



Society for Paediatric Anaesthesia in  
New Zealand and Australia

# SPANZA Sustainability Position Statement

## Introduction

**The healthcare sector is a significant contributor to the climate crisis. SPANZA strongly supports urgent action on climate change by advocating for sustainable healthcare in paediatric anaesthesia. Sustainable healthcare should always have both public health and optimal clinical outcomes at its core.**

SPANZA recognises that the global climate and ecological crises are the greatest threats to human health and wellbeing today, and in particular, to the health of children.

SPANZA recognizes that the need for climate mitigation and adaptation is urgent, and that we have a narrow window of opportunity to transition to a low carbon world, and to allow regeneration of natural systems crucial for the survival of a livable planet.<sup>1, 2, 3</sup>

SPANZA acknowledges that this will require fundamental societal, economic and political change and includes a transition to a sustainable healthcare model that also optimizes planetary health.

We wish for health equity and climate justice for all children, now and in the future.

## Values

SPANZA acknowledges the importance of Aboriginal and Torres Strait Islanders in Australia and Māori as tāngata whenua of Aotearoa, New Zealand and their continuing strong cultural connection to lands, waters and communities. We recognize the multifaceted role of indigenous knowledge and practices in supporting the environment and combating climate change and its impacts.

The values and goals of SPANZA's Strategic Plan<sup>4</sup> are also key to our Sustainability Position Statement. These values include *equity*, *inclusivity* and *respect*, with an emphasis on being *child-centered*, particularly with respect to future generations.

## Statements

SPANZA is committed to improving sustainability in healthcare, through education, research, quality improvement and advocacy.

As an educational leader, SPANZA will work towards improving awareness of and inclusion of sustainability considerations in anaesthesia provision for children.

SPANZA will collaborate with other anaesthesia organisations to improve sustainability in anaesthesia care.

SPANZA supports work with industry and end users to move rapidly to a circular<sup>7</sup> and ethical economy.

Through advocacy, SPANZA strongly supports Australia's and Aotearoa New Zealand's international obligations under the Paris Agreement through rapid just transitions from fossil fuels to renewable energy sources. SPANZA would like to see Australia and Aotearoa exceed the requirements of the Climate Change Bill 2022<sup>10</sup> (Australia) and the Climate Change Response (Zero Carbon) Amendment Act 2019<sup>12</sup> (NZ) and the Carbon Neutral Government Programme<sup>11</sup> (CNGP, NZ).



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### **Ideas of how to implement these statements in practice**

SPANZA and its members can contribute to improving sustainability in healthcare in many ways, through changes in practice, education, and advocacy.

The largest contribution to SPANZA's own carbon footprint is from flights. SPANZA now runs most of its meetings online and offers high quality virtual conferencing options in parallel with face-to-face events to enable its members to reduce their flights.

The following actions are examples only.

#### **Individual anaesthetists could:**

- reduce their greenhouse gas emissions by:
  - discontinuing the use of desflurane
  - minimising the use of nitrous oxide
  - using TIVA<sup>5</sup> (Total Intravenous Anaesthesia) and regional techniques where appropriate
  - reducing fresh gas flows during volatile anaesthesia
  - considering the use of circle systems for induction of anaesthesia
- incorporate sustainability into education and training in paediatric anaesthesia
- minimize pharmaceutical waste impacts by choosing wisely, minimising waste and ensuring appropriate pharmaceutical waste streams are utilized
- consider a lower environmental impact form for work-related travel
- access CME (Continuing Medical Education) events online where appropriate to minimise work-related flights.

#### **Anaesthesia departments should:**

- advocate for procurement of reusable anaesthesia equipment
- reduce barriers to sustainable anaesthesia practices, e.g. by ensuring adequate access to TCI (target controlled infusion) pumps and encouraging a culture that normalises intravenous inductions where possible
- encourage positive change, e.g. by providing feedback on sustainability measures
- encourage education and research into sustainability in paediatric anaesthesia.

#### **Hospitals and institutions should:**

- implement a sustainability strategy
- transition to 100% renewable energy sources
- invest in creating zero emissions buildings
- enable waste minimisation – work with industry to adopt circular economy principles<sup>7</sup> and ethical procurement, with a shift from single-use devices to reusables, in conjunction with sustainable reprocessing and recycling
- reduce patient travel with the use of telemedicine if appropriate, and by maximising each visit they make to healthcare facilities
- transition hospital fleets to zero emissions vehicles
- ensure the provision of healthy and sustainably sourced plant based local food for the hospital, and food that is derived from climate resilient agricultural practices.



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### At a national and societal level, leaders must:

- advocate to reduce societal and health inequalities in Australia, New Zealand Aotearoa and beyond (e.g. Pacific Islands) and empower the vulnerable
- support and advocate for urgent dramatic reductions in national emissions contributing to global warming
- support and advocate for environmentally regenerative practices.

### Summary

As paediatric anaesthetists, we have a responsibility to care not only for the child we are anaesthetising today, but also for the health of children now and into the future, and for the health of the planet they will inherit.

*This Position Statement has been developed by the SPANZA Sustainability Document Development Group 2022. (Lee Beale, Michael Clifford, Stephanie Cruice, Paul Currant, Ben Hallett, Justin Hii, Su May Koh, Rebecca McIntyre, Ian Miles and David Stoeter.)*

### References

- <sup>1</sup> Romanello M, Mc Gushin A, Di Napoli C, et al. The 2021 report of the Lancet Countdown on health and climate change: code red for a healthy future. *Lancet* 2021; 398: 1619-62. Available at [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(21\)01787-6.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(21)01787-6.pdf)
- <sup>2</sup> World Health Organization Climate Change and Health Factsheet. Available at <https://www.who.int/news-room/factsheets/detail/climate-change-and-health>
- <sup>3</sup> IPCC (2022) IPCC Sixth Assessment Report: Impacts, Adaptation and Vulnerability. Available at <https://www.ipcc.ch/report/ar6/wg2/>
- <sup>4</sup> SPANZA Vision and Goals <https://www.spanza.org.au/about/goals-of-spanza/>
- <sup>5</sup> J Gaynor and JM Ansermino, Paediatric total intravenous anaesthesia, *BJA Education* 2016; 16(11):369-373.
- <sup>6</sup> Choosing Wisely <https://www.choosingwisely.org>
- <sup>7</sup> Ellen MacArthur Foundation <https://ellenmacarthurfoundation.org>
- <sup>8</sup> Doctors for the Environment Australia. (2020). *Net zero carbon emissions: responsibilities, pathways and opportunities for Australia's healthcare sector*. [https://dea.org.au/wp-content/uploads/2020/12/DEA-Net-Zero-report\\_v11.pdf](https://dea.org.au/wp-content/uploads/2020/12/DEA-Net-Zero-report_v11.pdf)
- <sup>9</sup> Tennison, I., Roschnik, S., Ashby, B., et al. Health care's response to climate change: a carbon footprint assessment of the NHS in England. *The Lancet Planetary Health*, 2021; 5(2), e84-e92
- <sup>10</sup> Climate Change Bill 2022 (Australia) [https://www.aph.gov.au/Parliamentary\\_Business/Bills\\_Legislation/Bills\\_Search\\_Results/Result?bld=r6885](https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/Bills_Search_Results/Result?bld=r6885)
- <sup>11</sup> Carbon Neutral Government Programme (New Zealand) <https://environment.govt.nz/what-government-is-doing/areas-of-work/climate-change/carbon-neutral-government-programme/>
- <sup>12</sup> Climate Change Response (Zero Carbon) Amendment Act 2019 (New Zealand) <https://environment.govt.nz/acts-and-regulations/acts/climate-change-response-amendment-act-2019/>