



Lorentz



Zeeman

# War for talent: this is our competition

Zurich



Stig Nygaard

Copenhagen



Robbie Shade

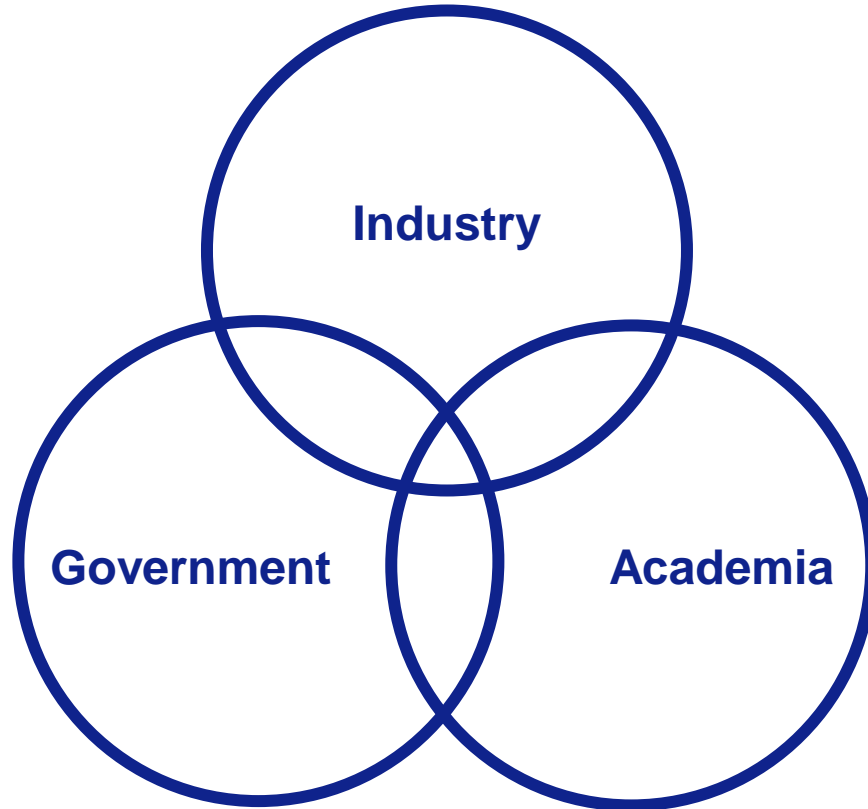
# Competition is strong in the talent market

## Global City Talent Competitiveness Index rankings and overall scores

RANK	CITY	OVERALL SCORE
1	Copenhagen (Denmark)	74.0
2	Zurich (Switzerland)	67.7
3	Helsinki (Finland)	65.4
4	<i>San Francisco (United States)</i>	63.5
5	Gothenburg (Sweden)	62.6
6	Madrid (Spain)	60.2
7	Paris (France)	59.4
8	<i>Los Angeles (United States)</i>	58.2
9	Eindhoven (Netherlands)	57.8
10	Dublin (Ireland)	57.2



# Close cooperation of industry, government and knowledge institutes creates a competitive edge



The image features the ASML logo in a bold, dark blue font on the left side. The background is a gradient of light blue, with several abstract, flowing white lines that create a sense of movement and depth, resembling waves or a stylized landscape. The overall aesthetic is clean and modern.

**ASML**