

CAETS

Communications Committee

Presentation to CAETS Council - 9 September 2025

Lucas Noldus (Committee chair)

Netherlands Academy of Engineering

Overview of the Communications Committee

Leadership



Lucas NOLDUS

Chair

Netherlands Academy of Engineering



Siegfried Zhiqiang WU

Deputy Chair

Chinese Academy of Engineering

Secretariat

Wei Wang, Sisi Chen, Ziqin Yang

Tongji University

Members

47 committee members (August 2025)

From 27 out of 31 member academies (**87%**)

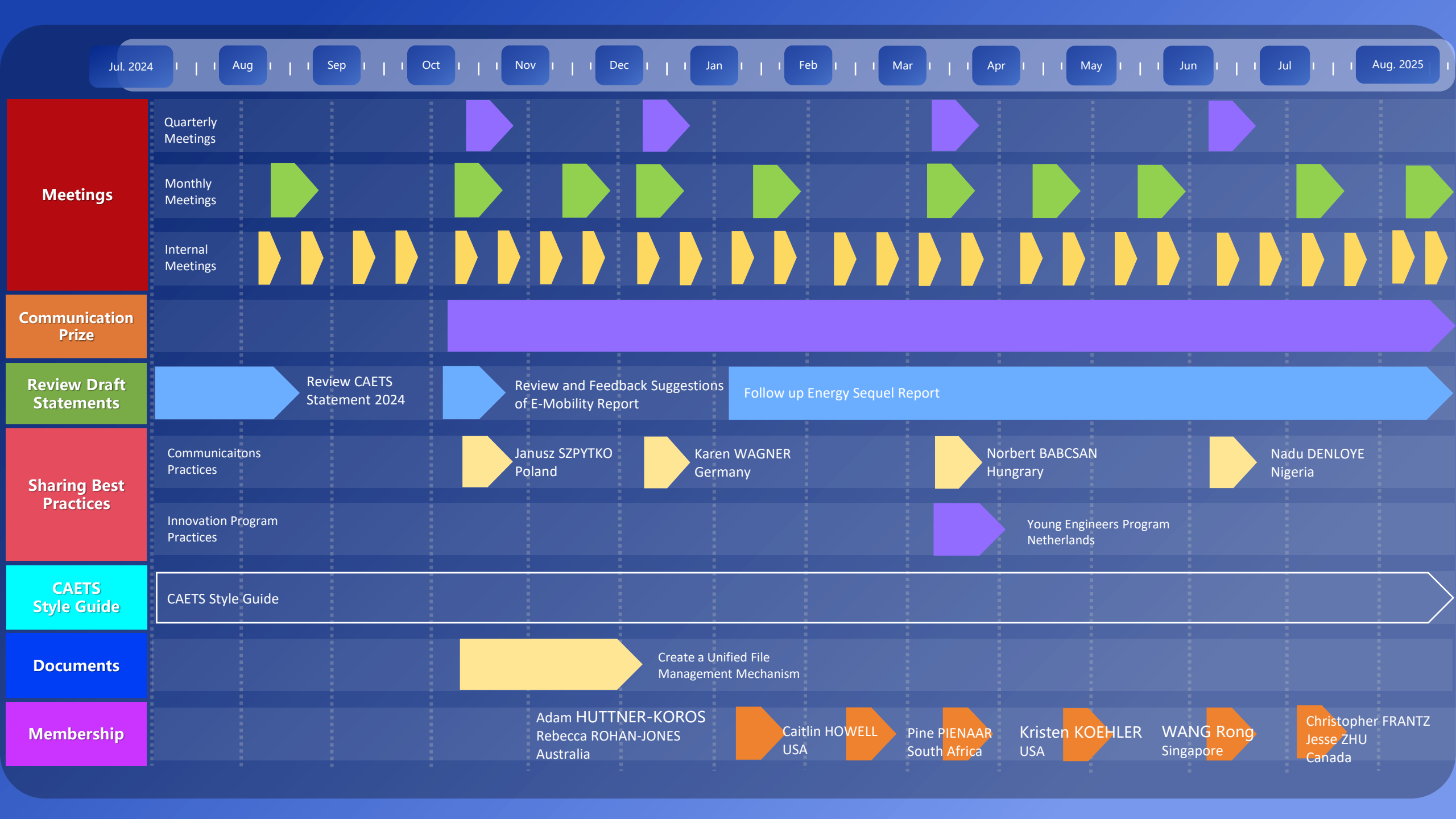
Mix of Fellows and Communications professionals

Committee Activities (July 2024 - August 2025)

Work plan is guided by charter in CAETS Operating Guidelines¹ :

1. Development and maintenance of a CAETS Style Guide
2. Coordination and supervision of the CAETS Communication Prize competition
3. Derivation and synthesis of key messages from Working Groups and other activities

1. Section 4b, Standing Committees - CAETS Operating Guidelines (February 2022)

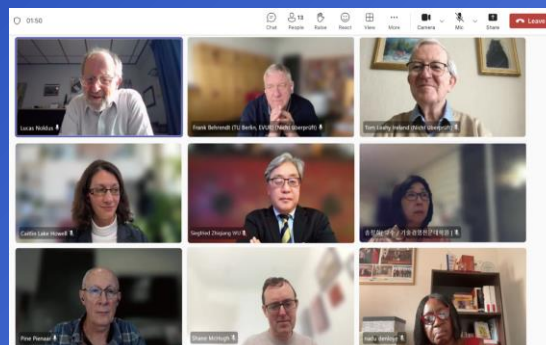


Committee Activities - Meetings

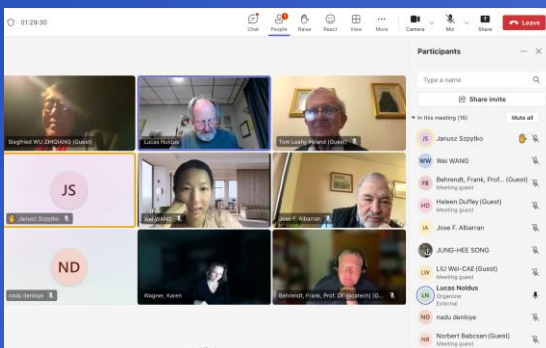
4 Quarterly Meetings



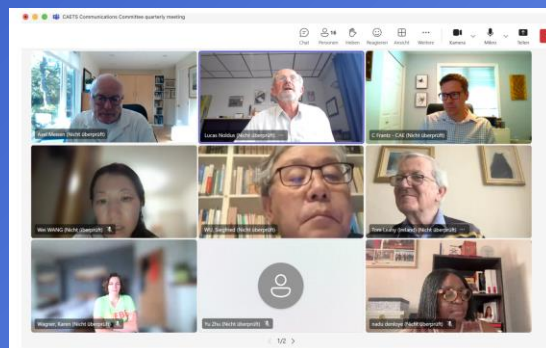
17 Oct 2024



13 Mar 2025

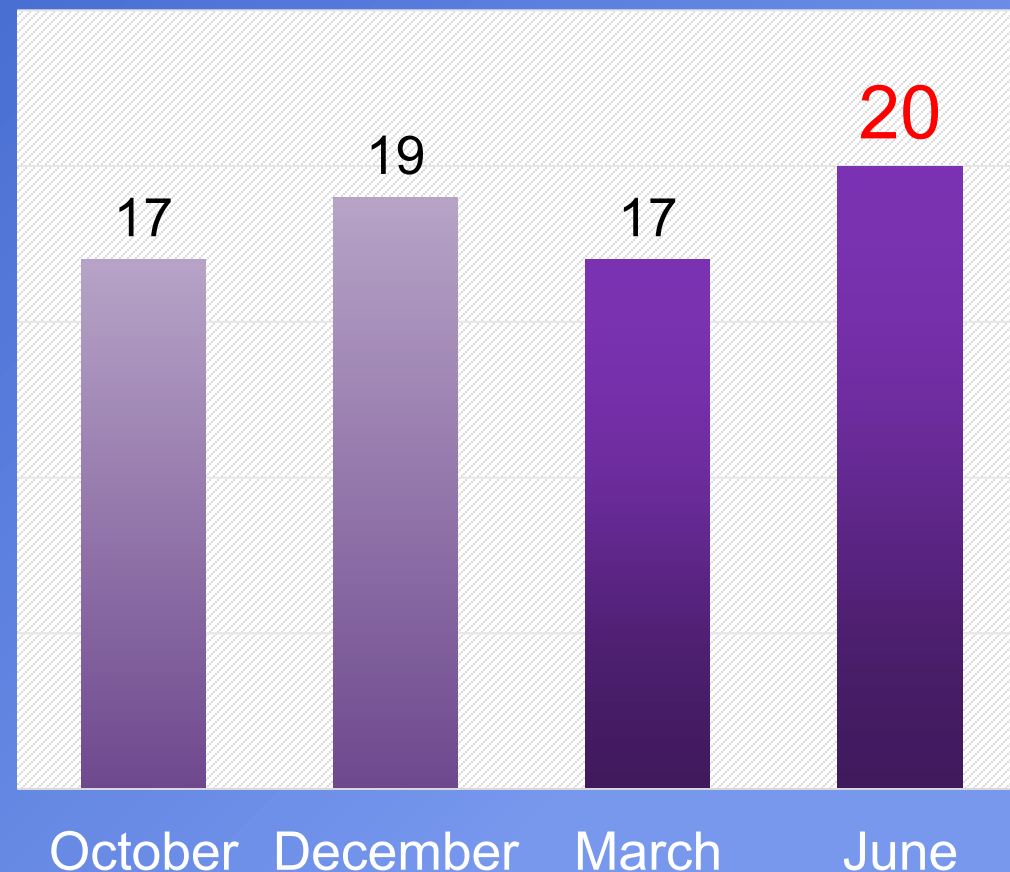


6 Dec 2024



10 Jun 2025

Number of Attendees



Committee Activities - Meetings

10 Monthly Leadership Meetings



26 Biweekly Internal Meetings



Committee Activities - Communication Prize 2025

Work plan

- One prize category
- Monetary award of USD 5,000
- Support winner's travel to CAETS conference (reimbursement of travel, accommodation and conference fee)
- Judging complete 3 months ahead of conference

Communication Prize 2025 - Progress

 CAETS Communication Prize 2025 Framework Introduction This paper sets out the Framework for the annual CAETS Communication Prize. Background The CAETS Communication Committee was established to help member academies enhance their communication on projects, educational activities, and the role of engineering and technological sciences in society. The goal is to strengthen an influence on both governments and the public in our respective countries by clearly conveying the importance of technology to a broad audience. We encourage technological innovation and engineering excellence to communicate as a single, merging very with general audience, particularly young people and industry. This is done through a competitive selection of their videos, each with its own merits, highlighting the societal significance of technological advances and engineering achievements. Such entries have the dual role of: 1. Inspiring students to follow careers in engineering and technological sciences; 2. Educating the general public on the impact that engineering and technological sciences have in their lives and future. The annual CAETS Communication Prize was established to recognize the best work in the early career innovation and Academy theme already. Engineering Innovation Sectors The Prize will be awarded to the most outstanding educational communication of a technological innovation or engineering. The winning entry will have clearly demonstrated the successful identification of a problem, with the necessary being of benefit to the economy or society, either nationally or internationally. The video submissions may outline the problem and an evidence-based or applied a successful outcome can be proven over time. The prize will cover the registration fee to the annual conference as well as travel, accommodation up to \$1000 USD in addition to a \$1000 USD monetary reward. CAETS Communication Prize Framework 2025	 CAETS Communication Prize 2025 Submission Guidelines The CAETS Communication Prize recognizes effective educational communication to a general audience of those applied technology and engineering has been or can be used to address a real-world problem, and the resulting benefits to the economy or society. The prize is judged as a two-step process. Firstly, each CAETS member Academy selects a national winner. The national winner is then submitted to the international CAETS prize, selected by an international judging panel drawn from CAETS member Academies. One international winner will be selected. Deadline for national submissions: 11:59pm local time 31 March 2025 Deadline for international submissions: 11:59pm local time 30 April 2025 Winners: international The winner of the prize will be announced under embargo on 30 May 2025. The recipient will receive the prize at CAETS 2025, 8-11 September in Bucharest, Romania. Entry rules: Each member Academy is to submit no more than one video, except where they are submitting entries from different groups. Each video submission must be accepted by the CAETS member Academy. Entries must be submitted by 11:59pm local time 31 March 2025. Entries must be submitted by 11:59pm local time 30 April 2025. Entries must be submitted by 11:59pm local time 30 April 2025. CAETS Communication Prize Submission Guidelines 2025	 CAETS Communication Prize 2025 Framework Process Member academies judge to country entries and submit their best video to the CAETS Secretary for international judging. Member academies provide that any submission due to country submissions to be made, leaving the judging entries to the international judging for judging. Entries are to provide protection for the videos to be presented internationally in traditional and social media, CAETS Academies, websites and other relevant. The videos may be used in whole or part and entries are to retain their rights to compensation for the use of the material provided in the format for the marketing and promotional purposes. International judging will be done by a judging panel consisting of the Chair and Deputy Chair of the CAETS Communication Committee, as well as the member academies' Academies already serving on the CAETS Board, representatives to the national and international academies and members of the media of their respective countries to the CAETS Communication Committee. Should the judging panel be an even number of representatives, then the Chair of the CAETS Communication Committee will have the vote. Board member academies are to submit their entries as a member of the international judging panel in the Chair and Deputy Chair of the CAETS Communication Committee by 11 March 2025. When considering a judge for the international panel, it is desirable for member countries to have a team that we seek to diversify and include a panel as possible. The videos for judging to country entries will be the same criteria used for international judging (see below). A guide will be provided to judges to assist in voting action. The videos will be selected on 30 May 2025 and the winning member academy will be notified (in confidence) under embargo and announcement of the CAETS Annual Meeting. All submitted videos will be presented on the CAETS website. In addition, member academies are encouraged to promote and communicate the prize locally within their country and internationally, including exhibiting the winning academy. Timeline 2025 <table><tr><td>11 November 2024</td><td>Launch of CAETS Communication Prize 2025 competition</td></tr><tr><td>31 March 2025</td><td>So country entries close (international academy can choose a different date)</td></tr><tr><td>31 March 2025</td><td>International judging panel submissions due</td></tr><tr><td>30 April 2025</td><td>International entries close</td></tr><tr><td>1 May 2025</td><td>International judging starts</td></tr><tr><td>30 May 2025</td><td>Winner and finalist announced - under embargo</td></tr><tr><td>8-11 September 2025</td><td>Winner announced at CAETS Annual Meeting</td></tr></table> CAETS Communication Prize Framework 2025	11 November 2024	Launch of CAETS Communication Prize 2025 competition	31 March 2025	So country entries close (international academy can choose a different date)	31 March 2025	International judging panel submissions due	30 April 2025	International entries close	1 May 2025	International judging starts	30 May 2025	Winner and finalist announced - under embargo	8-11 September 2025	Winner announced at CAETS Annual Meeting
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 CAETS Communication Prize 2025 Filming with a smartphone, tablet or laptop Filming of the entry can be done using a smartphone, tablet or other filming device. Set up Laptop: Overhead lighting creates downward shadows on your face. Natural light is preferable. Do not have a bright window or light source behind you but as you face will appear very dark. If possible, have a window shining onto your face, or have a lamp from directly behind the camera screen. Orientation: horizontal Turn the device to horizontal and position yourself in the frame. Framing Maintain enough distance between the camera and yourself so there is some space above your head, at a minimum, your shoulders can be seen. If you are an expressive talker and use your hands to punctuate the filming can be wider or use zoom and avoid too close. Background Try to have a background that is relevant to the content of your submission. The example of a car or a machine that works in a lab it would be relevant to film in a laboratory. Please check the background for items that stand out for the wrong reasons, such as a clock that is not precise, clocks in view that could be distracting, etc. If at all stand a watch / floor that is not in the background to avoid camera distraction behind you. Sound Close the door / windows to maximize background sound. If you can, turn off air conditioning or other machines that produce low background humming sounds. You can get up a sign to discourage conversations from colleagues or family. A headset or microphone will also help with voice clarity. Time Time is time ready to you can maximize how you go for time. Time yourself a few times for the practice before you start filming. Filming Look at the camera and not your screen. It's ok to look at your screen once and again for your submission will be more engaging if you speak to the camera. After your third speaking wait three seconds before reaching out to your device to stop the recording. CAETS Communication Prize Filming with a smartphone or tablet	 CAETS Communication Prize 2025 Entry and Declaration Entrants are to complete this form along with their video submission. Title of entry Name of member Academy submitting through Personal details <table><tr><td>Title</td><td>First name</td><td>Last name</td><td>First surname</td></tr></table> Organisation Email address International phone number Country of residence This should be the same country as the academy, you are submitting your entry to. CAETS Communication Prize Entry & Declaration	Title	First name	Last name	First surname	 CAETS Communication Prize 2025 Entry & Declaration Access Please provide a link where the video can be viewed and downloaded. Acknowledgements <table><tr><th>Title</th><th>Full Name</th><th>Contribution</th></tr></table> If more than four individual contributors, please attach a list to this document. Name of team Name of organisation Declaration ☐ I hereby declare that the work represented in the video is my own work. ☐ I declare that I am authorized to, and give my permission for, my video entry to be presented internationally in traditional and social media, CAETS and its member Academies, websites and other relevant. The video entry will be made in the name of CAETS and its member Academies, and entrants are to retain their rights to compensation, including financial, for the use of the material provided in the format for marketing and promotional purposes. CAETS Communication Prize Entry & Declaration	Title	Full Name	Contribution							
Title	First name	Last name	First surname													
Title	Full Name	Contribution														



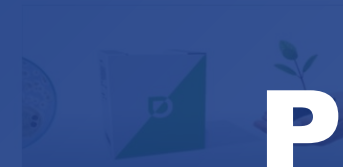
How Samasara Eco Made a Jacket from Enzymatically Recycled Polyester



Glass Changes the World, We Change Glass



Smart QR: Empowering Women with Device-Free Body Fluid Testing towards Good Health and Well-Being



Solena: Living Engineering with Mexican Roots and Global Vision



Bio-mimicry inspired Sensors for Biomedical Sensing Applications



Innovative Technologies in the House of Arts



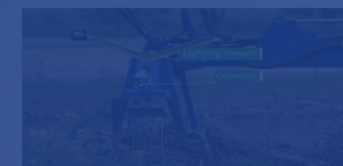
Sustainable Automotive Technologies: A TUT Case Study



Biofilters: Inside the Black Box



Ingestible Robotics - Unlocking the Gut's Brain



Automated Irrigation with Computer Vision in a Forestry Company

Progress Overview

Communication Prize 2025 - Entries

Australia



How Samasara Eco Made a Jacket from Enzymatically Recycled Polyester

Entrant: Nicholas Vevers

China



Glass Changes the World, We Change Glass

Entrant: Shou Peng

India



Smart QR: Empowering Women with Device-Free Body Fluid Testing towards Good Health and Well-Being

Entrant: Suman Chakraborty

Mexico



Solena: Living Engineering with Mexican Roots and Global Vision

Entrant: Guillermo Jose Aguirre Esponda

Netherlands



Bio mimicry: Nature-Inspired Sensors for Biomedical Sensing Applications

Entrant: Ajay Giri Prakash Kottapalli

Poland



Innovative Technologies in the House of Arts

Entrant: Marian Przybylski

South Africa



Sustainable Automotive Technologies: A TUT Case Study

Entrant: Barend Van Wyk

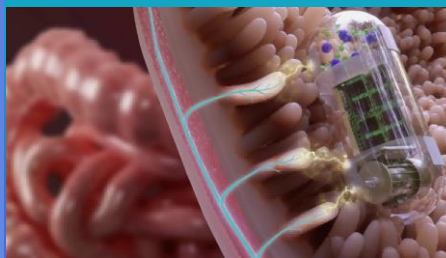
United Kingdom



Biofilters: Inside the Black Box

Entrant: Maria Vignola

United States



Ingestible Robotics- Unlocking the Gut's Brain

Entrant: Shriya Srinivasan

Uruguay



Automated Irrigation with Computer Vision in a Forestry Company

Entrant: Lucio Pelufo

Communication Prize 2025 - Outcome

- 10 entries from 10 countries
- Higher quality entries than previous years
- Winner: to be announced tomorrow!

CAETS Communication Prize

Improvements approved by Communications Committee (today)

- Name of the prize remains “CAETS Communication Prize” but we add an explanatory subtitle: “The global award for engineering communication”
- We will shorten and simplify the framework document
- We will launch next year’s competition shortly after CAETS meeting
- Judging panel to be populated by Communications Committee (with ex-officio member from Board) rather than Board alone, with max. 1 member per academy
- Finalists to be published on CAETS and conference websites shortly after submission deadline

Communication Prize 2026 - Timeline

1 Oct 2025 ●

Launch of prize competition

31 Mar 2026 ●

In-country entries close

30 Apr 2026 ●

International entries close

31 May 2026 ●

Winner selected

14-17 Sep 2026 ●

Winner honored at the CAETS 2026 Meeting

Committee Activities - Draft Statements Review

Work plan

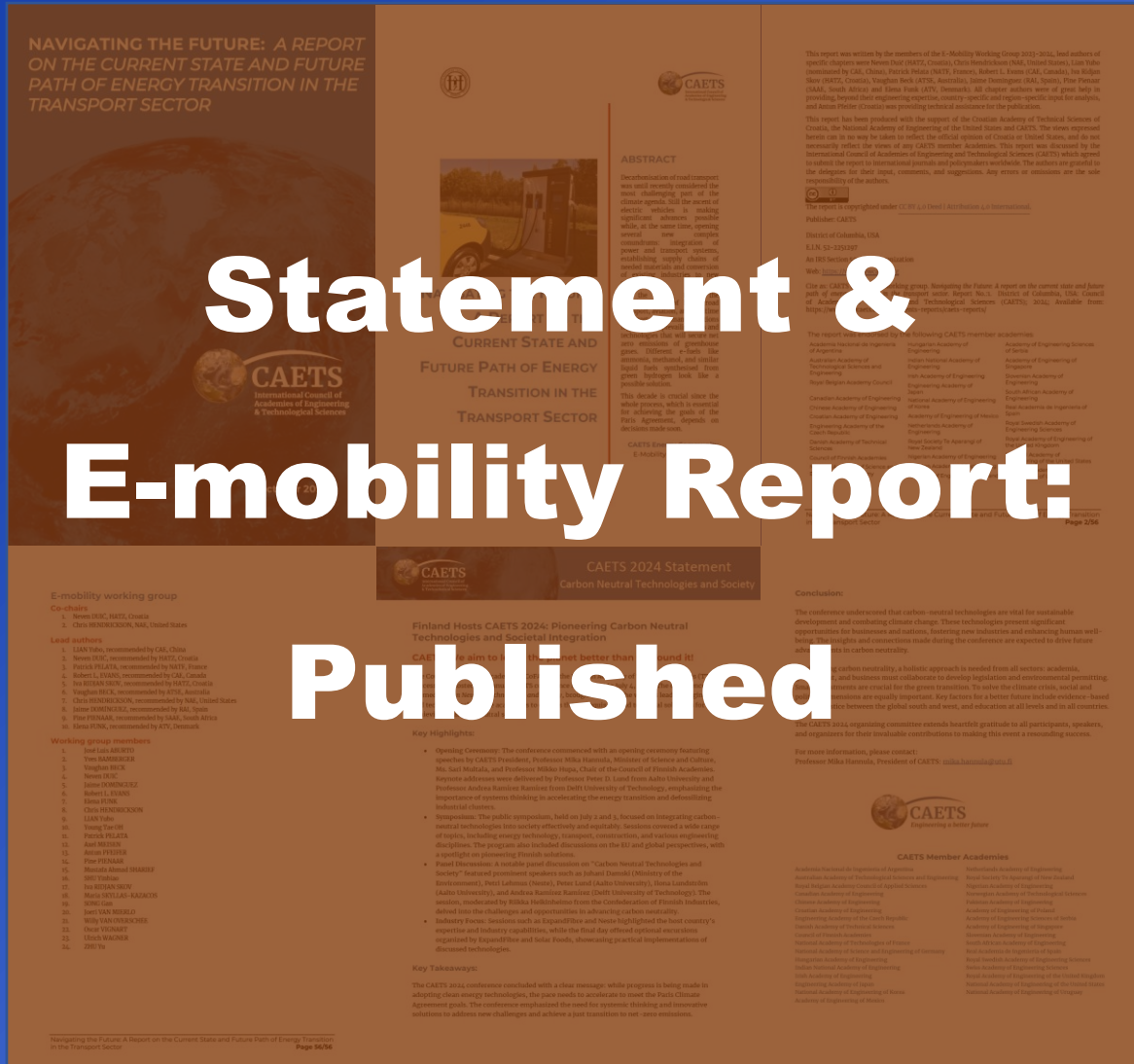
- CAETS reports under development:
 - e-Mobility (transport decarbonisation)
 - Energy Community Sequel Project (low-GHG emissions >2040)

Our job

- Support authors to prepare CAETS statement based on executive summary of report

Committee Activities - Draft Statements Review

Statement & E-mobility Report: Published



Energy Sequel Report: almost finished

Looking forward to deliverables from WGs

- Diversity & Inclusion
- Engineering Education
- Engineering for Sustainability
- Artificial Intelligence

Committee Activities – Sharing best practices

Work plan

Provide a forum for member academies to learn from each other about:

- Communicating to the sector/Fellows
- Communicating with the public
- Communicating to policy makers/decision makers

Sharing best practices - Presenters



Janusz SZPYTKO
Poland
17 Oct 2024



Karen WAGNER
Germany
6 Dec 2024



Norbert BABCSAN
Hungary
13 Mar 2025



Nadu DENLOYE
Nigeria
10 Jun 2025

Sharing best practices – Current status

Presentations from 12 member academies

China

Ireland

Nigeria

Denmark

Korea

Poland

Germany

Mexico

UK

Hungary

Netherlands

USA

All presentations are archived on CAETS website (Members Only section)



Young Engineers

Netherlands Academy of Engineering

February 2025

Young Engineers at NAE

Our selection criteria for new Young Engineers span across their achievements, personality, motivation, and situation

Selection criterion	Description
Achievements	• Technical entrepreneurs or enterprising / highly valorising technical scientists • Evident impact and success from concrete valorisation of research and/or innovative products/services • Rising star / high potential in engineering-based entrepreneurship
Personality	• Active, enthusiastic and visible innovators • Unconventional, original view within the field of NAE, as well as a broad interest in applications of science and technology, also outside their own field
Motivation	• Aspire to be actively involved in the NAE, and are willing to work for the NAE's projects • Balance between how NAE adds value to them (network, mentor program), and the added value they want to provide for the NAE (contribution in working groups)
Study	• Completed an (engineering-relevant) education less than 10 years ago

JIAJUN CEN

CEO & FOUNDER AQUABATTERY



Jiajun obtained his PhD at Imperial College London. He has built two water-energy related companies: Desolenator (CTO) and AQUABATTERY (CEO). His patented ideas have established the foundation of Desolenator's solar-driven thermal desalination technology to produce purified water.

In 2014, he founded AQUABATTERY, a renewable energy storage company tackling the challenge of intermittent power from wind and solar. The company provides safe, scalable, and sustainable long-duration storage solutions using only water and salt.

Jiajun and his companies have won many awards and recognitions, including the personal accolades of FD Young Talent and Forbes 30 Under 30.

JIAJUN IS LOOKING FOR...

Opportunities for collaboration in advancing the technology and partners for manufacturing and distribution



"Engineers are needed to develop clean technologies to provide food, water, and energy for a sustainable and circular world. Let's make it happen, together!"



MARJOLEIN HELDER

CEO & FOUNDER PLANT-E



Marjolein obtained her PhD at Wageningen University, after which she started Plant-e in 2009.

Plant-e revolutionised the world of IoT, making use of energy generated by plants for sensors and lighting. This allows for worldwide monitoring of precious ecosystems at very remote locations, with a power source that lasts for decades. Plant-e provides 15 years of engineering and entrepreneurship knowledge with a strong focus on multidisciplinary and sustainable businesses.

Marjolein and Plant-e have won numerous awards, including the Impact Award as part of the Amsterdam Science & Innovation Award.

MARJOLEIN IS LOOKING FOR...

Landowners with a mission to restore wetlands that have a need for monitoring of environmental parameters



"Nature has developed a balanced energy system over billions of years. What makes us think that we humans can do better than that? Let's use the power of nature to power our sensors and charge your sense's!"

New members in 2025



Adam HUTTNER-KOROS
(Australia)



Rebecca ROHAN-JONES
(Australia)



Caitlin HOWELL
(USA)



Pine PIENAAR
(South Africa)



Kristen KOEHLER
(USA)



WANG Rong
(Singapore)



Christopher FRANTZ
(Canada)



Jesse ZHU
(Canada)

Welcoming more members in 2026

Please join us! Share best practices, learn and be inspired.

Fully Occupied

Argentina

Australia

China

Canada

Denmark

Germany

Ireland

Korea

Netherlands

New Zealand

Nigeria

Pakistan

South Africa

Spain

Switzerland

United Kingdom

United States

Partly Occupied

Czech Republic

Finland

France

Hungary

India

Japan

Mexico

Poland

Serbia

Singapore

Invited

Croatia

Slovenia

Sweden

Uruguay

Plans for the coming year (2025-2026)

Proposed activities

- Support ATSE with preparation of CAETS 2025 statement
- Organize Communication Prize 2026 competition
- Support WGs with preparation of reports and CAETS statements
- Explore potential of AI tools
- Explore broader dissemination of CAETS statements
- Expand CAETS Style Guide with guidelines for reports
- Continue to share best practices

To do so, we need...

- Working groups: provide planning of reports
- Member academies with communication teams: please share style guides
- Communications Committee members: sign up for presentation at quarterly meetings → two more signed up today!
- Communications Committee members: volunteer to help with specific projects (AI tools, dissemination beyond CAETS academies) → several signed up today!