



## **Endocrine Society of Australia Sustainability Position Statement**

### ***ESA Sustainability Interest Group***

#### **Background**

Environmental degradation and climate change are amongst the biggest threats to human health and wellbeing for current and future generations. The direct and indirect impacts are already resulting in excess morbidity and mortality, and this is likely to accelerate as extreme weather events become more frequent and severe. A rapid transition to a low carbon economy is warranted, to limit the extent, and mitigate the worst impacts, of climate breakdown <sup>1</sup>.

Patients with endocrine disorders are particularly vulnerable to the effects of environmental stress, given many have an impaired ability to maintain homeostasis under normal circumstances and this is likely to worsen if environmental conditions push beyond physiological boundaries. For example, an increase in heat-related events is associated with an increased risk of hyponatraemia <sup>2</sup>, as well as morbidity and mortality in people with diabetes mellitus<sup>3</sup>. The relationship is complex and indirect factors such as impacts on healthcare delivery and resource availability, medication supply, food security and psychological factors all need to be considered <sup>4</sup>. Furthermore, it is important to recognise common drivers behind certain (especially obesity-related) metabolic disorders and environmental breakdown. Addressing these underlying factors requires deep systemic societal changes but can have important co-benefits for global health <sup>5,6</sup>.

The health care system itself has a significant environmental footprint, contributing as a sector to overall carbon emissions <sup>7,8</sup>. By reducing the health-care related carbon footprint, the sector can have meaningful impact whilst also leading by example. Reducing low value care has direct patient and financial benefits, whilst also reducing the carbon emissions associated with clinical care. Optimising the use of virtual/tele-medicine also reduces the carbon costs associated with travel. Medical waste, including the use of single-use plastics, is also particularly relevant to Endocrinology, considering the high number of patients using injectable medications such as disposable insulin pens, and other diabetes related consumables.

A healthy environment is essential for human health and survival. Health professionals have a key role in reducing the impact of environmental breakdown on both individuals and broader communities. This role is increasingly recognised by professional bodies and several organisations including the Australian Rheumatology Association <sup>9</sup>, the Australian and New Zealand Society of Nephrology <sup>10</sup>, and the Australasian College of Physicians <sup>11-13</sup>, have position statements on climate change and environmentally sustainable healthcare.

Considering the unique and intimate connection between the endocrine system and the environment, environmental factors and protection should be a key focus for Endocrinologists<sup>14</sup> and it is timely for the Endocrine Society of Australia to develop a position statement on climate change and environmental sustainability and include this in its strategic goals.

With the establishment of a Special Interest Group for Environmental Sustainability, we propose the Endocrine Society of Australia pursue the following goals:

1. To increase awareness and understanding of the impact of environmental factors on patients with endocrine disorders, and to support Endocrinologists in their management of patients in a changing environment.
2. To reduce the impact of the health system on the environment, with a focus on the field of Endocrinology.
3. To reduce the environmental footprint of our own organisation.
4. To be an active voice for the protection of environment and health through advocacy and education.

Proposed initiatives and actions to help the ESA achieve these goals:

<b>POLICIES, EDUCATION AND RESEARCH</b>	<b>Goals</b>
Develop member resources exploring the effects of environmental factors on health, with a focus on endocrine disorders	1
Create a toolkit for members to use in their workplace to help achieve environmentally sustainable clinical practice goals.	1,2
Promote topics relating to environmental sustainability in the ESA Annual Scientific Meetings and Seminars	1, 2, 4
Consider establishment of “sustainability research grants” and “microgrants” to promote research projects that explore the effects of environmental factors on patients with endocrine disorders and strategies to reduce the environmental burden of endocrine care.	1, 2
<b>ORGANISATION</b>	
Review the ESA’s own operations and meeting structure (including conferences) and enhance virtual/hybrid attendance options to reduce the transport footprint of ESA events.	3
Consider investing ESA finances into sustainable banking and investment funds.	3
<b>CLINICAL PRACTICE</b>	
Promote rational use of diagnostic tests, medicines and procedures to reduce low value care.	2
Promote physical activity interventions to improve patient health and reduce environmental impact e.g. active transport.	2
Promote plant based diets, lower in meat and ultra processed foods, which can reduce the risk of obesity and type 2 diabetes, with the added benefit of lower environmental impact.	2

Support initiatives such as telehealth to reduce patient travel and improve access and equity.	2
Utilise electronic communication to reduce printing and postage.	2
Where like-for-like choices can be made, opt for medicine delivery devices that involve less packaging and plastic waste (e.g. reusable insulin pens).	2
Promote environmentally sustainable clinical operations in our hospitals and clinics, e.g. renewable electricity (such as solar), phasing out fossil fuel appliances and transport (gas, petrol, diesel) in favour of efficient electric alternatives.	2,4
<b>ADVOCACY</b>	
Work with consumer groups to identify relevant priorities in health care and research related to a changing environment.	1, 4
Work with industry and regulators to reduce single-use plastics in medication delivery, and establish recycling pathways.	2,4
Advocate to government and other stakeholders, alongside other health bodies, to rapidly reduce greenhouse gas emissions, and support the health sector in achieving net zero carbon emissions by 2040.	4

## SIGNATORIES:

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