# CAETS COMMUNICATION AWARD BRISBANE, 2025

## COMMUNICATIONS COMMITTEE: FEEDBACK REPORT

15 OCT 25

# PURPOSE OF THE AWARD

- Encourage effective public engagement – making complex engineering or technological ideas understandable
- Promote awareness of engineering's role in society –solving global challenges
- Inspire young people – to attract future generations to careers in engineering
- Strengthen collaboration across academies – share best practices and improve communication of engineering achievements

Communication Committee oversees the criteria, nomination process, and evaluation of candidates

# THE AWARD

- Made at the CAETS Symposium held from 8 to 11 Sep 2025 in Brisbane
- Entrants from Australia, China, India, Mexico, Netherlands, Poland, South Africa, United Kingdom, United States and Uruguay.
- Award went to South Africa's project: Sustainable Automotive Technologies: A TUT Case Study, under leadership of Prof Barend van Wyk
- The award was presented by the Chairperson of the Communication Committee, Lucas Noldus, to Dr Christiaan Oosthuizen, a mechatronics engineer and a senior team member

# THE PROJECT

- The competition: the Sasol Solar Challenge, an endurance competition in SA for solar-powered cars built by university and student engineering teams from around the world
- Eight-day event covering a route of 2 500km
- It is a project of the the Tshwane University of Technology (TUT). Participation since 2014
- Solar car, SunChaser 4, operating on solar energy only
- 70% of the components have been manufactured inhouse by TUT
- A regular winner over the last number of years has been the Delft University, Netherlands


04
SUNCHASER 4
Ansys
Tshwane University of Technology


EXIT


EXIT


EXIT

Handover by Lucas Noldus to Christiaan Oosthuizen and SAAE President TC Madikane at the Brisbane City Hall


# COMMUNICATION PLAN

SOUTH AFRICAN ACADEMY OF ENGINEERING

**SAAE COMMUNICATIONS PLAN FOR THE CAETS COMMUNICATION PRIZE**

The prize and the winning entry will be promoted by sending the information and the video to:

1. All the members of SAAE with the request that it be brought to the attention of their colleagues, acquaintances and friends who may be interested.
2. All the Engineering Faculties of the Universities in South Africa.
3. The Academy of Science of South Africa (ASSAf) with the request that it be brought to the attention of all its members.
4. The Young Academy of Science of South Africa with the request that it be brought to the attention of all its members.
5. The National Science and Technological Forum (NSTF) with the request that it be sent to all its stakeholders.
6. The Department of Science and Innovation for its information.
7. The prize winning entry will be sent to the Director-General of the National Department of Basic Education in South Africa, with the request to distribute to all nine provincial Departments of Basic Education. The Department will be encouraged to consider funding of the video to translate it into indigenous languages and subsequently distribute it to the more than 24 000 public schools in the country."

The CAETS Communication Prize and the winning entry will also be shown on the website of SAAE. In the event that a video entered by SAAE be announced as the winner, then apart from the above-mentioned actions, all CAETS Academies will be asked to put the video on their websites and a press release will be sent to all the news media in South Africa.

Distribution of the project details and award to:

- Members of SAAE – Done, also on website
- Engineering faculties – universities and universities of technology: In process. We need to discuss with them how to give it through to the students
- ASSAF – Done. Also on website and in newsletter
- Young Academy of Science: Outstanding
- National Science and Technology Forum: Outstanding
- Department of Science and Innovation: Done
- National Department of Education for distribution to schools: Still working on it

# COMMUNICATION TO THE TECHNOLOGY FRATERNITY

Exposure to the engineering and technology fraternity is summarised as follows:

- SAAE MEDIA RELEASE
- SAAE WEBSITE (TWO ARTICLES)
- ACADEMY OF SCIENCE OF SOUTH AFRICA (ASSAf) WEBSITE ANNOUNCEMENT
- ACADEMY OF SCIENCE OF SOUTH AFRICA (ASSAf) ARTICLE IN NEWSLETTER
- ENGINEERING NEWS
- BUILDING REVIEW
- TUT SOLAR CAR SUNCHASER FACEBOOK PAGE

# CREAMER MEDIA'S ENGINEERING NEWS

- Combination of print and online platforms
- Online website receives 41 200 weekly visitors and generates 140 000 page impressions.

MAIN POINTS

- International award to showcase African engineering innovation
- Project changing student lives
- A proud win for South Africa
- Looking ahead

# ENGINEERING NEWS ARTICLE

## TUT Solar Car Project Wins Prestigious Global Engineering Prize

6th October 2025

*This article has been supplied.*

*An inspiring story of innovation, collaboration and South African excellence*

South Africa is celebrating a proud moment on the international stage: the Tshwane University of Technology (TUT) Solar Car Project has won the 2025 CAETS Communication Prize, awarded at the CAETS Annual Meeting in Brisbane, Australia.

The Council of Academies of Engineering and Technological Sciences (CAETS) Communication Prize recognises the world's best audiovisual communication showcasing engineering innovation and impact. TUT's video, "Sustainable Automotive Technologies: a TUT Case Study," outshone strong entries from countries including China, India, the USA, the UK, Australia and the Netherlands to claim the top spot.

The entry was officially submitted by the South African Academy of Engineering (SAAE), a national body that connects South Africa's engineering expertise to the global stage. SAAE was represented at the symposium by President TC Madikane, Vice-President Felix Reinders and SAAE Fellow Pine Pienaar, underscoring South Africa's active role in global engineering conversations.

**Showcasing African Innovation**

For Dr Christiaan Oosthuizen, Senior Lecturer in Mechatronics Engineering at TUT, this project is deeply personal.

"I was inspired to showcase African engineering excellence. We often look to Europe and other advanced countries for excellence, but Africa can do this too," he explains.

Since joining the project in 2014, Oosthuizen has integrated it into the university curriculum, turning it into a living laboratory of innovation. Funding has been a persistent challenge, but the team overcame this by designing and manufacturing about 70% of the solar car's components in-house at TUT.

Their solar vehicle has already covered over 10 000 km on South African and Namibian roads, proving both its reliability and the team's ingenuity. This approach, unlike many international teams that rely on off-the-shelf parts, has led to patents, postgraduate research opportunities, and a unique proudly South African achievement.

**Changing Student Lives**

Beyond the technology, the Solar Car Project is transforming lives. Bongani, a former student, secured a job by showcasing his contribution to the car's battery cooling system during his interview. Others, like Gift, are now lecturers or working for leading international automotive companies.

"The biggest satisfaction I get from this project is seeing student progress," says Oosthuizen.

**A Proud Win for South Africa**

Hearing that their entry had won on the international stage was a humbling moment.

"We followed the brief carefully and created a video that truly connected with people. Everything was made the good old-fashioned way, no AI, and I think that authenticity stood out," Oosthuizen reflects.

The prize includes a monetary award and travel support, but its true value lies in the recognition of South African engineering excellence and the inspiration it provides for future generations.

**Looking Ahead**

Oosthuizen hopes this success will inspire spin-off companies, growth in local innovation and give young South Africans confidence that world-class engineering is possible right here at home.

The partnership between TUT, SAAE and CAETS has shown how academic institutions and professional bodies can work together to elevate African innovation globally.

# TUT FACEBOOK PAGE

TUT Solar Car SunChaser

## Intro

TUT Solar Car Team - SunChaser 4, a cutting-edge solar car for sustainable transport.

**Page** · College & university

Staatsartillerie Road, Pretoria West, South Africa

devriesj@tut.ac.za

sc4-technology.webflow.io

tut.ac.za/faculties/engineering/sunchaser/about

## Photos

See all photos


## Posts

Filters

**TUT Solar Car SunChaser**
2h ·

We have some exciting news to share, the TUT solar car project has been honoured with an international Engineering award, read the article below to share in our excitement!... See more

ENGINEERINGNEWS.CO.ZA

**TUT Solar Car Project Wins Prestigious Global Engineering Prize**

You and 10 others 5 shares

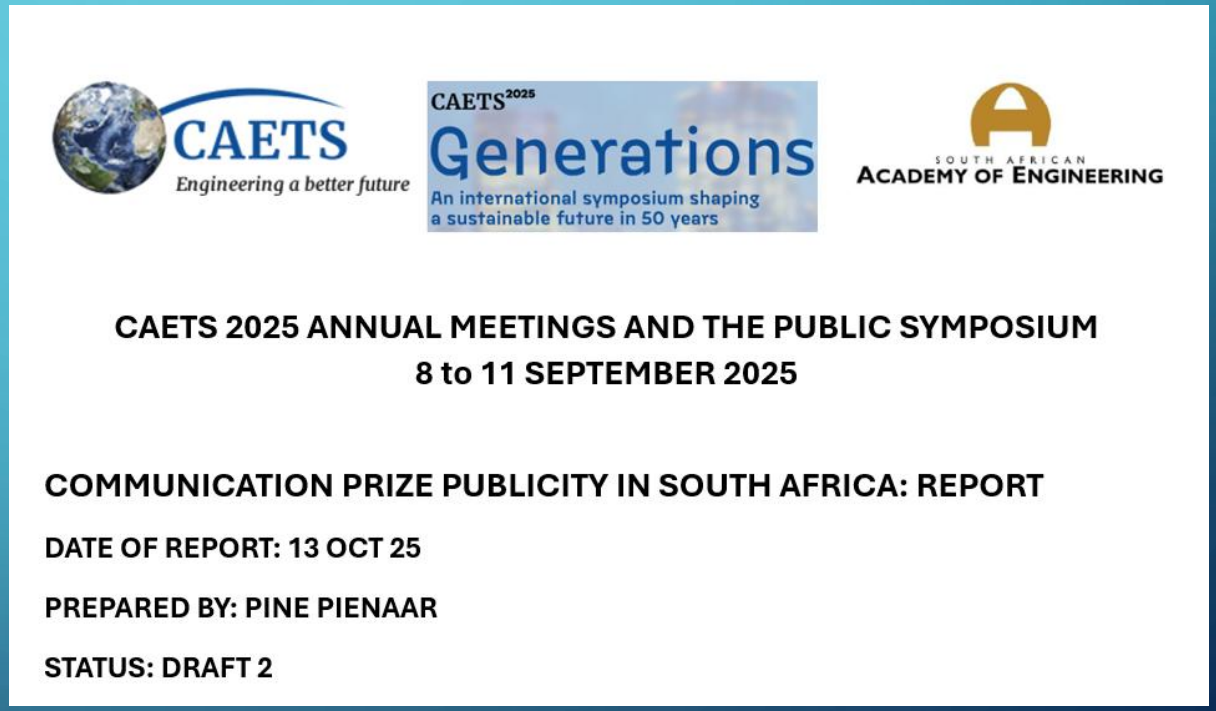
Like Comment Share

Write a comment...

**TUT Solar Car SunChaser**
July 24 ·

# FEEDBACK TO CAETS COMMUNICATIONS COMMITTEE

- This presentation
- Interim report



# OBSERVATIONS

- SAAE official, Heleen Duffy, put in significant effort to obtain publicity
- A company was appointed to assist with publicity, Fusionmedia
- Some publications required payment for articles to be placed, similar to advertising. Our focus was on the publication of news. As payment was not an option, these publications didn't place the article offered to them.
- The role of social media to market important news, like the CAETS award, needs to be investigated further. Refer to the TUT Solar Car Facebook page
- It is important to get good pictures