

CAETS Working Group: Engineering for the SDGs

Report to CAETS Council
September 2022

Headlines

- Working Group has continued to meet as a forum for cross-academy exchange on how engineers can help achieve SDGs
- Meetings have featured presentations from member academies and discussions on CAETS statements
- Working Group drafted statement published by CAETS just after COP26
- Developing proposal for a follow-up statement promoting the practical role of engineering in addressing the SDGs

About the Working Group

Overall purpose: promote and advance the pivotal role of engineering in achieving the UN SDGs

Primary goal: stimulate exchange between CAETS member academies on respective actions and initiatives that address the UN SDGs

Secondary goal: inform CAETS' voice on sustainability and the SDGs by developing external-facing outputs, such as statements, to be published by CAETS

There are **13** CAETS member academies represented on the Working Group, which is currently chaired by RAEng (UK)

2 meetings held this year: 25 May 2022 (Online), 26 September 2022 (Hybrid)

Academy	Lead contributor(s)
Acatech (Germany)	Prof. Frank Behrendt
ANI (Argentina)	Eng. Cesar Arias
ATSE (Australia)	Dr. Lachlan Blackhall; Professor Ian Lowe; Mr John McGagh
ATV (Denmark)	Mr. Martin Bech
CAE (Canada)	Mr. Robert Crawhall
CAE (China)	Prof. Kejun Jiang
EAJ (Japan)	Prof. Taikan Oki
INAE (India)	Mr. Pradeep Chaturvedi
IVA (Sweden)	Dr. Johan Kuylenstierna
NAE (US)	Dr. David Butler
NATF (France)	Ms. Claude Nahon
PAE (Pakistan)	Prof. Dr Nasim A Khan
RAEng (UK)	Mr. David Thomlinson (Chair)

CAETS statement – post-COP26

- Statement published November 2021, just after COP26, to convey CAETS' view on climate change and why the engineering systems approach is so crucial to achieving net zero goals.
- Aimed at broad audience of governments, policymakers and public authorities (as bodies that develop and deliver net zero strategies)
- Published on CAETS website; CAETS academies were also asked to share with their networks



International Council of Academies
of Engineering and Technological Sciences

CAETS sets out engineering's commitment to help governments achieve climate goals

The Glasgow Climate Pact, signed at the 26th UN Conference of Parties (COP26) by 197 countries, reaffirmed global ambitions to achieve the goals of the Paris Agreement and avert a global climate catastrophe.

The scale and pace of the transition required to meet these goals presents an immense challenge. To keep on track, the world needs to reduce annual emissions by an additional 28 gigatons (that's 28 billion metric tons) of carbon dioxide equivalent by 2030, *beyond* what has already been promised within unconditional Nationally Determined Contributions (NDCs)¹.

CAETS statement – post-COP26

Initial impacts and traction reported by some academies, including:

- INAE – strong interest from membership as a means of promoting the engineering profession's contribution
- ATSE – wide sharing among academy forums and discussion of adopting messaging into external-facing outputs on the topic of mineral extraction
- CAE (Canada) – value noted in highlighting global expertise and experiences of how to apply the systems approach, including in relation to technology deployment and planning of major infrastructure projects

Key question for the future: how can we improve the visibility and recognition of CAETS statements?

Working Group Meetings

Professor John McGagh - Australian Academy of Technology & Engineering

“Professional engineering standards for the UN SDGs

ATSE has formed a Working Party charged to examine use of the UNSDG’s Seeking to explore/understand:

- How Learned Academies are aligning with and leveraging the UNSDG’s
- Trends in emerging professional obligations as they apply to the SDG’s
- Possible use of the SDG’s to align with policy makers/wider stakeholder.

They are conducting a short survey to consider if there are trends in other countries of more professional standard adoptions of the SDGs, we would be happy to share this survey with any interested CAETS members.

Future Plans

Continue to stimulate exchange between academies through online meetings.

Consideration of a statement or similar to be released in conjunction with World Engineering Day for Sustainable Development (4 March), focusing on one or more of the groups SDG focus areas:

- SDG 9 Industry, Innovation, and Infrastructure
- SDG 11 Sustainable Cities and Communities
- SDG 13 Climate Action

Further information

See the members' area of the CAETS website for:

- Copies of presentations given by member academies
- Further resources relating to academies' own initiatives relating to the SDGs

Academies not currently represented on the Working Group are very welcome to attend future meetings!



Royal Academy
of Engineering

Thank you

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