

Position paper #1 Version 3, August 2022

What do we mean by 'climate security?

Vision

Our vision statement says we aspire to 'create climate security by 2030'.

This information paper clarifies what we mean by 'climate security and provides some criteria by which to judge our progress.

What is 'climate security?

The 'climate security' we aspire to is one where we can rely on a sufficiently stable (scientifically based) and safe (socially acceptable) climate that is not under pressure of human activities (in addition to natural forces) in ways that create unacceptably high risks of dangerous impacts and extreme events.

The scientific basis for climate stability is related to the flow of incoming solar energy to the Earth compared with the flow of heat from the Earth to space. When these two are balanced (known as radiative equilibrium, or 'planetary energy balance'), the climate remains stable. If the amount of incoming or outgoing energy becomes unequal, global temperatures will rise or fall and the climate becomes unstable.¹

Since the beginning of the Industrial Revolution in the 18th century, which introduced large-scale burning of coal, oil and gas by the Western world, huge amounts of carbon dioxide and other greenhouse gases have been pumped into the atmosphere, trapping heat and causing temperatures to rise (radiative imbalance). The climate scientists warn that as the temperatures rise, self-reinforcing feedbacks could push the Earth towards a threshold ('tipping point'²) that, if crossed, would cause continued warming that could not be stopped, reversed or managed, and therefore make the Earth uninhabitable for humans.

¹ Based on article entitled 'Climate and earth's energy budget' by Rebecca Lindsey, January 14, 2009. https://earthobservatory.nasa.gov/features/EnergyBalance

² Such tipping points are not necessarily clearly defined by science yet; however, observations keep hitting or exceeding the higher end of projections that are generally already conservative. This means that we are in danger of hitting these tipping points without much warning. So good risk management dictates that we take action swiftly.

So when we talk about 'climate security' we mean ensuring that carbon emissions are on a sufficiently steep downward trajectory that the world's climate scientists agree we will avoid crossing a threshold from which there is no coming back to safety.³

We have nominated the date of 2030 to achieve this 'climate security' because the latest predictions of the world's climate scientists through the International Panel on Climate Change (IPCC) strongly recommend that human emissions of carbon dioxide must be reduced to zero within the next decade in order for longer-term stability to be achievable (see below for further explanation).

Simply stated, by 2030 we want some certainty that the necessary steps are being taken, in line with scientific advice, to manage short-term climate risks and move towards long-term stability. With this certainty our children will be able to plan their future with hope and optimism instead of fear and uncertainty.

The Women's Climate Congress position

We are grateful for the material comforts brought by over 250 years of booming manufacturing times. As beneficiaries of the industrial age, we acknowledge our responsibility for the present climatic situation. However, we now feel trapped in a political system that does not seem able to make the necessary change and we lament that the world is in such a perilous situation.

Through listening deeply to the science, including the knowledge of First Peoples, we recognise the interconnections of Earth systems and human influences within those systems. With this in mind, we bring our collective imagination to uncover innovative, equitable and sustainable ways forward.

We are weary of the political conflict and polarisation around the issue of climate change and urge all to adopt a collaborative approach, without judgement or blame, to find a safe passage from climate chaos to climate survival.

We believe that women must come to the fore at this time to balance current paradigms of growth at all cost, and to replace the adversarial processes for deliberating policy with a more collaborative approach deeply imbued with care for each other, protection of our children and custodianship of all life on Earth.

The COVID-19 pandemic has taught us that no one is safe until everyone is safe. Climate change will impact everyone from the most well off to the most vulnerable. Action on climate change will also have widespread effects – from direct effects on jobs in mining communities through to retirees and superannuation investments. We need collaborative approaches to ensure an equitable and just transition.

We note that there are precedents where collaboration and scientifically informed policies and strategies have allowed us to manage global environmental crises; for example, the reversal of ozone depletion due to chlorofluorocarbons (CFCs).⁴

Watch out for our paper 'Why is women's leadership important (and why we think it is important for women to work together)?'5

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³ Will Steffen, Johan Rockström, Katherine Richardson, et al (2018), Trajectories of the Earth System in the Anthropocene, *PNAS* 115 (33): 8252–59.

⁴ Andrew Klekociuk and Paul Krummel (2017). After 30 years of the Montreal Protocol, the ozone layer is gradually healing, *The Conversation*, Australian edn. https://theconversation.com/after-30-years-of-the-montreal-protocol-the-ozone-layer-is-gradually-healing-84051

⁵ Coming soon

What are the targets that need to be met?

Simply put, the notion of 'climate security' will be restored when:

the world is on track to limiting global warming to 1.5°C

The Paris Accord was based on advice available in 2015 that to maintain a safe climate and avoid unpredictable tipping points leading to catastrophic climate outcomes, global warming must be limited to 1.5°C. Australia's initial target under the accord was for 26-28% reduction below 2005 levels by 2030 (including land use, land-use change, and forestry).

carbon emissions are on a trajectory to be reduced to net zero in line with IPCC advice

The 2018 IPCC Special Report cautioned that to limit global warming to 1.5°C, faster reductions were needed by 2030 and net zero emissions⁶ must be reached by around 2050.^{7,8} However, the IPCC 6th Assessment Report (released in August 2021⁹) reports that global surface temperature will likely continue to increase until at least mid-century under all emissions scenarios considered. Hence, global warming of 1.5°C and even 2°C is likely to be exceeded during the 21st century unless there are deep reductions in carbon dioxide and other greenhouse gas emissions within the coming decades.

we are staying within the 'carbon budget'

Scientists have assessed that to meet the carbon emissions and global warming targets mentioned above, we must stay within a finite 'carbon budget' (ie the amount of carbon that can be released to the atmosphere to stay within a safe limit). This means that it is not the date when zero emissions is achieved that is important (eg 2030, 2050), but the cumulated tonnes of carbon saved from going into the atmosphere as we move towards that date. ¹⁰ Because we have already kept 'spending' the budget at high rates (ie emitting high levels of carbon) – we must now reach zero much sooner than was considered necessary in 2015. ¹¹ Hence, many Australian scientists recommend further steep reductions this decade. ¹² All countries, including Australia, have been invited to present increased ambitions above the targets agreed in Paris, to meet this greater urgency.

What needs to change?

To achieve 'climate security' governments need to work collaboratively with climate scientists and the business community to address risks and make appropriate technological and economic changes to ensure we stay within safe limits for carbon emissions and global warming. There is simply no

⁶ 'Net zero emissions' refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere. Getting to net zero means we can still produce some emissions, as long as they are offset by processes that reduce greenhouse gases already in the atmosphere. For example, these could be things like planting new forests, or drawdown technologies like direct air capture. See https://www.climatecouncil.org.au/resources/what-does-net-zero-emissions-mean/

⁷ IPCC Special Report: Global warming of 1.5°C, 2018. https://www.ipcc.ch/sr15

⁸ Australian Meteorological and Oceanographic Society Council endorsed policy statement on the IPCC Special Report on Global Warming of 1.5°C.

 $[\]underline{https://drive.google.com/file/d/1ruMs2I48recT8oWq5EtS6k0uXOcEV6W9/view}$

⁹ IPCC 6thAssement Report (AR6). https://www.ipcc.ch/assessment-report/ar6/

¹⁰ As with a household budget, if we keep spending the budget at high levels in the first few years, we will have to starve for the remaining years (ie we will reach zero much sooner). If we eek out our budget gradually we will reach zero later.

¹¹ For example, see the article 'Our carbon budget is all but spent but who is counting' by Penny Sackett, May 2019: https://www.anu.edu.au/news/all-news/our-carbon-budget-is-all-but-spent-but-who-is-counting

¹² Climate Council (2021). Aim high, go fast: why emissions need to plummet this decade.

https://www.climatecouncil.org.au/wp-content/uploads/2021/04/aim-high-go-fast-why-emissions-must-plummet-climate-council-report.pdf

room for polarising debate to continue to slow things down – anymore than there was for action on COVID19. We must set aside party political posturing and work out a national (indeed global) plan supported by science. The scientific community, in turn, should espouse the values of integrity, transparency, collaboration, kindness and open source so that everyone can access scientific information and evidence.

To achieve and maintain a safe climate for ourselves and future generations, all of us — individuals, communities, business, media and government — need to take on responsibility for bringing back this balance through practical, economic and social behaviours. This must include deep listening to First Nations peoples whose knowledge and connection to the land, marginalised since colonisation, can teach us so much about what it means to be custodians of the Earth for future generations.

Furthermore, Earth System science has identified social equity as a factor influencing the Earth System alongside other biophysical factors. ¹³ This means that when we continue to ignore gross inequities among peoples – whether in our own country or globally — then we are 'baking in' ongoing environmental damage. Working together we can adopt new cultural practices that nurture human health and safety, and care for the Earth; and also ensure financial security, dignity, equity and justice for all peoples.

This means that we must transition away from the energy production and consumption patterns that have served us well for generations. But our current economic paradigm reinforces these patterns and does not value environmental processes (or a range of other social services), so we need to find new economic models that favour the required transition. This does not rule out political differences or robust discourse but we must put concern for the safety of future generations and for all of life on Earth at the forefront of policy making.

There needs to be trust in the scientific process and respect for the advice of scientists. This does not rule out being alert to new information and interpretation but unless robust new evidence emerges, the best current assessment should guide our behaviour, business models and policies.

We must rapidly transition away from fossil fuels

The relationship between human greenhouse gas emissions, stabilisation of atmospheric greenhouse gas concentrations, stabilisation of the global average surface temperature and what we might consider 'climate safety' are complex and are beyond the scope of this paper to describe in detail. This scientific complexity makes interrogation of the science in relation to decision-making processes about applications to develop new fossil fuel projects, for example, very difficult as science and law have different approaches to certainty.

However, taking into account the carbon budget, the advice of the international climate science community is consistent: To achieve a safe climate for the survival of human and other life on Earth, fossil fuels must stay in the ground (ie there should be no new fossil fuel developments) and we must phase out the use of supplies from existing sources as fast as possible. There needs to be a clear policy pathway to achieve net zero emissions of carbon dioxide from human sources as quickly as possible. This alone will not lead to immediate stabilisation of global temperatures, which will continue to rise for some further decades as the carbon cycling between atmosphere, land and oceans is reestablished at the new levels. Hence, the urgency to reach net zero to allow this stabilisation process to play out safely.

Because of the slow global response to date, we now have less time to make the necessary changes and so we cannot continue a slow transition that allows further extraction of fossil fuels. Every tonne of fossil fuel extracted and burnt anywhere in the world contributes to the finite carbon budget and

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¹³ Will Steffen, Katherine Richardson, Johan Rockström, et al (2020), The emergence and evolution of Earth System Science, *Nature Reviews Earth & Environment* 1: 54–63.

even if we confine ourselves to current sources, we are already on a trajectory to overspend that budget.

In relation to energy production in Australia, this means creating a policy environment to transition as fast as possible to renewable energy. It also means showing our gratitude for workers made redundant by the ongoing closure of fossil fuel industries, and providing them with generous income support, retraining and community reorientation while they transition to new jobs and lifestyles.

We must also reduce other sources of emissions

Energy consumption is only one part of the carbon emissions picture. Transport, agriculture and manufacturing are also all contributors. Changes are needed in each of these sectors to reduce overall carbon emissions to zero and achieve climate security.

In all these areas, new approaches are needed to realign economic models with the true value of environmental and human services and to promote a fair distribution of resources among citizens.

Watch out for our paper on 'What do we mean by an equitable and sustainable way forward?' 14

Who needs to make the change?

Political/government level

Electors want honesty and transparency in all spheres of government activity and especially in policies and practices that affect their future and that of their children. It is governments' responsibility to create and foster an economic and social environment in which people, business and industry can work together to maintain a safe and stable society.

All governments (federal, state and local) must emphatically affirm the urgency to restore climate security by 2030, and ongoing climate stability. This means listening to and acting on scientific advice, as has been the case for COVID-19, and assessing policies through the lens of 'is it good for the health and wellbeing of humans and our Earth?'

Rather than being ideological in a party political way, these issues reflect human principles that we all share such as care for our children and for the places we know and love. Collaborative action is needed given the current predictions of science in relation to climate change.

Watch out for our paper on 'What do we mean by nonpartisan collaboration?' 15

Business and industry level

In recent times, the corporate world has ramped up environmental and social responsibility in its business models. Further work is needed, particularly to reduce unnecessary consumerism and waste. Media can also play an important role in influencing social opinion and behaviour.

Heavy industry has started to work towards a cleaner environment and can continue to improve technology and practices without waiting for government to compel it to do so. Working collaboratively with climate scientists to categorise risks and make appropriate technological and economic changes will ensure we stay within safe limits.

As with fossil fuel industries described above, careful and timely exit planning is needed, including retraining of workers and mitigation of negative economic impact on communities.

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¹⁴ Coming soon

¹⁵ Coming soon

In agriculture, intensive animal rearing practices and cropping have seriously compromised animal welfare and contributed to increased carbon emissions, biodiversity loss and environmental decay. The past decade has seen the uptake of new farming practices. Regenerative agriculture is a holistic approach to land management that keeps water in the landscape, improves soil health stores carbon and increases biodiversity. This ecosystems approach can renew landscapes while increasing productivity. Support for such approaches will be needed to maintain food production while reducing carbon emissions and restoring and regenerating the landscape.

Similar approaches will be needed for forestry, fisheries and other industries that rely on the finite living resources of the Earth.

It is imperative that these changes are made with the primary goal of improving human and planetary wellbeing and not as lip-service to ongoing 'business-as usual' models.

Community and individual level

In line with the principles of sustainable development and the UN Sustainable Development Goals, ¹⁷ communities and individuals must all play a part to embrace renewable energy sources, reduce wasteful consumption (eg clothing, plastic, fuel, energy, food, water etc) so that less fortunate societies can survive and thrive.

Communities all around the country are already creating their own zero waste, sustainable futures through local activities to reduce emissions and other waste, generate renewable power locally and many other projects. A representative government would foster and support these activities.

What is the Women's Climate Congress doing?

The Congress is inclusive of women (cis and trans) and gender diverse people who feel drawn to our vision —from all political parties, ages and social and cultural backgrounds. We are engaging with all political parties and representatives, looking for common ground, identifying roadblocks and seeking deeper conversations about the issues and potential solutions. We are seeking out and developing relationships with First Nations women.

As women leaders in our communities, we assert our right to protect future generations. We firmly and respectfully reinforce the science in discussions with decision makers and we will focus on what must happen: 'Will this action reduce emissions?' 'How will this approach ensure a safe future for the children with no more than 1.5°C warming?' 'How will this approach allow equitable adaptation to the climate change that is already locked in?'

We have proposed an approach for a mediated whole-of-community stakeholder engagement to overcome current polarisation and create a united national plan for action on climate change. We continue to seek support for this approach, including through cultural and systemic change in our political structures and processes to allow gender-inclusive decision making.

We are encouraging women leaders of all political parties to support each other to be fully included in decision-making at all levels. We have proposed that this could be achieved through multiparty

¹⁶ See for example http://www.landcarewa.org.au/resources/hot-topics/regenerative-agriculture/

¹⁷ The *17 Goals*, UN Department of Economic and Social Affairs, Sustainable Development: https://sdgs.un.org/goals

¹⁸ Building a unified national agreement for Australia's climate response: proposal for an inclusive process to address climate risks, Women's Climate Congress position paper, November 2020. https://womenscongress.weebly.com/uploads/3/0/2/0/30206683/wcc mediation proposal-01 23nov2020 .pdf

parliamentary women's groups at all levels of government similar to the Women's Caucuses in the US Congress and other OECD countries. 19

We will reinforce and affirm government actions that move the political culture towards more collaboration, respect for the science and actions to unify the nation to restore climate security. We support the Parliamentary Friends of Climate Action group and encourage parliamentarians of all parties to join and participate. We have also initiated a series of 'Neighbourly Conversations' to bring MPs and/or senators representing nearby electorates together with constituents in respectful conversations designed to build on shared values to find common ground. ²¹

Nationally and locally, we encourage our members to convene bold conversations that deepen our bonds as women and build relationships with those not currently engaged with climate change, focusing on common issues – care for families, children, community.

We are giving voice to these principles, and proposed actions through a WCC 'Women's Charter for Change', which identifies short-term actions to urgently create climate security, and longer-term, more holistic actions to create ongoing human and planetary wellbeing. These themes and the actions we propose will form the basis of our ongoing movement-building and advocacy work.²²

Finally, these principles and ideas have been central to our National Congress of Women initiative with the theme 'How can women rising transform our response to climate action?' This initiative has comprised two 1-day online events ('Women Rising' on 30 November 2021; 'Weaving' on 28 April 2022), and culminates with 'Renewal' — a 2-day hybrid conference in Canberra and online on 11-12 September 2022 (and online).²³

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The opinions expressed here reflect those of the Women's Climate Congress.

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https://www.aph.gov.au/About_Parliament/Parliamentary_Friendship

¹⁹ Women's Caucus: https://www.wcpinst.org/our-work/the-womens-caucus/

²⁰ Parliamentary Friends of Climate Action:

²¹ https://www.womensclimatecongress.com/advocacy.html#neighbourly-conversations

²² https://www.womensclimatecongress.com/wcc-charter-for-change.html

²³ http://womenscongress.weebly.com/national-congress-of-women-2021.html