

An aerial photograph of the TU/e campus in Eindhoven, Netherlands, taken at sunset. The sky is a mix of orange, yellow, and blue, with scattered clouds. The city skyline is visible in the background, with several buildings illuminated. In the foreground, a large, modern glass-walled building is prominent, its interior lights glowing. A semi-transparent red banner is overlaid across the bottom half of the image, containing the main title and speaker information.

Welcome to the TU/e scale jump update

November 17, 2022, Robert-Jan Smits, Frank Baaijens, Nicole Ummelen and Kees Storm

The Brainport region is booming!



Here's why:

Minister Mark Harbers over geld voor bereikbaarheid regio: 'Brainport dient een enorm nationaal belang'

56.000 vacatures in Brainport in 2030

Vergeet Silicon Valley, kom naar Eindhoven

Nergens zoveel groei als hier: de economie rond Eindhoven trekt flink aan

Eindhovens Dagblad

Honderden miljoenen naar regionale hightech; duizenden banen erbij in Zuidoost-Brabant

Brainport offers solutions to the world's societal issues

Smart Mobility

Health

Sustainability

Energy Transition



Norbert van Onna

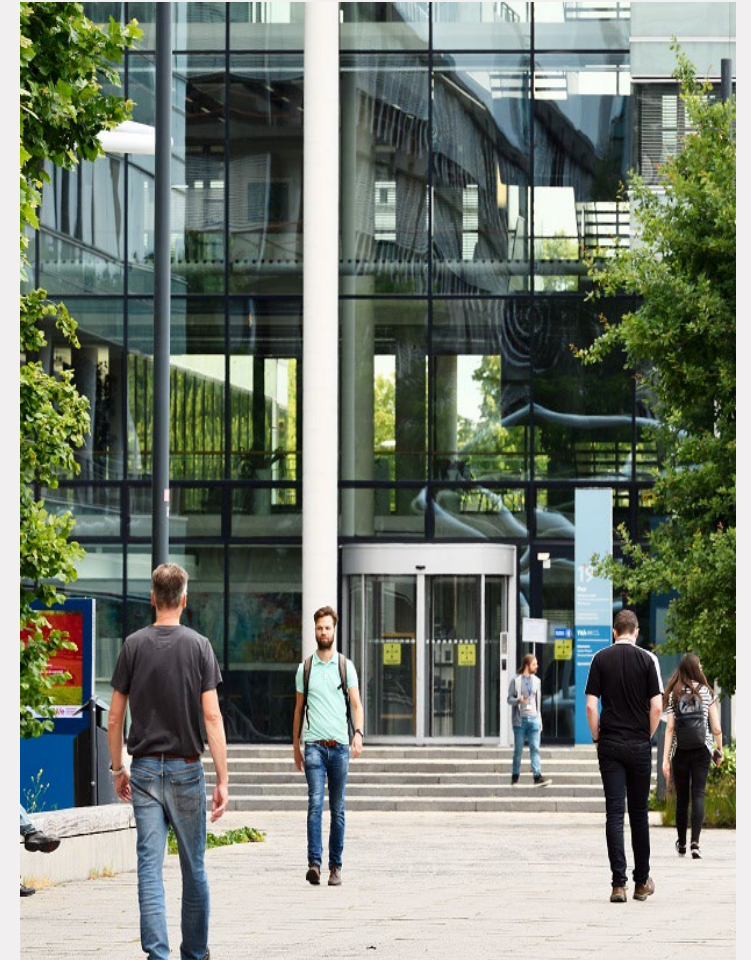
Strategic agenda Brainport Region: 3 pillars



Innovation, technology & entrepreneurship



Talent: the fuel for our technological engine

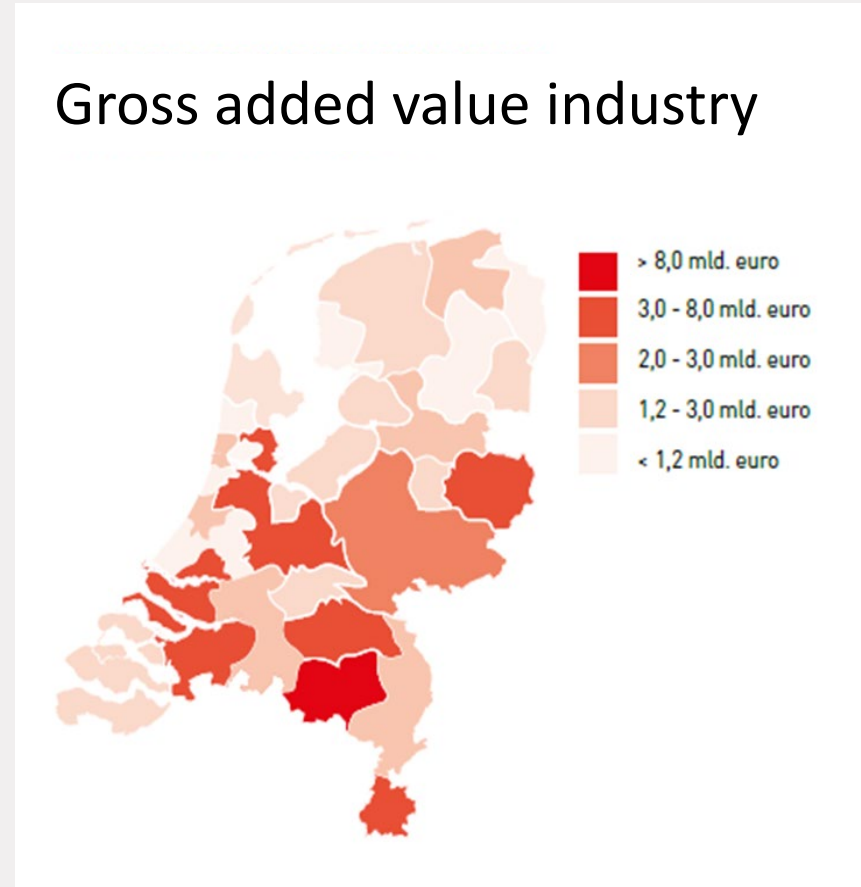


Living environment and business climate

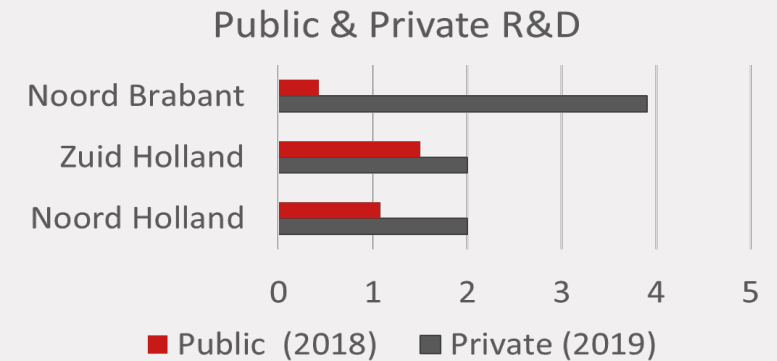
Coalition Agreement: “Together with the Brainport Region we will further develop its Mainport status”



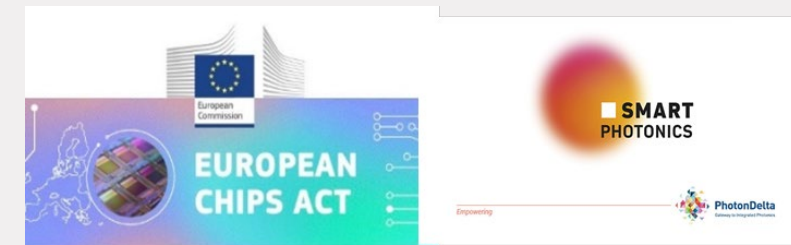
Why? Rationale for a Brainport scale jump



Increase in Public R&D spending needed in Region



Technological sovereignty EU





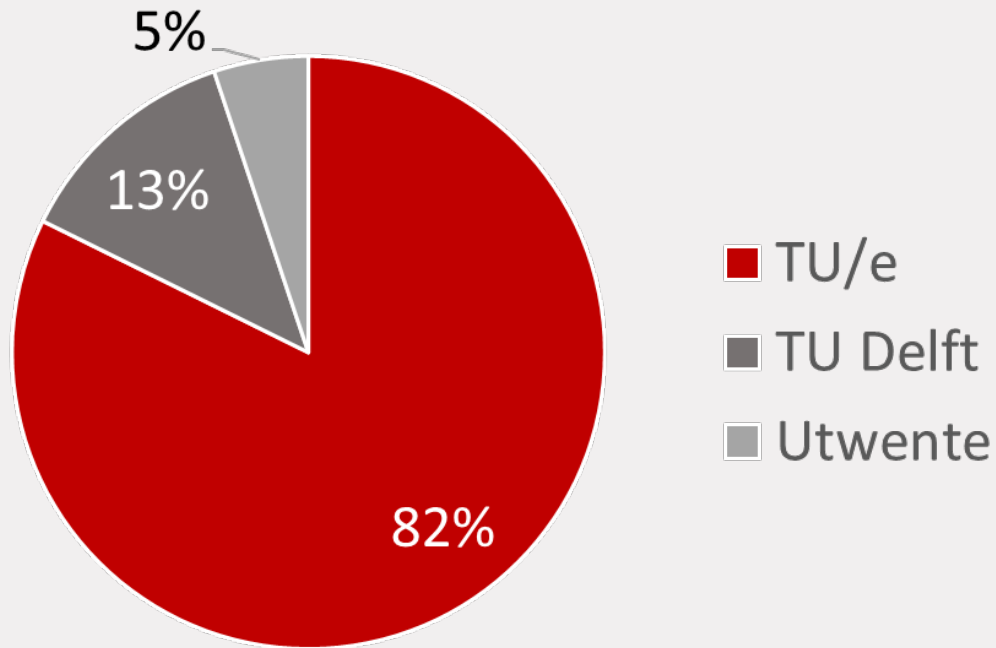
Request from Brainport to us

**“Are you willing to join us in the scale jump
of our region”?**

Answer TU/e: YES!

Why? Rationale for a TU/e scale jump

TU/e is the main source of Brainport talent



Graduates working in Brainport

TU/e is driven by societal challenges



Proximity matters...



Because we are born out of industry



What's in it for us?

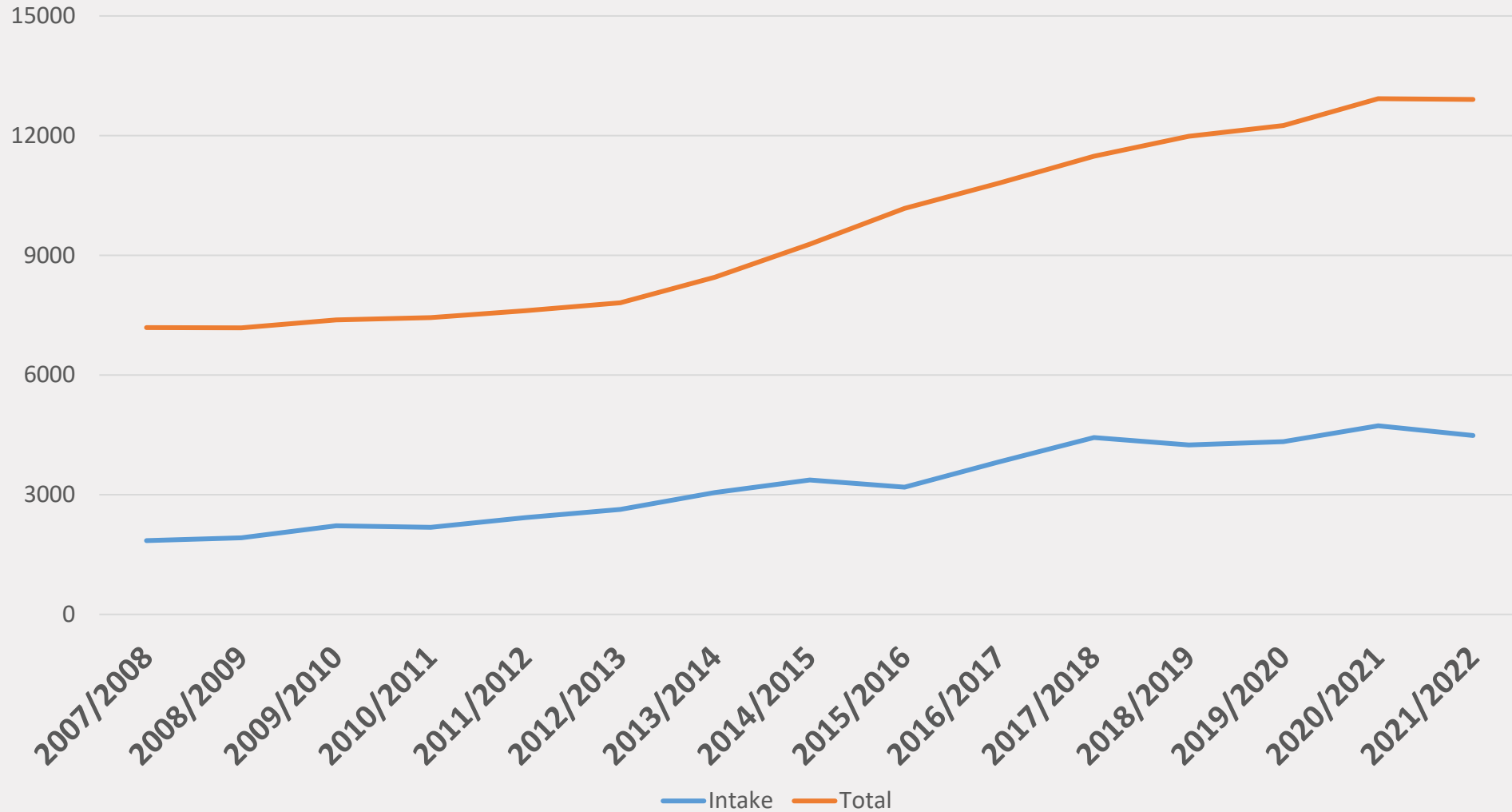
Firm TU/e links between research and education mean we can

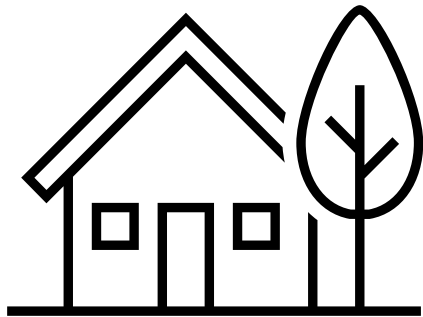
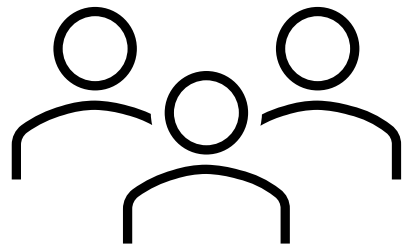
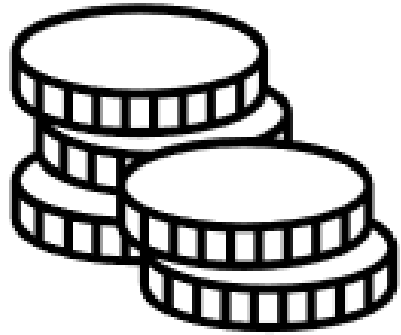
- Grow in **staff and facilities**
- Grow in **quality and excellence**
- Grow in **relevance**: strengthen and develop new things

...as we grow in numbers.

We did it before..

Student numbers 2007-2022





4 dealbreaking conditions:

1. **Upfront funding from the central government to facilitate growth and to keep the current workload from increasing further.**
2. **Growth should not come at the expense of excellence.**
3. **Growth should be gradual to keep the workload manageable.**
4. **The region must ensure that infrastructure and facilities are in place.**

First step: The Think tank

Challenge

“Imagine TU/e in 2030..”

- We have doubled the number of graduates.
- These engineers possess skills relevant to Brainport.
- After they leave TU/e, they stick around in the area.

Question: What will it take to get us there?



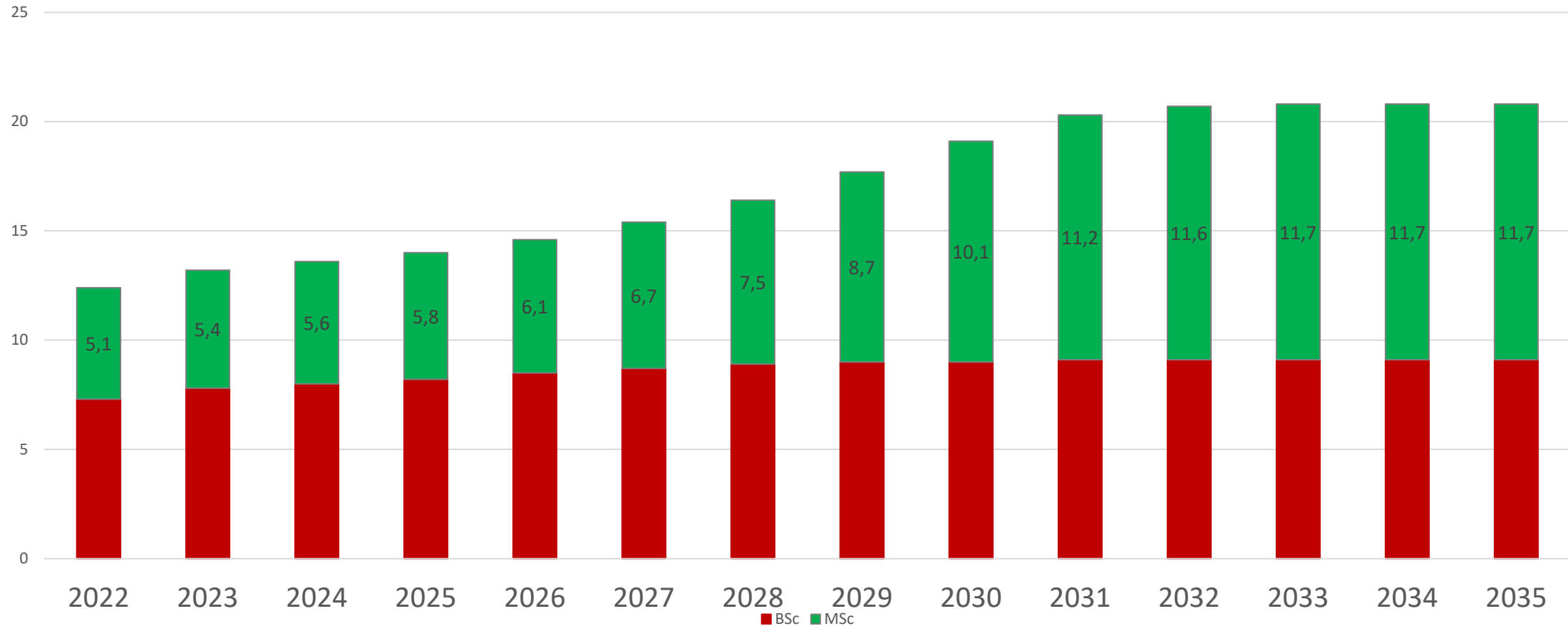
Think tank advice in broad strokes



- Primary focus: **Increasing the number of MSc graduates**
- Target: **Doubling MSc graduates in 2032**, increase to +140% in 2035
- Focus on **growth in domains relevant to our ecosystem**

Growth scenario for number of students

Total number of students in BSc and MSc combined (x1000)



Relevance and partnership: Diversified growth towards future needs Brainport and society



Greater inflow Dutch students



... but an increase of internationals will also be needed



Community and Culture: Improve stay rate in the Brainport region



And more..

- **Total staff will grow by 76%**
- **Student-staff ratio decreases to 17:1 (currently about 19:1)**
- **Lower costs per MSc graduate in 2035 compared tot 2022**
- **Number of PhD candidates grows in step with staff growth**
- **More room for research, teaching and support: +66% m2.**

Where are we now in time?



Next steps after December

- **Fingers crossed: Waiting for a positive answer Brainport ministers!**

In the meantime:

- **Internal: Regular information updates via Strategy Update, via departments and meetings**
- **External: Joint actions with Brainport partners**

**Decision on financial support expected in
April 2023 'Spring Memorandum' (Voorjaarsnota)**

Are you ready to jump?

www.tue.nl/scalejump

