

Existential Choices: Climate Change and You!

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Introduction

Every day we make choices. These choices determine our future. We are at a pivotal point in history where our choices will determine the landscape and quality of life for the current generations and those that follow. As an Air Force and wider Defence Force, we have a chance to steer Australian and global potential for climate change resilience and innovation. This is supported by the 2020 Defence Strategic Update which states: "Threats to human security, such as the Coronavirus pandemic and natural disasters, mean disaster response and resilience measures demand a higher priority in Defence planning." These future potentials must consider a secure, sustainable and healthy future for the planet, humanity and Australian National Security based on the innovation and actions that the Defence takes now. This requires effort, change, work and output. This requires constructively challenging the status quo. This requires your input now.

The Problem

One of the biggest threats to humanity is climate change. The natural disasters that Australia has witnessed have demonstrated not only how this threat is already affecting Australia and its population, but also the significant impact this will have on the Australian Defence Force. The purpose of Defence is 'to defend Australia and its national interests in order to advance Australia's security and prosperity.' This mantra is written on the wallpaper of every Defence computer. Defence has evolved to respond to the increasing threats and ramifications of climate disasters from Operation Bushfire Assist to Operations Flood, Ambulance and Aged Care Assist. We must rapidly implement practices throughout the organisation to work towards alleviating environmental impacts of our work and ensuring our energy security successfully meets capability needs. This is a necessary and critical evolution in how we operate by integrating humanity and environment into a healthy symbiotic relationship. I would like to propose some solutions to better Defence for our own energy security and environmental impact. My intent is for every leader at every level throughout Defence to continue this discussion and for our Senior

Leadership Teams to take decisive action and implement these solutions for a secure trajectory into the future.

Speaking with Defence members and Air Force Commanding Officers about energy and water security and improved environmental practices, the overwhelming consensus was that the Defence has capability and environmental issues that must be addressed. Few were aware that there is an environmental policy signed in 2016 which states “Defence will be a leader in sustainable environmental management to support the ADF capability to defend Australia and its national interests” (Environmental Management Defence Environmental Policy, Strategy and Plan, 2016). It has five strategic aims and four delivery achievement markers: compliance, efficiency, trust and accountability. Middle management is unaware that this policy exists, so when decisions are made, this policy is not considered and we’re missing opportunities to incorporate environmental management into our battle routines. This differs from the role of Air Force Environmental Health Managers (EHM) that are personnel centric, not environment. As Defence Force Recruiting states EHM job is to “protect the health and wellbeing of personnel on base and on deployments in this rewarding role; managing health threats to prevent injuries or illnesses to Air Force personnel” (Environmental Health Manager, 2022).

The Facts

My high school science teacher gave an analogy that if the Earth’s lifespan to date was 24 hours, humans have existed for 7 seconds. That is unbelievably remarkable for the rate of evolution, innovation and intellectual advancements. On the contrary, it is frightening how quickly we have damaged this planet and drained its resources. Even more startling is that the average Australian lifestyle requires more than 4.5 planet Earths to sustain our habits (How many Earths? How many countries? - Earth Overshoot Day, 2022).

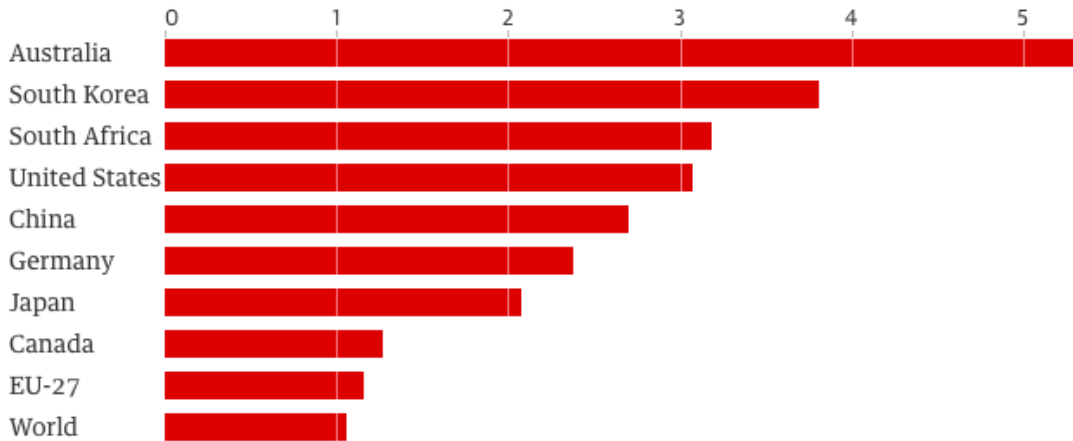
Eight years from now, we will turn into the new decade, the 2030s. I will be 32, my sister will be 30 and the 2020 babies will be turning 10. According to Sir David Attenborough and his scientific advisors, the 2030s are forecasted as follows: the Amazon Rainforest will be significantly reduced triggering localised extinctions and loss of biodiversity, including the trees and wilderness that heavily capture carbon; and the Arctic Ocean is expected to have its first completely ice-free summer.

Consequently, this accelerates the warming of our planet, including the loss of ocean life due to the absence of algae that grows on the underside of the ice, which plays a critically intricate role for the entire marine food chain (Attenborough and Hughes, 2020). Our coral reefs harbour 30% of the ocean’s biodiversity and we are fortunate to have one at our doorstep. If we do not act now, irreversible damage will occur to the Great Barrier Reef by 2030 (Reef Recovery 2030, 2022) and we will permanently lose 30% of our marine biodiversity.

Globally, Australia is one of the largest contributors to negative climate impact. In 2021, the United Nations generated a report on positive climate action of its 193 member states and Australia was ranked last (Mazengarb, 2021). “Australians discard close to 800,000 tonnes of clothing and textiles each year, a rate of 15 tonnes every 10 minutes” (Kollmorgen, 2021). Food waste creates methane and is more damaging than emissions produced from flying.

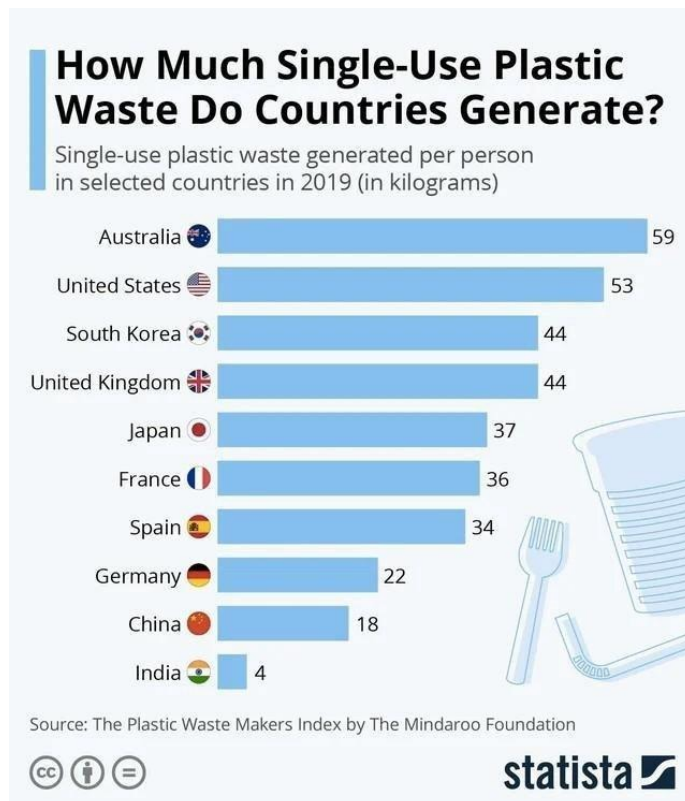
Coal power emissions per capita, G20 nations above world average

Annual average 2015-2020 in tonnes of CO2



Guardian graphic | Source: Ember

One third of all food produced, 7.6 million tonnes, 70% is edible, goes straight to landfill (Food Waste and Hunger Facts | OzHarvest, 2022). The graph demonstrates how per capita, Australians have a significant impact for emitting coal-powered emissions (Morton, 2021). Lastly, Australian habits of consuming single-use plastic outperforms all other countries.



Disadvantages

The primary duty of Defence is not to look after the environment. Incorporating energy security and environmental initiatives into the operating psyche will have pushback, challenges and may not have a clean-cut solution. For example, implementing new environmental technologies may have a more expensive overhead with uncertain reliability. This could potentially create vulnerabilities and oversights that have not been considered before by introducing new ways of thinking, with new technologies and infrastructure.

Advantages

This is our chance to enact upon our policies and intent to inject climate cultural change in the way we operate. A survey was conducted in 2021, from a pool of 15, 000 voting Australians from all political perspectives and the results showed that 67% of Australian voters want the government to do more to lessen the impacts of climate change (O'Malley and Perkins, 2021). This will also enable a recruiting hook (potentially even more effective than the release of Top Gun) as the incoming generation's value environmental considerations. This could potentially leverage the rate of evolution and advancement in technology for Defence that is needed to adapt to a rapidly changing world.

Ideas for Improvement

In New Zealand, Prime Minister Jacinda Adern removed the GDP as a marker of success for her country. In its place, she implemented Profit, People and Planet (Attenborough, S. and Hughes, J., 2020). I propose that a success marker for Defence is that it considers Protecting People and Planet when making decisions and writing policy. This aligns with our core business of protecting national interests which encompasses environmental impacts.

Climate considerations are the new 'normal' for my generation, an example of shifting baseline syndrome. Shifting baseline syndrome is the change in standards between each generation and what we come to accept as 'normal.' The generations that came before mine (Gen Z) did not have to consider climate because it wasn't a threat to their survival. An example of shifting baseline syndrome is how we have adapted to living with COVID-19. Once, we lived in a world without the virus and since its introduction, we have adapted to this new normal in how we live, work and travel. I propose we improve our baseline standard to include environmental considerations into our battle rhythms. Let us improve the shifting baseline positively for the current and next generations.

Flying aircraft is the trade of the Air Force and there is no doubt that we produce a substantial level of pollutants as a by-product. The government has a carbon-offset scheme that the airlines must abide by and is regularly audited, as discussed on ABC series 'Fight for Planet A.' This scheme enables the person flying to pay a small 'carbon offset' fee to support renewable energy and initiatives like planting trees to offset their emissions from their flight. I recently flew from Sydney to Melbourne and it cost me \$1.92 to offset my carbon footprint. I propose the Air Force set up our own carbon-offset scheme. This could be executed by our Senior Leadership Team negotiating with the government for specific carbon offset policy and funding. Additionally, it

could be incorporated into the contract between QBT and Defence that they must allocate a portion of our travel fees to offsetting our CO2 emissions.

Some other of my suggestions are as follows:

- Stand up a Tiger Team to rethink how Defence conduct sustainability
- Attach a 'SustainO' representative to the Mess Committee as a secondary duty
- Address the 18,000+ DHA houses so they have solar panels, water tanks and a high Energy Efficiency Rating
- Replace the Defence 'white fleet' with a 'green fleet' of electric vehicles (the Army are trialing electric bikes (BISHT, 2021))
- Changing how we recycle uniforms and equipment
- Implementation of biofuels
- Initiate carbon capture systems
- Incorporate water tanks, solar and wind farms onto bases
- Include sustainability safety into our annual mandatory Safety Day
- Ensure all bases have environmental sustainability plans and are enacting upon them
- Foster good environmental human behaviour and education.

The list of ideas is endless - it just takes your thoughts put into action. For example, go to AAFCANS and take your keep-cup with you as opposed to using a takeaway cup as there is an estimated 1 billion coffee cups that end up in landfill each year, and that's just in Australia alone (Coffee Cup Recycling, 2022).

Personal Example

I have already taken action implementing some of the initiatives I have mentioned such as (trying to) implement 'Sustainability Officer' secondary duties, solar power for the base, different solutions for food waste from the Mess, turning discarded textiles into fuel, alternative solutions for shredded paper, etc. I am a Flying Officer and I have been in the Air Force for three years. I have been astounded by the level of support I have had for these projects and how much influence you can have by asking the right questions and networking with representatives. I represent what you can do too. All it takes is an idea and action.

Conclusion

Acting on environmental initiatives is not only an opportunity for the ADF to demonstrate leadership in what is one of the most challenging problems we are facing but also to adhere to policy and strategic intent that we have already stated that we would comply with. It is not just for the Australian people of today but it is for the generations that follow. National security relies on our actions. It is up to us to begin these conversations and influence decisions that will alter the structure of Defence operations externally and within our battle rhythm microcosms.

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