

THE MELBOURNE DECLARATION ON ENGINEERING A SUSTAINABLE WORLD

World Engineers Convention 2019 *Engineering a Sustainable World: The Next 100 Years*

Melbourne, Australia

The sixth World Engineers Convention (WEC) 2019, held in Melbourne, Australia brought together engineers from around the world to focus on the UN Sustainable Development Goals. It also celebrated the centenary of Engineers Australia (EA) and emphasized the contribution that engineers make to societies and economies around the globe.

Considering that engineering:

- has a vital role in advancing every one of the UN Sustainable Development Goals;
- is important for the development of a sustainable future in terms of infrastructure, utilities and transport systems, cities, agriculture and public health, water supply and sanitation, energy use and resource utilization.
- bridges the gap between people, regions and countries and can develop sustainable and equitable solutions so that no one is left behind;
- draws on the best talents around the world, including women and disadvantaged groups, to foster innovative and sustainable engineering.
- needs to break down the barriers to attract and retain young people as the future workforce;
- education must consider changing social, economic and educational needs for the future workforce and respond to the needs of society of today and tomorrow;
- leadership, governance and influence is vital in the transformation of engineering, the profession and be seen by the public and policy makers as vital to sustainable development; and
- needs to support action in terms of climate change mitigation, adaptation and resilience

The delegates at WEC 2019, acknowledged the challenges ahead and priorities for action.

Delegates recognized the important role of engineering in our economy and society and the necessity to address how:

- to inspire future generations of engineers;
- education will prepare engineers with the right skills for today and tomorrow;
- to ensure a diverse and inclusive profession;
- to create infrastructure for cities and regions so that the needs of all are considered and no one is left behind;
- engineering innovation can solve the pressing challenges confronting humanity;
- to provide ethical leadership and governance in engineering; and
- to create engineering solutions that address climate change and its impacts

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Accordingly, we declare that:

1. Engineers have an important role to lead the development of solutions to advance the UN Sustainable Development Goals and will work through the World Federation of Engineering Organizations (WFEO) and its member associates and partners to advance the UN 2030 Agenda.
2. The Declaration of 4 March as a UNESCO World Engineering Day for Sustainable Development, announced at WEC2019, is a catalyst and will be a focal point for engineering action to develop appropriate solutions that consider the planet, its people and prosperity in an integrated manner.
3. The Second UNESCO Engineering Report and its recommendations, now in preparation, will be a blueprint for future action by engineers.
4. EA supports the UNESCO WFEO IEA Declaration signed at WEC 2019 that facilitates the multilateral mutual recognition of international benchmarks for engineering education and professional competencies and for capacity building in engineering, , that is vital to ensure we have engineers with the right skills to address the problems we face today and tomorrow.
5. Professional engineering institutions, such as Engineers Australia and the national and international members of the World Federation of Engineering Organizations, will continue to support their members through professional development and capacity building on the application of engineering solutions to advance the UN Sustainable Development Goals.
6. Professional institutions will continue to work to inform the community, government and policy makers on the regulatory framework that will create the enabling environments for appropriate engineering solutions for sustainable development.
7. Engineers will continue to embrace the principles of sustainable development in their work, and promote the principles of sustainable development in all current and emerging engineering disciplines, and in all area of engineering practice in industry, government and academia.

We reach out to engineers, engineering organizations, governments and international bodies to acknowledge the issues and adopt the actions outlined in this Declaration. We present the body of knowledge generated at WEC 2019 to help guide policies and partnerships to achieve a sustainable world.



The Hon. TRISH WHITE
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Chair Engineers Australia Board
President Engineers Australia



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