

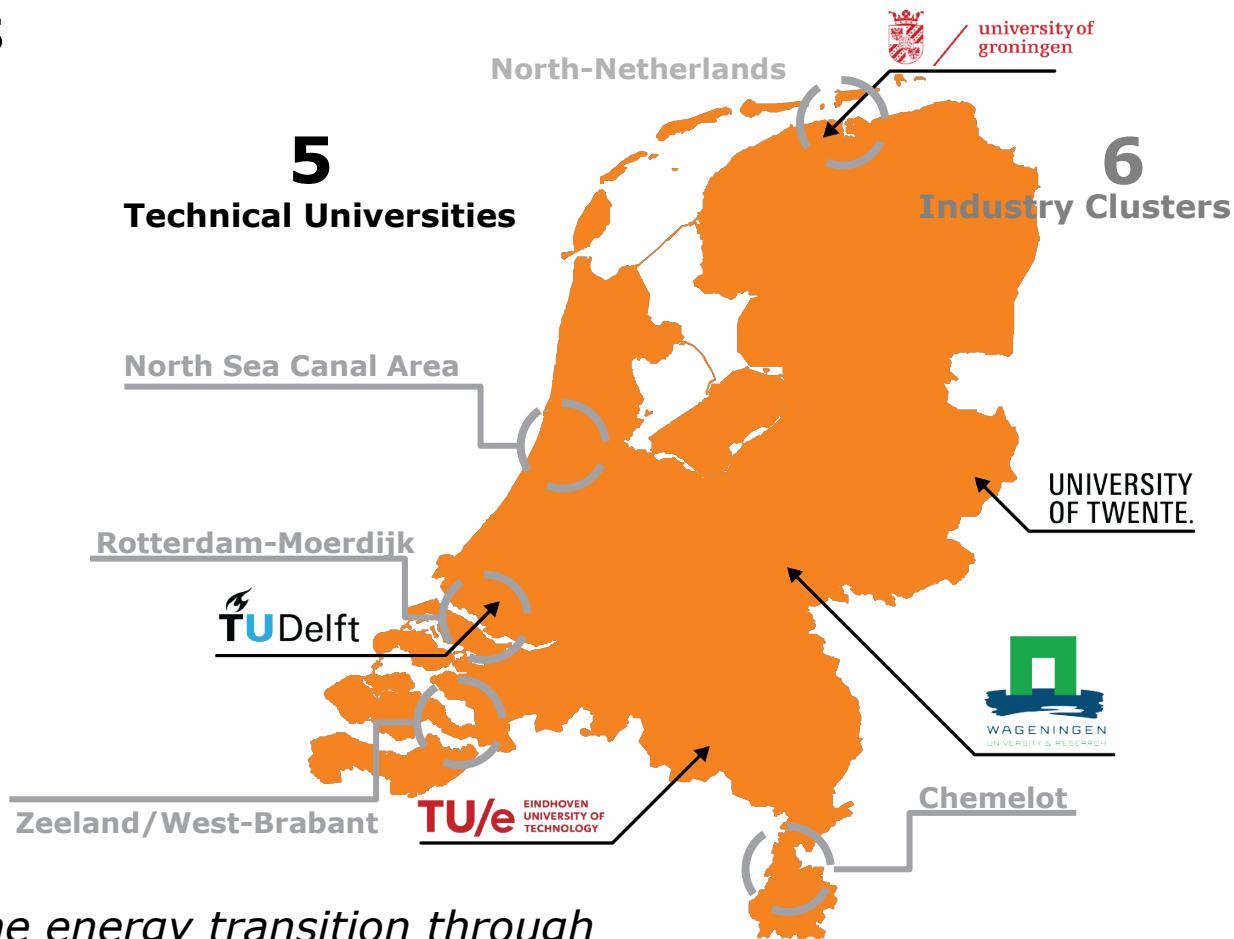
"System, Sustainability and Societal aspects in the Energy Transition" (3SET)

3rd edition of 4TU.Energy PhD course
13 and 14 November 2025
Bar Beton Utrecht



Facts & Figures

4TU+.Energy

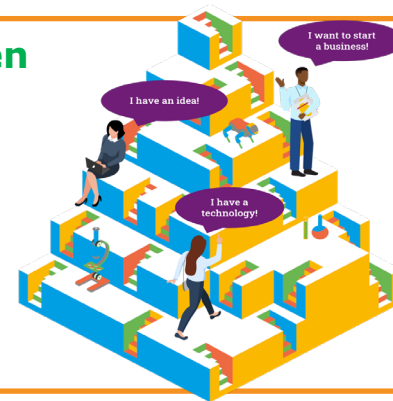
**4+****Research Institutes****100+****Research Groups****1000+****Researchers**

*Mission: Accelerating the energy transition through **research**, **innovation**, and **collaboration**.*

4TU. From Mission to Action: 4C goals



**Groenvermogen
NL
Ideation Lab**



Connect

Coordinate

4C goals

Collaborate

Create



Coming event

4TU-DSO Matching Symposium June 2026

Goals:

- Bridge Academia & DSOs
- Collaboration & Innovation
- Knowledge Exchange

Expected audience:

- 50 4TU researchers incl. master students & **PhD candidates**
- 50 DSO representatives

Key Topics

Flexibility in Energy System

Grid Congestion & Infrastructure

Energy Hubs

Program committee



David Smeulders



Mina Shahi



Pedro P. Vergara



Akbar Asadi



Amir Mahmoudi



Maja Rücker



Anne van der Molen



Angele Reinders



Pilar Ruiz Ramiro



Fokko Mulder



Niek Mouter

Speakers Day-2



Louise van Schaik



Eveline van Leeuwen



Bas van Vliet



Oscar Kraan



Mark van der Meijde



Francesco Lombardi



Chair

Akbar Asadi Tashvigh



Angèle Reinders

Professor TU/e

- PhD in Experimental Physics (Utrecht University)
- Held research and leadership positions at TU Delft, University of Twente, EPFL, Fraunhofer ISE, Solliance, World Bank, and others
- Author of books including Designing with Photovoltaics (2020) and Photovoltaic Solar Energy (2017 & 2024)
- Active contributor to IEA PVPS programs on PV integration and strategic PV analysis

Program

Day-1	13-Nov	Chair of the day: prof. dr. Angele Reinders
9:30	Walk-in Reception	
10:00	Welcome speech & Opening	
	David Smeulders - Professor Energy Technology TU/e Scientific Director 4TU.Energy	
10:30	Pitch Your Research (1min/Pitch)	
11:30	Keynote	Anne van der Molen - 7 Dilemmas for the Distribution Network Operator
	Stedin TU/e	(Senior Strategic Advisor Stedin Researcher TU/e vice chairman E.DSO)
12:30	Lunch and Social moment	
13:30	Presentation	Angele Reinders - Design-driven approaches towards the sustainable energy transition
	TU/e	(Professor Energy Technology, TU/e)
	Main session - 1	
14:00	Pilar Ruiz Ramiro (Professor UTwente) - Challenges and opportunities of chemical recycling <i>of plastic waste</i>	
15:00	Fokko Mulder (Professor TUDelft) - The necessity of energy storage in a renewables-based energy and feedstock system	
16:00	Break	
16:30	Presentation	Niek Mouter - Participatory Value in the Dutch Energy Transition
	Populytics TUDelft	(Assoc.Professor Technology, Policy and Management, TUDelft Scientific Director Pop)
17:00	Closing Day-1	
17:15	Optional Dinner	Based on self-payment
Day-2	14-Nov	Chair of the day: dr.ir. Akbar Asadi Tashvigh
9:30	Walk-in Reception	
9:55	Opening Learning objectives	
10:00	Presentation	Louise van Schaik - Geopolitics of the Energy Transition
	Clingendael	(Head of Unit EU & Global Affairs, Clingendael Institute)
	Main session -2	
10:30	Eveline van Leeuwen (Scientific Director AMS institute & Professor WUR)	
	Bas van Vliet (Assoc. Professor WUR, Lecturer / PI at AMS Institute)	
	- Spatial Justice & Participation in the Energy Transition	
12:30	Lunch and Social moment	
13:30	Presentation	Oscar Kraan - The Future of Energy: A business perspective on what's next
	Deloitte	(Future of Energy Leader, Senior Manager Strategy, Deloitte)
	Main session -3	
14:00	Mark van der Meijde (Professor UTwente) - Geothermal for all – exploring non-conventional geothermal options	
15:00	Francesco Lombardi (Assoc. Professor TUDelft) - Beyond cost-effectiveness. Designing socially viable and technologically resilient energy systems.	
16:00	Borrel with reflection/connection incl. best pitch reward, certificate	
17:00	Closing Day-2	

Attention:

- QR code on your name badge
 - Present fully to get your certificate (10:00-17:00 2 days)
 - Any questions/feedback?
- Coordinator: Sha Lou

Overall Learning Objective

Describe

- system, sustainability, and societal complexities within the context of the energy transition

Analyze

- how technical, economic, social, and governance factors influence the energy transition

Discuss

- future opportunities and requirements for achieving energy transition goals

Mutual agreement

- **Energy research is a broad field, and we may all use different terminology and perspectives.**
- The **energy transition** requires collaboration across **many disciplines**.
- During this 2-day course, we aim to:
 - **Respect** different definitions, viewpoints, and research approaches
 - **Step outside** our own research comfort zones and explore other fields' perspectives
 - **Engage** in thoughtful, constructive discussion
 - **Broaden** our academic and professional networks

A Challenge for All Participants

- Find at least **one person** who is not from your university.
- Start a conversation.

Who knows — they may be your **co-author, co-innovator, or co-grant** in the future!

