

## BACKGROUND

Children and young people today are growing up in a time that scientists have described as a global ‘climate emergency’ and ‘climate disaster’. Regardless of where they live, they are regularly exposed to the reality of climate change, either through their lived experience or through various media and digital channels.

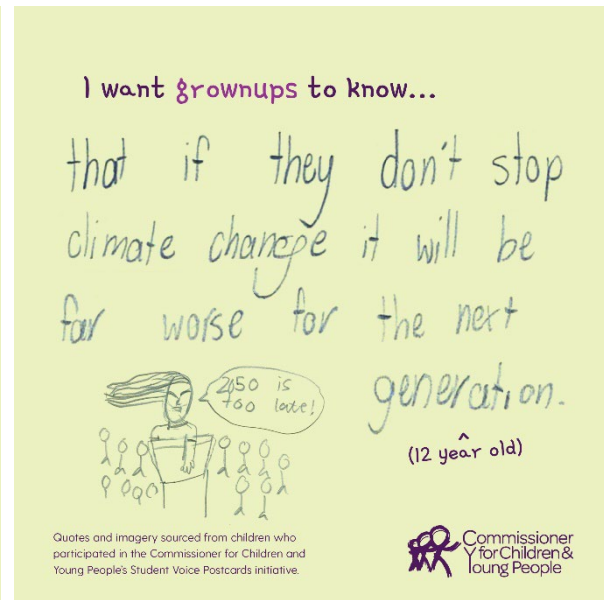
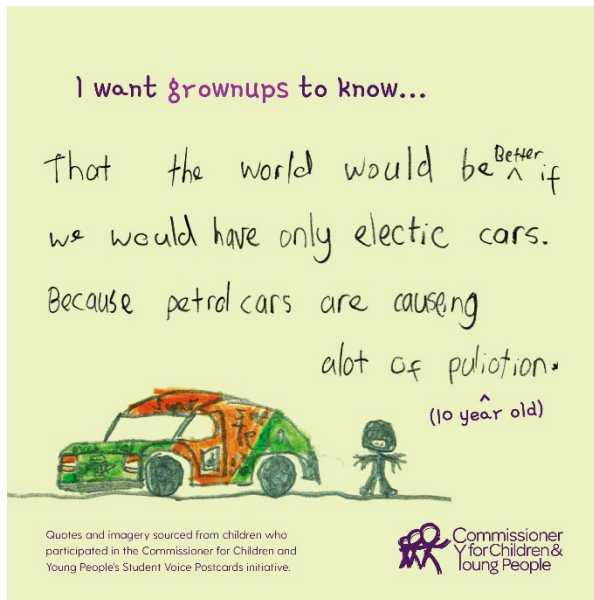
They read news stories and reports and see images and video footage of extreme weather events, air pollution, rising sea levels, and loss of biodiversity occurring in places across the globe. In South Australia, many children are living in communities directly affected by bushfires, drought, flood, heatwaves and other extreme weather events.

Children and young people have discussed issues related to climate change in the context of conversations about poverty, health, education and transport, highlighting the significant impacts it has on their daily lives, the people, places and animals they care about, and how they feel about the future.

Key to children and young people’s concern about climate change is their sense of justice. They recognise that climate change heightens social and economic inequalities and disproportionately impacts those who have the least resources to respond and cope, including people living in poverty and in regional and remote communities.

Children and young people are particularly vulnerable to climate change, despite being least responsible for contributing to it. Climate change adversely impacts a range of children’s rights and presents as both a threat to their future and as a problem that is ‘beyond their sphere of influence’.<sup>1</sup>

Young people want to 'change society's mindset' regarding climate change in ways that move away from a view 'that nothing can be done about it' or 'just ignoring the issue' towards more 'prevention' and 'action'. One young person called for 'less questioning of whether climate change exists' and more answers to 'how do we fix it'.



There is a real sense of despair and frustration among many children and young people about what they see as a lack of action being taken to mitigate the impacts of climate change and a lack of consideration for the wellbeing and interests of present and future generations.

Many children and young people also describe feeling invisible, ignored, and 'cut off' from decision-making at school, in their community and across all levels of government. There is limited information that is made by and for children about climate change-related risks, impacts and solutions, and what positive actions are already being taken at a local, state, national and global level.

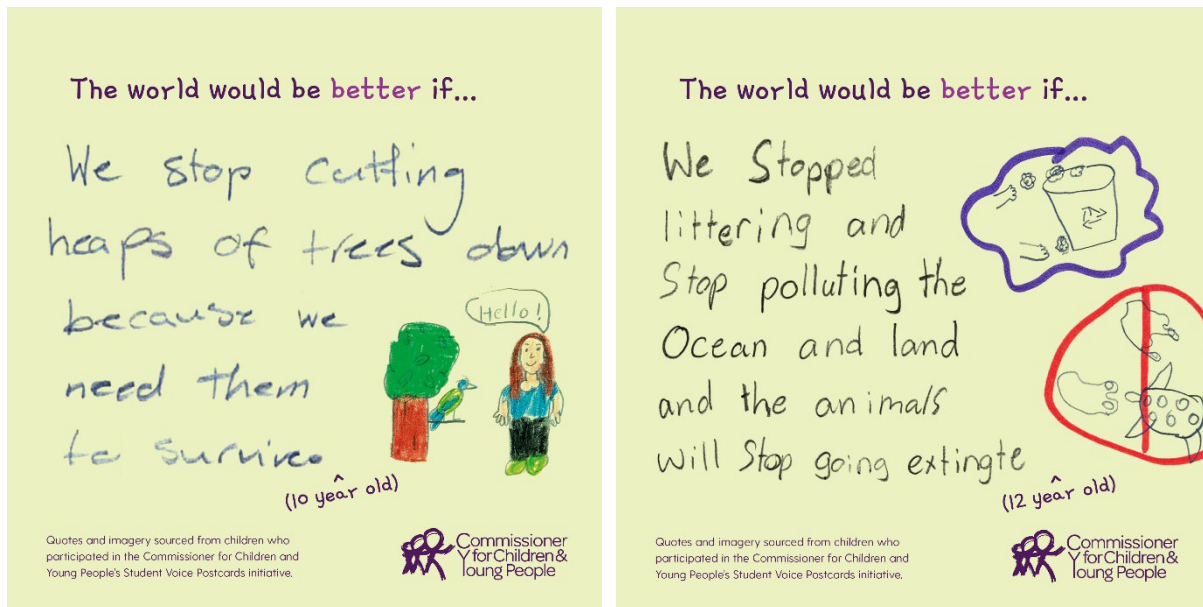
Young people highlight the need for schools, media and governments to provide more information about what is already happening to mitigate and adapt to climate change and to provide opportunities for them to contribute to these efforts.

Children and young people want to understand the systems they live in and acquire the skills they need to transition into adulthood and actively engage with the world around them. Yet there is a notable divide between young people's calls for climate action and the reality of what is happening – or rather, what is not consistently happening – in schools.

While some children and young people attend schools where they are supported to engage in enriching climate change education and climate action opportunities, other children and young people report having teachers 'who don't believe in climate change' or who are not willing or comfortable to engage in conversations about issues related to climate change. This silence has negative impacts on children and young people's

wellbeing and engagement at school, their confidence in teachers, and their hope for the future.

A lack of information and influence undermines their trust in adults, institutions and the government, and exacerbates their climate anxiety. Given that climate action is recognised as an antidote to rising climate anxiety, there needs to be avenues for children and young people to contribute to addressing climate change and its impacts.



In addition to calls for more ambitious emissions reduction targets and urgent action to move away from our dependence on fossil fuels, children and young people have also identified important opportunities for change at a school and community level, including:

- 'Consistent education' and a 'targeted curriculum' on climate change 'from a younger age';
- 'More community involvement and awareness of these issues';
- 'Make sure that schools have proper bins for waste' and 'normalise recycling in secondary schools'; and
- 'Normalise youth involvement in climate decision making'.

South Australian children and young people's emphasis on action and implementation is consistent with the stated goals of the COP27 Presidency: to 'move from pledge to implementation' and 'to accelerate, scale up, replicate success stories and deliver through the right mechanisms'.

This submission focuses on schools and the education sector as one such mechanism, highlighting the significant potential of:

- Climate change education as an opportunity to transform climate anxiety into agency;
- Carbon-neutral schools as an opportunity to meet emissions reduction commitments.

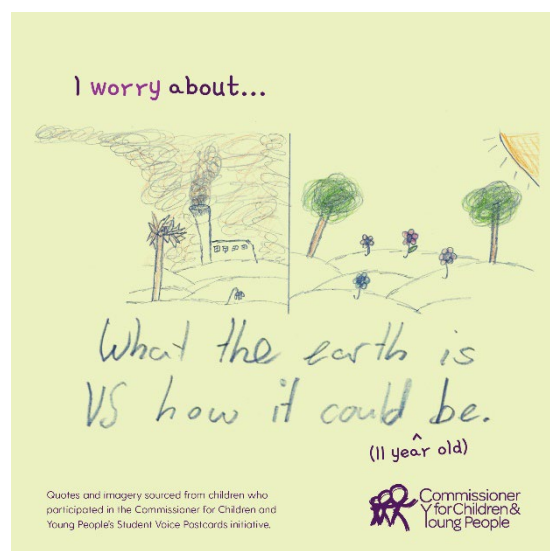
COP27 presents a significant opportunity for Australian governments to recognise and support the unique role of schools and the education sector as one of many ‘fronts’ where action and progress is needed in order to meet commitments made in the Paris Agreement.

Recognising and supporting climate action and climate change education in schools is consistent with Australia’s national and international commitments and obligations, including to:

- give effect to children’s fundamental human rights as set out in the United Nations Convention on the Rights of the Child (the UNCRC);
- promote public access to information and public participation in addressing climate change as per Article 12 of the Paris Agreement;
- to develop and implement educational programs on climate change and its effects, as per Article 6 of the United Nations Framework Convention on Climate Change (UNFCCC) and in line with the 2030 Agenda for Sustainable Development (particularly Targets 4.7, 12.8 and 13.3); and to
- Promote equity as well as excellence in educational outcomes and to prepare young people for the future as active and informed citizens as per the national goals for education set out in the Alice Springs (Mparntwe) Education Declaration.<sup>ii</sup>

A recent parliamentary inquiry in Western Australia emphasises that the significant ‘social and physical footprint’ of schools means they are in a unique position to effect change. This aligns with evidence suggesting that the most effective climate action and climate change education is locally relevant and tied to issues, challenges, action and ownership at the community level.<sup>iii</sup>

The benefits of scaling up good practice that already exists in schools across Australia and the world are significant and encompass positive learning and wellbeing outcomes alongside wider cost-savings and community health outcomes.



As the impacts of climate change become more frequent and intense, it is our responsibility to ensure all children and young people across all schools, all year levels and all subjects are supported to have a genuine stake in climate action.

To fail to do so would be a missed opportunity to support current and future generations of citizens to build the knowledge, skills, attitudes, and behaviours needed to meet our mitigation and adaptation targets.

I have attached some specific insights regarding the benefits of climate change education and carbon-neutral schools in the hope that these considerations can inform your preparation for COP27 and broader policy commitments and development beyond COP27.

## **Climate change education**

Global commitments have recognised the power of education in climate resilience and climate change mitigation and adaptation since the early 1990s. Despite this, the education sector remains ‘under-exploited’ as a strategic resource in climate change mitigation and adaptation.

A number of positive climate change education resources, programs and partnerships have been developed and implemented across South Australia. However, without a substantive climate change education curriculum or consistent policy frameworks at a state or national level, individual schools and teachers are currently ‘left to their own devices’.

There are no references to education in Australia’s Nationally Determined Contribution under the Paris Agreement, and the Mparntwe Declaration is also silent on climate change. Although sustainability is embedded as a cross-curriculum priority in the Australian Curriculum, it is ‘fragmented, poorly understood and often overlooked as a curriculum concept’.<sup>iv</sup>

In the context of this ‘piecemeal approach’, climate change education is often vested in the goodwill of individual ‘champions’ and there are inconsistent opportunities across year levels and subjects, particularly between primary school years and secondary school years.

Research has emphasised the benefits of climate change education for individuals, schools and communities. Quality climate education builds children and young people’s understanding of the scientific, social, economic and cultural dimensions of climate change, strengthens connections with peers, industry and the community, and develops a range of skills and knowledge that are critical to active citizenship and to tackling the problems that climate change presents.<sup>v</sup>

Climate change education initiatives tend to be inquiry-based and action-oriented, involve strong student participation and provide practical, ‘hands-on’ and project-based learning opportunities. Education helps children and young people develop a personal connection to climate solutions as well as a sense of personal agency and empowerment as children and young people see, report, publish and celebrate results and progress.

Education that increases climate literacy is a powerful way to acknowledge and reduce student concerns related to climate change. When students see the ‘real world’ relevance in what they are learning, they are more likely to be engaged.

Beyond short-term learning, engagement and wellbeing outcomes, evidence also highlights the power of education in improving physical and mental health outcomes and in engendering longer-term changes in attitudes, behaviour and decision-making that have the potential to reduce overall lifetime carbon footprint. A recent study suggests that there could be a 19 gigaton reduction of carbon emissions by 2050 if only 16 per cent of secondary school students in high- and middle-income countries received climate change education.<sup>vi</sup>

A global survey of teachers conducted by UNESCO found that while 95% of teachers consider climate change an important topic to teach, fewer than 40% actually feel confident enough to do so.<sup>vii</sup> In order to match strong public support for climate change education, there is a need for clear education policy, guidelines and materials that address climate change, alongside professional development and curriculum materials for teachers to have confidence and knowledge regarding the ‘what’ and ‘how’ of climate-responsive teaching.

### **Carbon-neutral schools**

As in other states, school buildings and the environments that South Australian children and young people are educated in are often environmentally inefficient and largely if not fully reliant on fossil fuels. The school system is Australia’s fifth largest emitter of CO<sub>2</sub> in terms of energy alone.<sup>viii</sup>

Despite evidence that schools can provide some of the most cost-effective opportunities for carbon reduction, there has been limited ambition and mixed approaches from various levels of government to support carbon reduction in schools.<sup>ix</sup>

A relatively small but growing number of schools across Australia have achieved carbon neutral accreditation. Many more have identified ways to substantially reduce their contribution to climate change, including through:

- Taking a whole school and community approach to waste management that enables recycling and composting;
- Considering energy efficiency and sustainability in all major works on school buildings, infrastructure and facilities;
- Encouraging staff and students to bus, train, walk or cycle to school and supporting ‘active’ or ‘fuel-efficient’ transport choices;
- Implementing tree-planting programs to address local heat issues and supporting low carbon food production on and off site; and
- Implementing programs that measure, monitor, compare and reduce their carbon footprint.

Many of these initiatives complement and enhance student-led practical learning opportunities insofar as they involve audits and projects geared towards reducing resource consumption and identifying savings.

The key features of carbon-neutral schools align with the key features of children and young people’s vision for positive communities in the future, including ‘greener’ buildings and spaces, less waste and food waste, and more rain tanks, solar panels and ‘active’ transport options.



Beyond benefits in terms of emissions reduction, climate action in schools has ‘real potential’ in terms of ‘major cost savings on school utility bills’ and an equally important positive influence in terms of supporting people to think and live sustainably.<sup>x</sup>

Climate resilient schools can also provide critical shelter and safety during heatwaves, floods and other extreme weather events. This is particularly important in light of estimates suggesting that children born in 2020 will experience 2-7 times as many extreme weather events over their lifetime compared to people born in 1960.<sup>xi</sup>



- <sup>i</sup> Western Australia Legislative Assembly, 2022. Education and Health Standing Committee Report 2: Making Hope Practical: Report of the inquiry into the response of Western Australian schools to climate change. Available at [https://www.parliament.wa.gov.au/Parliament/commit.nsf/\(Report+Lookup+by+Com+ID\)/09588581425D4AB448258869000DC80A/\\$file/220617%20-%20SCC%20-%20Finalised%20Version.pdf](https://www.parliament.wa.gov.au/Parliament/commit.nsf/(Report+Lookup+by+Com+ID)/09588581425D4AB448258869000DC80A/$file/220617%20-%20SCC%20-%20Finalised%20Version.pdf).
- <sup>ii</sup> The Alice Springs (Mparntwe) Declaration. Available at <https://www.education.gov.au/download/4816/alice-springs-mparntwe-education-declaration/7180/alice-springs-mparntwe-education-declaration/pdf/en>.
- <sup>iii</sup> Martha Monroe et al. 2019. 'Identifying effective climate change education strategies: a systematic review of the research'. *Environmental Education Research*, 5(6), pp. 791-812. Available at <https://www.tandfonline.com/doi/abs/10.1080/13504622.2017.1360842>.
- <sup>iv</sup> Western Australia Legislative Assembly, 2022. Education and Health Standing Committee Report 2: Making Hope Practical. p. 28.
- <sup>v</sup> Kwauk, Christina and Rebecca Winthrop, 2021. Brookings Institute. Unleashing the creativity of teachers and students to combat climate change: An opportunity for global leadership. Available at <https://www.brookings.edu/research/unleashing-the-creativity-of-teachers-and-students-to-combat-climate-change-an-opportunity-for-global-leadership/>.
- <sup>vi</sup> Cordero, et al. 2020. 'The role of climate change education on individual lifetime carbon emissions'. *PLOS*, Available at <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0206266>.
- <sup>vii</sup> UNESCO, 2021. Teachers have their say: Motivation, skills and opportunities to teach education for sustainable development and global citizenship. Available at <https://unesdoc.unesco.org/ark:/48223/pf0000379914>.
- <sup>viii</sup> Zeropositive.org. Available at <https://www.zeropositive.org/>.
- <sup>ix</sup> Clean State, 'Bright Sparks' Solar Powered Schools Program. Available at <https://www.cleanstate.org.au/>.
- <sup>x</sup> Western Australia Legislative Assembly, 2022. Education and Health Standing Committee Report 2: Making Hope Practical. p. 13.
- <sup>xi</sup> Thiery et al. 2021. Intergenerational Inequities in exposure to climate extremes. *Science* 374(6564), Available at <https://www.science.org/doi/10.1126/science.abi7339>.