

# HE Department Strategy session

8 October



# Agenda

Time	Topic
9:00 – 9:10	Walk-in
9:10 – 9:30	Background & context <ul style="list-style-type: none"><li>• Why we are here</li><li>• TU Delft mission, vision &amp; values</li><li>• Faculty strategy</li><li>• Current department vision/mission</li></ul>
9:30 – 10:45	Activity 1: HE department identity
10:45 – 11:00	<i>Break</i>
11:00 – 12: 15	Activity 2 - Pathway to the future
12:15 – 12:25	Next steps
12:25 – 13:00	<i>Lunch</i>
13:00	End of session

# Why we are here

- Cuts as an opportunity, let's use this to improve.
- Responding to national and global developments (eg. geopolitics, climate change, digitalisation)
- Taking a clear look at where we stand and where we want to be
- Building a stronger internal and external profile and position





# Vision, mission & values TU Delft

## Vision

- TU Delft contributes to solving complex and urgent societal challenges through the education of highly qualified engineers who are creative, innovative and responsible, by pushing the boundaries of technical sciences, by developing innovative applications, and by fostering entrepreneurship.

## Mission

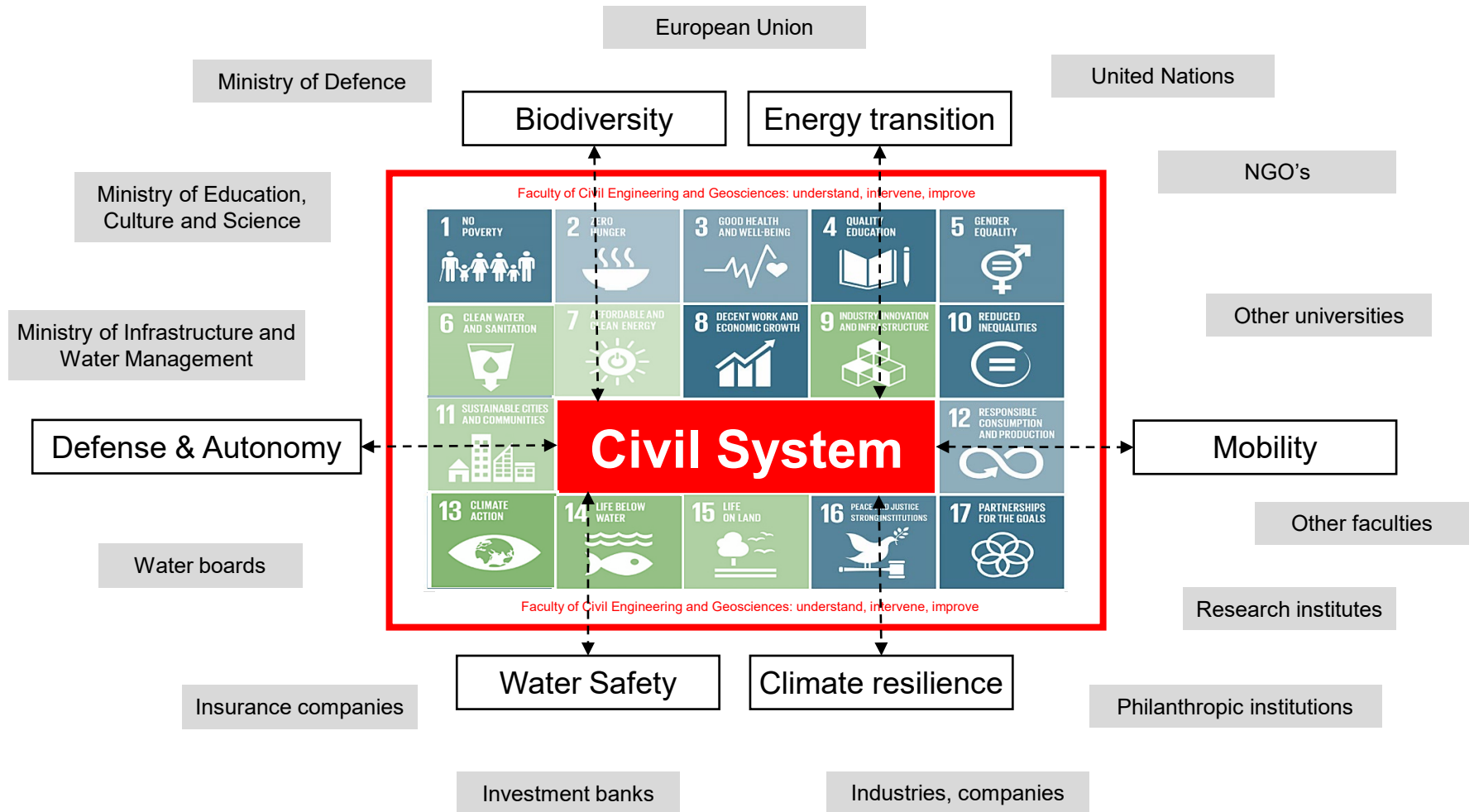
- We conduct research at a world-class level by combining groundbreaking science, pioneering technologies and human-centred designs in a socially responsible manner. **This enables us to make a real impact towards building a sustainable society.**
- We educate people to prepare them for a career as professional, highly qualified and reputable engineers, and develop and enhance the expertise of **technical leaders** throughout their careers.
- We develop technology-based innovations for some of our society's biggest challenges. We encourage entrepreneurship and proactively interact with leading **national and international institutions**, companies and societal partners, while also keeping our close **ties to the Delft region**.
- We continuously work towards improving our collective effectiveness, performance and organisational resilience by applying the following values as our guiding principles.

## Values

- Diversity
- Integrity
- Respect
- Engagement
- Courage
- Trust

## The Faculty of Civil Engineering and Geosciences

focuses on understanding, intervening in, and improving the civil system which is the collection of assets, measures, and requirements necessary for a functioning society in which citizens can live and survive.





# Current department vision/mission

- The mission of the Hydraulic Engineering department is to educate world-leading hydraulic engineers, train academic scientists and carry out world-class research. The Hydraulic Engineering department aims at thorough understanding of relevant processes (e.g. hydraulics and morphology) in rivers, coasts, estuaries and seas. It also focusses on the engineering of and research on man-made interventions in support of safe and sustainable development of urbanised deltas and water systems, and the development of renewable energy in the marine environment. Our research and education agenda is driven by societal needs to design, engineer and manage human interventions in the natural environment, for purposes such as flood safety, flood resilience, navigation, freshwater supply, energy generation and supply, nature development and recreation.
- To maintain our position as one of the world-leading departments in this field, we carry out groundbreaking fundamental and applied research. To do so we use our extensive global network for application- inspired, collaborative research with academia, research institutes and practitioners. This requires continuous efforts to innovate and advance research and education. The approach of combining the challenges from practice with systematic scientific investigation of the underlying physical processes and functioning of engineered systems has been very successful. This has resulted in productive and innovative research inspired by both natural processes and engineering applications, as for example reflected in the “Building with Nature” concept. This is achieved through a synergistic combination of experiments in the laboratory, field observations and numerical modelling
- The hydraulic engineering research program and educational activities focus on the following key societal challenges identified for our faculty: climate change, the transition to renewable energy systems and enabling of safe and sustainable urbanisation and infrastructure in delta areas.

# Current HE themes

- The department has defined the following four key themes:
  1. dynamics of marine and inland water systems;
  2. Sustainable infrastructure and nature-based solutions (NBS);
  3. Climate adaptation and flood-risk management;
  4. Renewable energy in the marine environment.

These are directly linked to the core faculty disciplines (particularly fluid and sediment dynamics), societal challenges and cross department methods and technologies, as shown in Figure 14.



our focal themes of hydraulic engineering embedded in the most related societal challenges and methods and technologies for the faculty (in green). Source: Cape Holland

# RULES OF THE ROAD



A few shared guidelines to make  
sure everyone can join in and be  
heard



# Activity 1- Department Identity:

## Questions

1. Describe the current identity of the Hydraulic Engineering department.
2. Imagine it is 2035 – how would you *want* to describe the department then? What do we want to be known for?

## Instructions

- Think about: education, research, working environment, support, finances, industry engagement, international profile etc.
- Groups of 6–8 people
- 45 minutes for discussion
- 2 minutes per group for feedback



# BREAK TIME



# Activity 2 - Pathway to the future

## Question

- What are key things we need to do to achieve where we want to be in 2035?

## Instructions

- Consider new things we need to do as well as things we need to do better or differently
- Think about: education, research, working environment, support, finances, industry engagement, international profile etc.
- Groups of 6–8 people
- 30 minutes for discussion
- 2 minutes per group for feedback

## Next steps

- The board will gather and combine all input from today.
- We will process and cluster the results into a clear overview.
- You will see this overview again, online or in your section meetings, so we can reflect together.
- The final draft of the vision and mission will go the HE MT for official approval.



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## Next workshop

- 13 November. Block your agenda!
- Putting our vision and mission into action.





Lunch