Australia in 2030

Possible Alternative Futures

Acknowledgement and Commitment

We recognise Aboriginal and Torres Strait Islander People as the traditional custodians of the land on which we live and work and acknowledge that sovereignty of the land we call Australia has never been ceded. We commit to listening to and learning from First Nations people about how we can better reflect Indigenous ways of being and knowing in our work.

Rewrite the Future

The Rewrite the Future Roundtable series is a collaboration between Climate and Health Alliance (CAHA) and over 100 thought leaders. We are grateful for the input and advice from and the support of our sponsors, Australian National University, Monash Sustainable Development Institute, University of Sydney and Health, Nature, Sustainability Research Group at Deakin.

About Climate and Health Alliance

CAHA's Mission is to build a powerful health sector movement for climate action and sustainable healthcare.

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Foreword

The decisions that we make now about greenhouse gas emissions and about adapting to climate change will affect us in 2030 and for decades beyond. Human activities currently produce the equivalent of about 53 billion tonnes of carbon dioxide per year.

The rising trend in emissions was long and strong before the COVID lockdown drove emission down by around 7% in 2020.

Will it 'bounce-back' to that upwards trend or will the reductions in emissions this year be the start of a new, downwards trajectory?

The long-term difference is likely to be stark.

On the one hand, a world heading towards 4 or 5°C warmer, with profound, and sometimes effectively unmanageable and irreversible impacts via changes in average climate, increased climate extremes and rising sea levels (amongst other things) affecting almost every aspect of our lives, livelihoods and environment.

In contrast, effective action on climate change, keeping it within 1.5°C to 2°C above pre-industrial will still result in significant impacts but these are likely to be much more manageable.

Whilst the differences in climate impacts of these two trajectories will only just be emerging by 2030 due to committed climate changes arising from past emissions, and the likely time needed to radically reduce GHG emissions, what will be very clear in that timeframe is:

1. further increases in the costs of climate change impacts

2. further increases in the need for proactive and effective adaptation responses and in particular

3. changes in human systems across the globe (e.g. energy, food, urban, water, biodiversity, transport etc) as we either increase emissions under a business-as-usual scenario or reduce them as required by the Paris Agreement.

The choices we make now will put us on these different trajectories. Different future worlds.

Professor Mark Howden
Director, *Climate Change Institute,*
Australian National University

Introduction

In 2020, we led a process of deep thinking and creative engagement in the *Rewrite the Future* roundtable series which brought over 100 thought leaders from health, social science, environment, human ecology, biodiversity, sustainability, finance, economics, urban design, media, science communication, Indigenous land and fire management, race relations, criminal justice, philanthropy, and futures thinking together over a six week period, to collectively imagine the future.

We sought to use the moment of disruption provided by the COVID-19 pandemic to imagine possible alternative futures for Australia, and to describe a preferred future – and the steps required to achieve it.

Guided by futures experts, we used a process of developing narratives for four possible alternative future scenarios: no change, marginal change, maladaptive change and radical transformative change.

What emerged was four possible alternative futures, from which (using a process of backcasting) we surfaced the key elements of a fifth, preferred, integrated scenario – the future we choose.

The five scenarios are described here, along with case studies or 'day in the life of' stories, intended to bring the scenarios to life, situate them in the real world, and communicate the experience of someone in that situation in 2030.

We have chosen different contexts, geographies and demographics to illustrate the experience of as wide a cross section of the community as we could.

About the process

Scenario development is a tool used by communities, agencies, governments and other groups to discuss possible alternative futures. Scenarios are in effect, 'stories' about the future. Scenario thinking allows us to challenge the status quo, by asking "what if?" This allows us to imagine the possibilities of tomorrow, so we are better prepared to take action, based on those insights.

Our goal through the publication and dissemination of this set of possible alternative future scenarios for Australia in 2030 is aimed at helping decision makers and the wider community better understand the consequences associated with different policy choices - and build consensus around a shared vision for a healthy, regenerative and just future for all.

Fiona Armstrong
Executive Director, *Climate and Health Alliance*

The case for imagination

2020 was a remarkably challenging year for humanity. A global novel coronavirus pandemic infecting millions around the world, with morbidity and mortality steadily rising.

Radical changes to how we live and work, instituted to combat the pandemic, leading to a global economic recession with rising unemployment and increased suffering.

And simultaneously our climate continues to change with an increasing rate of extreme weather events.

Our climate is changing and the rapidity and impacts of the changes are already catching us by surprise.

Imagination is central to the human condition.

It informs our creativity and our science and it is central to our survival particularly as we contend with events not previously experienced or imagined.

Healthcare workers use imagination in practice to guide patients through diagnosis, treatment and maintain hope through periods of extraordinary challenge.

These skills are of central importance as we work through catastrophic and existential global risks toward a better future.

As we emerge from this remarkable period, it is time to employ our imaginations deliberately and in collaboration.

To take our understanding of science and explore ideas and challenges we've not yet experienced or perhaps conceived.

As the consequences of the COVID-19 pandemic resonate around the world, there has never been a better or more important time to imagine our future.

To imagine the risks and threats, and to imagine how we can work together toward a healthier and happier community.

Dr Arnagretta Hunter
Physician and Cardiologist, *The Canberra Hospital and Australian National University*

Possible Alternative Futures

Head in the sand

This scenario is the 'no-change' scenario – one in which we bury our heads in the sand, refuse to acknowledge the scale and urgency of the problem of climate change, and fail to take appropriate action to respond. It features increasing climate-fuelled extreme weather events, rising social anxiety, an ongoing political apathy, which combine to worsen already unstable social and environmental conditions. Two case studies, featuring data broker Cara and firefighter Malcolm, describe personal experiences in this possible future world.

Short memory

This scenario describes the outcome if we ignore scientific evidence and fail to heed the lessons from the past. Despite some positive social policy initiatives when COVID-19 first emerged, we quickly reverted to small government strategies, ignoring the evidence of social and economic benefit from tackling inequity. Advances in technology, including for health and education, are largely serving upper to middle income urban Australians, leaving rural and remote First People's communities further behind. A young Aboriginal girl in the Northern Territory dreams of making a difference. Ministerial advisor Ramesh is trying to push forward with positive policy, but is thwarted by political egos and media interests.

Looking for love in all the wrong places

In this scenario, we have lost our compass as a country. Without strong leadership, nor a sense of identity that we can be proud, we feel paralysed, and inert. Despite recognising we are at a powerful tipping point, we fail to act. We panic, and throw funds at unproven schemes and technologies. Our decisions serve to deepen cultural and social divides. We fail to mitigate or adapt - climate impacts intensify. The relationship between federal and state governments declines - cooperation is a thing of the past. A law student laments the now almost total shift to online learning while planning an activist future. Another day-in-the-life story centres on a young rural craftsman, Kaspar, struggling to imagine a secure future.

We can do this

Australia is on a strong and positive path. We have faced the future with courage and agency, and in the early 2020s, engaged in bold and decisive action - and it shows. Deep thinking, community engagement and a revitalisation of democracy helped create a mandate for elected representatives at all levels of government to act. Recognition of First Nations sovereignty and voice is enshrined in legislation, and all Australians embrace Indigenous culture as part of their identity. Policy is guided by the deep knowledge of the connection between planetary and human health and connection to country. The school strikers form a new generation of leaders in our parliaments, and a Climate Emergency Act is passed. We hear the story of Suraya, a co-owner in a local cooperative in Tasmania, and a new life for Frank, an organic farmer in Queensland.

Our island home

Australia finds its place in the world as a responsible, compassionate, fair country. We begin by acknowledging historical injustices, and take formal steps to address this with compensation, expansion of land tenure and water rights. Indigenous voices and knowledge systems guide policy and practice. Our environment and unique biodiversity begins to recover following legislated reforms. A progressive taxation system and increased investment in the commons supports a more equitable society. We invest in truly sustainable progress, with measures going well beyond GDP. We champion truth and accountability, rethink what is needed from technology, and reimagine how we might live.

This scenario describes a future that is possible – if we proceed with our eyes open to the interconnected and complex challenges we face, and do this with courage, humility, and the generosity that has characterised the community response to COVID-19.

We can employ solutions that offer wide ranging benefits and set us up well to succeed, and flourish, into the future.

This future is available to us. It is scientifically, economically, culturally, socially, and technologically feasible.

It can be the future we choose.

Further information about this scenario, and the accompanying policy agenda to achieve it, is available here: www.caha.org.au/hrj-agenda

Planetary health improves

Societal health declines

Societal health improves

Looking for love in all the wrong places

We can do this

Our island home

Head in the sand

Short memory

Planetary health declines
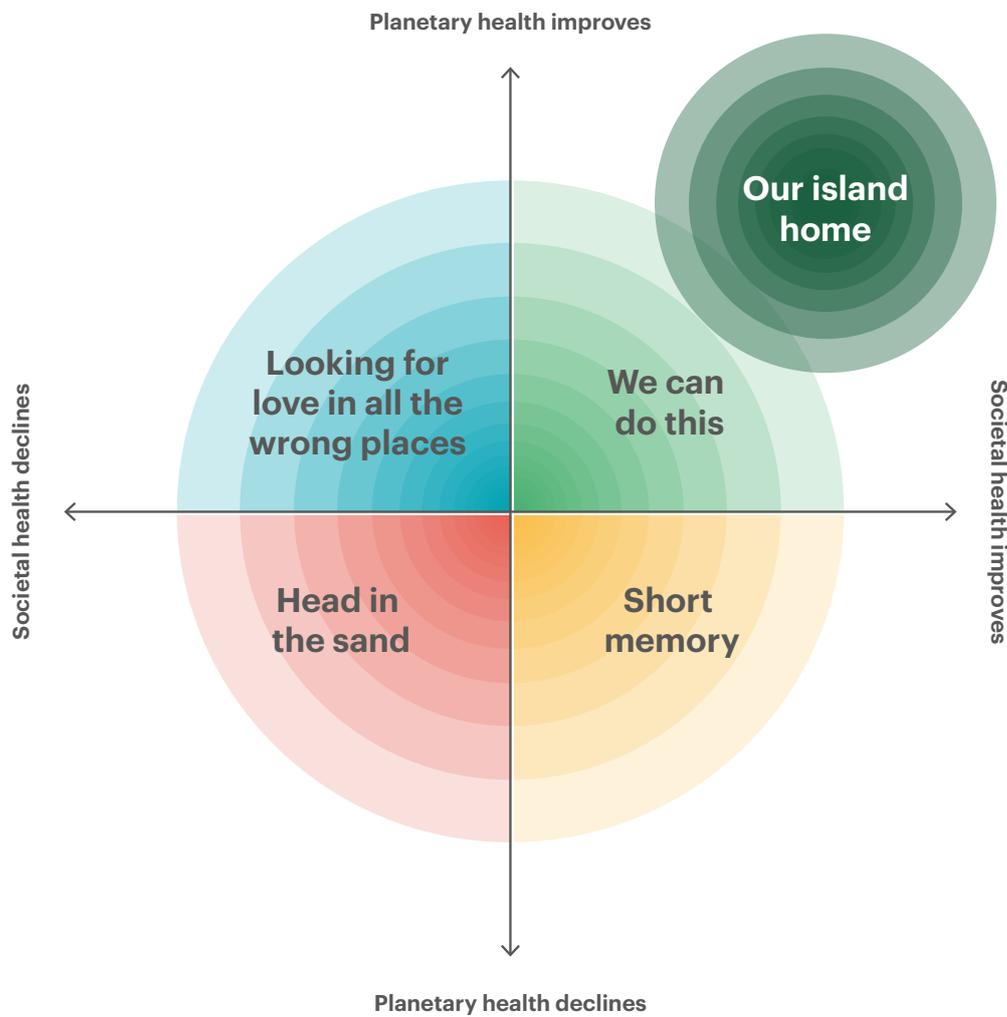
Figure 1. Possible alternative futures for Australia in 2030

Based on figure from ARUP: 2050 Scenarios, available at:

https://www.arup.com/perspectives/publications/research/section/2050-scenarios-four-plausible-futures

Definitions

No policy change

This refers to a situation in which there is no change to current (inadequate) climate policy settings.

Marginal change

This refers to small, incremental or marginal changes to policy, which may be positive, but are insufficient to effectively tackle the problem.

Maladaptive change

This refers to policies and actions that may appear to respond to the problem, but ultimately deliver negative results due to unforeseen or unintended consequences.

Radical, transformative change

This refers to bold, ambitious actions that seek to address the core of the problem and provide solutions to match.

Integrated scenario

This scenario takes desirable elements of the four preceding scenarios to create a preferred future.

Head in the sand

Same as it ever was

Disasters compounding having passed multiple tipping points

Litany	*She'll be (not) right, mate*
Metaphor	Ignoring the elephants in the room
Motto	Let her rip

A great upheaval, which had been percolating for many decades, peaks and implodes during the early '20's in a perfect storm of political and social unrest.

This is a world less open, less prosperous and less free. After COVID-19 prompts leaders in many countries to assume emergency powers, a trend towards centralised, authoritarian rule grows in several regions. Right-wing nationalist-populist governments and parties now resort to using paramilitary or military forces to quell riots and attacks on property. Armed conflict on a global scale increases as water and other resources come under growing pressure and the forced mass migration of climate refugees reinforces nationalism and heightens hostility.

We fail to plan

In Australia, we remain under-prepared for inevitable extreme weather events, choosing badly managed adaptation responses under crisis rather than enacting sound strategies to drastically cut emissions and mitigate the worst impacts of climate change. There is a short period during COVID-19 where decisions are evidence-based and strongly guided by science, but we soon fall back to discrediting, ignoring or censoring scientists and any expert who contradicts populist government rule.

Many Australians feel helpless in the face of constant trauma through skyrocketing unemployment, geopolitical relationship collapse, trade wars, health crises, cyber attacks and a rolling cascade of extreme climate disasters. We live in a permanent state of anxiety.

Trust in government is broken. Locked into positions of denial and obfuscation, our political leaders steadfastly refused to lift their gaze and develop a strategic long-term approach or even pretend to plan for any policy scenarios beyond their political terms.

We make the wrong choices

Instead, a series of reactive stimulus measures are directed at industries like weapons manufacturing, gas expansion, road-building and coal mining. Opportunities to build new economic frameworks – around emerging industries not based on intensive land modification and with little water demand, such as bush food, local sustainable production, nature and culture-based tourism, arts, recycling, high-tech manufacturing along with the renewable energy revolution - are ignored. Government bets on the wrong horse by sinking billions into oil and gas, despite an irreversible plunge in demand for fossil fuels.

Business and industry entrepreneurs take advantage of revolutions in technology and renewable energy, stepping up to fill gaps such as energy efficiency in the built environment. This is largely spurred by spiralling energy costs and solutions are not equally distributed. Low-income households without solar now spend 40-60% of their income on energy bills, unable to take advantage of plunging prices in battery storage and high-efficiency solar cells. At the other end of the socio-economic spectrum, high-income households who can afford solar and storage have almost zero energy bills.

We undermine our precious assets

Despite the huge impacts of climate extremes on ecosystems and people's wellbeing, governments inexplicably persist with significant clearing of native vegetation, the poorly planned allocation of water and rolling back environmental protections starting with the EPBC Act amendments in 2020. Clean drinking water has become an increasingly precious resource due in part to an explosion in fracking activity. This is mostly concentrated away from east coast metropolitan areas and instead focuses around regional and remote lands including Indigenous lands, due to outcry from city dwellers.

Social fractures are exacerbated by the atmosphere of uncertainty. Differences in ethnicity, religion, sexuality, gender, ability and geography are weaponised into social and political divisions. This increased tribalism and polarisation is fed by algorithms on social media. Credible professional journalism continues to decline and Australians rely on social media for news, which is largely controlled by private vested interests.

There are some positive trajectories, such as communities providing solutions to environmental, and social challenges, e.g. there is a growing grassroots community movement of mutual aid and collectivism. However, current efforts and support at the ballot box for public expenditure on public good aren't enough to combat the trend towards social fragmentation and division.

Overall, the country feels like it has retreated into a deeper state of self-interest.

The wealth gap has widened with worsening of inequitable structures, such as the casualisation of the workforce and unstable employment relations. Those in top tier income brackets benefit from tax cuts, and corporate influence grows. Meanwhile, vulnerable Australians fall further behind, leading to increased competition for public goods. In the economic devastation that followed the pandemic, rates of homelessness rose with informal communities growing in caravan parks on the outskirts of our cities. Fewer children complete high school education, with tertiary education increasingly accessible only to the rich.

We fail to invest in our health

Once the envy of many developed countries, our public health system is now in disarray. Despite a clear need highlighted during the COVID-19 pandemic, governments fail to reform healthcare. Demand for some services such as mental health support soar, while services like telehealth are hobbled by slow internet capacity. Health outcomes, particularly for vulnerable remote and rural communities, fall further behind. The life expectancy of First Nations people drops in parallel with higher rates of unemployment and incarceration.

Practitioners must ration prescriptions as a series of extreme weather events interrupt global supply chains, leading to shortages of basic medicines like antibiotics and blood pressure medications and critical anti-cancer drugs. The decade witnesses a mass decline in healthcare worker numbers, as older retiring professionals leaving the sector greatly outnumber graduates entering it.

Our future does not look any brighter.

We see further ecosystem loss

Though all Australian states and a growing number of businesses, including some major energy and fossil fuel companies openly support a 2040 net zero emissions target, national policies remain weak and we fail to meet 2030 targets. Not even further loss of vast areas of the Great Barrier Reef can motivate meaningful action to lessen future impacts. Instead we see public investment into building sea walls and technology-based solutions to protect coastal property and buildings along 'high value' coastlines despite being impacted by sea level rise. Inundated coastal areas without financial resources to adapt, such as in the Torres Strait, are simply abandoned.

While many other economies respond to COVID-19 and transition, we fail to adapt. Many of Australia's traditional trading partners slip away. Markets for beef, dairy and wheat exports to South Korea, Japan, Vietnam and Indonesia all decline as eating habits change while markets for our coal and agricultural products disappear when the EU introduces border tariffs for carbon intensive goods. Once a regional poster-child for trade, Australia is now seen as a poorer relative, failing to rise to many 21st century challenges.

We miss opportunities

Our opportunities to use the COVID-19 crisis to protect health through acting on climate change is wasted. The health outcomes of the community continue to decline, as preventable chronic illness, and climate-related health impacts, worsen.

A day in the life of Cara Lowenstein, urban Gen Z data broker, Norwood, SA

Cara's 7G wearable smartphone sends a vibration up her arm to indicate an email has arrived. She lies in bed, half awake at 10am, not feeling any rush to rise. It is her day off from her job in data privacy, but the apathy in this 25 year old Kaurna woman is more deeply rooted: Her life is definitely not going to plan.

A student during the COVID-19 pandemic, Cara has never really known a life of carefree abandon. Her parents were both made permanently redundant in the Upheaval which began in 2020. It took many years for each of them to find work.

Those days, the Federal Government was too busy fighting for its political survival to notice people fighting for their actual survival. Rebellion sprang up from every quarter as opposition and factions within their own party railed at ongoing policy failures, plummeting approval ratings, skyrocketing unemployment and failure to deliver any long term planning. Political leaders used the second pandemic once again to point score against leaders of other parties, rather than come together to solve challenges for the common good. Despite the OECD stating in 2020 that 'authorities should...consider further investment in energy efficiency improvements', this did not occur, with federal leaders firmly entrenched in a 'gas and fossil fuel led' recovery. A recovery that never eventuated, as global fossil fuel demand had already peaked – and unemployment continued to rise, peaking at 12% in 2022.
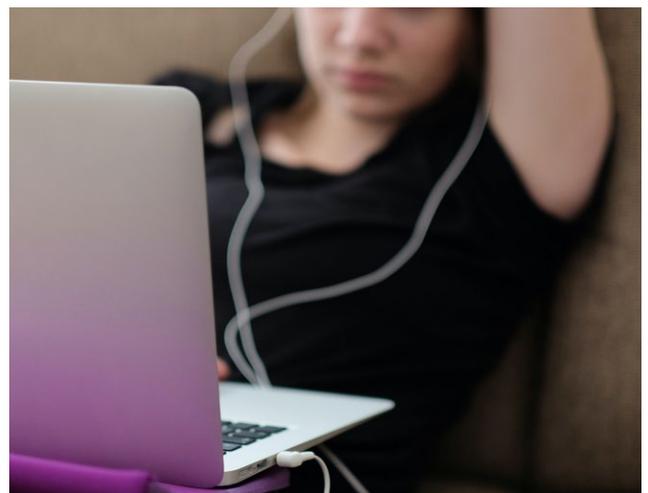
The Australia of Cara's early adulthood is less open, less liberal, with fewer options and more difficult choices. Her parents are naturally worried; both were diagnosed with Corona Melancholia after ongoing pandemic fallout (many who were young and seemingly invincible in 2020 continue to suffer chronic health impacts a decade later).

Cara herself struggles with anxiety. Despite her job she can never see herself affording her own home. Though she's fortunate to earn a good income, Cara is well aware the divide between rich and poor grows. She gets non-stop requests from charities to donate and supports several, though wonders if it really helps. And while her own industry – data privacy – is exploding with opportunity, Cara is unsure she wants what this portends.

With the erosion of trust that began last decade, and the rapid rise in remote working and online shopping during the pandemic, privacy and data protection laws were ramped up. CPO's or Chief Privacy Officers are now commonplace in businesses. The 'right to be forgotten' – the erasure of a person's data at their own request – is now law in Australia and many countries worldwide. But as regulations and protections tighten, so too, does activity from those who seek to undermine them. Cyber crime is rampant, posing a serious and evolving threat to Australian individuals, businesses and governments. Privacy penetrating technology is the new arms race. Cara knows her job security relies on her employer's track record for protecting privacy. But this reputation could so easily disappear with just one big, widespread hack. And at that point, there'll be nothing that either Cara, or the healthcare system she works to defend, can do about it.

A day in the life of Malcolm Tingwell, Butcher and volunteer fire fighter, Narrabri, NSW

"That's all today, thanks Malcolm." The elderly customer digs into her handbag for payment. Evie's fingers automatically sweep for coins until she reminds herself there won't be any actual coins in there. Anyway, the chip built into her purse is easier to use than the coins or notes she once had, to pay for goods.

On the other side of the counter, Malcolm smiles and holds forth the RetailReader, as Evie places a finger on her purse scanner pad to authorise payment. The butcher knows his customer would rather have purchased a better quality meat than sausages, but sausages are all she (and many customers) can now afford.

Malcolm actually thought long and hard before deciding to rebuild his business. After all, the bushfires had wiped out almost all of Narrabri in 2023; and many of those who survived never came back. And here he was, re-opening a butcher shop that needed lots of meat eating customers in an only partly rebuilt town. What was he thinking?

The evacuation order had come in the middle of the night. Malcolm was away fighting fires with the RFS on a different front, closer to Armidale. But Cheryl Tingwell was home and one of the more prepared locals, having packed their valuables some days ago. She could hardly ignore the signs: Her husband Malcolm coming home exhausted after a week away at a time, getting more nervous as the lines seemed to be moving rapidly closer to their town. It felt like the whole of NSW was ablaze.

That night, raging fire fronts swept in from both east and west. They'd already lost all of Mount Kaputar National Park and the Observatory telescope outside town but it seemed to be moving away from population centres. Then the wind shifted again, and the centre of Narrabri was suddenly in its path. Malcolm's hands tremble when he remembers what was lost.

As a local butcher born and raised in the region, Malcolm's family had deep connections to the region. Many mates worked for the local coal mine and the coal seam gas field that opened at the start of the decade. Backed by a Federal Government that steadfastly refused to follow the world transition to strong, new economies off the back of green industries, continued fossil fuel mining brought jobs - but it savagely divided the town. At odds with climate concerned locals, Malcolm and his mates had decried warnings that climate change was supercharging extreme weather events in Australia. They'd had floods, fires and even a cyclone around Narrabri before. Nah - this was just part of rural living.

After this megafire, he was no longer so sure.

Months after using his life savings to rebuild the shop, (as insurance companies had stopped covering catastrophic weather events long ago, unable to afford underwriting the risk), business remains slow. Malcolm can't help wondering if he hasn't made the same mistake as his government in failing to acknowledge the inevitable. Added to that, his lungs are shot. Malcolm jokes he's never smoked a day in his life, but he knows many people have ongoing respiratory health issues from working in the coalmines and from exposure to smoke from the fires. He hasn't told his wife but he's not sure how much longer he can run the butchery.

Short memory

It's getting awfully hot in here

The uncomfortable truth of failure to act

Litany	*Maybe later*
Metaphor	Rearranging deck chairs on the Titanic
Motto	What about me?

As we dust ourselves off from the storm of COVID-19 impacts of the early 20's, there are signs we've learned some invaluable lessons. These prove short-lived.

We think and act short term

While a COVID vaccine saves many lives, it also provides an excuse for many to return to 'normal', some even feeling the need 'to make up for lost time' by diving into hyper-consumerism. Advances in social policy during the pandemic are not maintained despite evidence that the next health crisis lies just around the corner. Promising policy proposals suffer lack of consultation and backlash from vested interests and this soon stymies progress. Just as widely happened post GFC, we fall into the trap of once again opting for short-term relief.

Failing to imagine the opportunity, innovation and optimism available from a brave new approach and staying the course, government and business retain a GDP-centric economic model that assumes markets will eventually solve everything. Our leaders cannot accept we need to fundamentally change to survive.

Equity, and security, suffer

Policies to address systemic failures, such as increased support to combat unemployment,

are trialled, but continues to disadvantage Indigenous people and women. Despite a stronger social movement for tackling inequity there is no meaningful policy response. Growing rural communities are increasingly disadvantaged by insufficient access to jobs, education and health services. Many issues, from civil liberty violations and corruption to housing affordability, remain major concerns, deepening divides in our cities. Protests and demonstrations increase. Outbreaks of violence spark fears Australia will follow US patterns of civil unrest.

Technology introduces many advances – and some unforeseen outcomes. Driverless vehicles are now widely used across a range of industries and robots commonly perform house cleaning and home security in wealthier households. AI has advanced diagnostics and targeted treatment for many chronic illnesses (even though this unexpectedly undermined campaigns promoting healthy behaviour). But access is unequal and serves only wealthier urban Australians.

In many ways we all feel worse off through a now entrenched loss of trust in governments, businesses, non-governmental organisations and the media. Unless this can be restored, it will remain near impossible to build consensus and address many of the challenges we now face.

It feels like groundhog day.

We remain exposed

Extreme weather events are inconsistently managed with weak attempts at risk prevention. Without systemic change, we remain exposed to the catastrophic impacts of intensifying fires, floods and droughts. Health and social impacts are more common as a result. Our ecological systems continue to decline. The only regions to be listed under new conservation agreements are in remote areas with extremely harsh conditions such as poor soils, steep gradients or swamplands and therefore offering no value to industry for development. Many of our wild places may never recover.

While the 2017 Uluru Statement from the Heart and a constitutionally-enshrined Voice to Parliament gathers emphatic support, Australia continues to fall short in addressing Indigenous disadvantage and empowerment across all areas.

We continue to ignore the lessons and insights from our Indigenous people when it comes to management of land, fires, our waterways and the sea.

At an individual level, we see a sense of entitlement and expanding consumerism nurtured in part by anxiety around an uncertain future. But there is also a growing movement towards vegetarianism and ethical, low-impact consumerism. Despite demand, local production does not keep up, limiting the expansion of an ethical and sustainable food system. Prolonged droughts impact many of Australia's food bowls, driving up food prices, and contributing to obesity and chronic health conditions among those on lower incomes as they are forced to rely on cheaper, processed, unhealthy foods.

We innovate, but too slowly

Local cooperatives form to address market failures in low carbon and greentech industries and to provide stable and ethical employment. Unions increasingly direct their super funds to invest in small manufacturing projects, such as plastics recycling, organic farming, and community renewable energy projects, and there is small but steady growth in jobs in these initiatives. But the pace of change is slow and unequally distributed, and lacks support from state and federal governments.

Online learning is now more interactive and many classes now cater for hundreds of students, with less time at school for high school students, and university students accessing 50% of all lectures and tutorials online. Despite ethical concerns, limited safeguards and regulations manage tech companies, leading to privacy violations through widespread surveillance and data mining.

Meanwhile, the prognosis for human health has, in many ways, stagnated. Latest reports suggest that without dramatic intervention, future generations are likely to experience shorter lives, with higher rates of cancer, heart disease, obesity, and mental ill-health than those alive today.

A surge in demand for mental health services in the early 20's is partly mitigated through investment in services but healthcare financing and delivery does not substantively change through the decade. Though a wider range of practitioners are now funded under the Medicare Benefits Scheme for primary healthcare services (including nurse practitioners, midwives and chiropractors), tertiary health systems still focus on short-term responses and symptoms instead of causes. There is little acknowledgement of the social, cultural or ecological determinants of health as the National Preventive Health Strategy maintains its narrow focus on alcohol, obesity and cancer and does not recognise climate change as a health threat.

We are governed by vested interests

The National Climate Action Summit in 2024 saw many solid commitments to climate action from many sectors, including healthcare, tourism, urban development, and agriculture, as well as local government. But fossil fuel lobbying stifles our real potential for a prosperous, green economy. Deeply influenced the fossil fuel lobby and corporate interests, the Federal Government locks into emissions growth by prioritising gas and coal, largely for export. Our continued reliance on fossil fuels leaves us poorly positioned in the transition to net zero carbon by 2050, compared to the rest of the world. The Federal Government is unable to pass or implement legislation to cut carbon emissions within critical timeframes.

Some initial investment in a green recovery is made but the transition, mismanaged and market-led, leaves those without adequate resources or incentives behind. For example, while there is a rise in the number of people driving electric cars, it remains unaffordable for most Australians.

We are left behind

While a cohort of business leaders remain determined to lead the decarbonisation charge and stay globally competitive, emerging industries like carbon farming and best practice agriculture are not supported, stunting their profitability and growth.

Australia is cast adrift from the green growth of Europe and other economies, leaving us increasingly vulnerable to external shocks.

A day in the life of Esther Widjaja, a Yanyuwa girl, NT

Esther is walking to the arts centre from home, carrying a special book under her arm. It is searingly hot already and only 9am on a Saturday in July. Dry seasons are now routinely dangerous – temperatures used to be a maximum of 34°C back in 2010 when Esther's mother was a girl. Just after Esther was born, the temperature reached 44°C and the tiny infant nearly died. These days it gets so hot that many people are dying. Though Esther doesn't yet realise the implications of her government's failed policies to drastically curb carbon emissions, there are no climate solutions in sight. Her country's stubborn reliance on fossil fuels will only help things get worse.

Esther passes the health centre where her mum works, to see the long queue already lined up in the shade. While telehealth promised to ease some of the burden on health centres, the use of video consultations is still not enough to meet the healthcare needs of the community. Many still lack access to technology to take advantage of the services available. This community, like many others, embraced telehealth services, especially when they were better funded during COVID-19, but since then, funding has fallen away, and poor internet quality limits widespread access to these services.

Esther passes the river next. Here, once healthy populations of fish have dwindled with the trend for warmer, more acidic waters, as well as rising sea

levels, more intense cyclones and changed oceanographic conditions. This drop in fish levels combined with the rise in dust pollution and intolerable heat much of the year. All of this threatens the tourism industry which forms a lifeline for the town's economy.

That leaves the McArthur River zinc and lead mine 60kms away, as an income source for locals. Yet they are torn, as the mine also poisons the land with fires producing toxic smoke, and lead and cadmium seepage making dugongs and many fish unsafe to eat. Esther's schoolteacher says you cannot drink the water any more either because of fracking. It turns water into poison. Environmental regulations continue to overlook all the evidence.

Ecosystem decline is not an issue unique to Esther's community. Forced migration aka 'walking off country' due to intolerable heat, and declining food sources are becoming common in Australia. Governments are widely criticised by their constituents, accused of willfully ignoring the responsibility they hold towards ecosystem health. Local activist groups have become common in localised areas, one of their tactics being to intentionally contaminate land and waterways, isolating communities and cutting access to resources, in order to stir further civil unrest. Resource scarcity is an everyday occurrence.

Esther arrives at the now abandoned Art Centre and sits in a shady spot, then carefully opens her book. Esther is really smart in school. She loves to read and she's very good at maths too. But her great passion is science. This is a book about crocodiles. When she grows up, Esther wants to be a scientist so she can help the crocodiles to come back.

A day in the life of Ramesh Khatri, 28 year old policy adviser working for a Federal Minister in Canberra

"I'm sorry I have to cancel." Ramesh's voice reveals little, but inside he feels the familiar swirl of cortisol that will flush away most of his exhaustion, at least, for the short term. Ramesh had been en route to brunch with a friend when the e-message came through from the Minister's office: 'Get here quick PFO'.

PFO stood for 'Policy Fall Out'. "Oh boy, here we go," sighed Ramesh as he dialled the friend he would once again stand up.

It was the middle of the week and a Time Off In Lieu day in exchange for an estimated 100 hours of overtime accumulated in just the past month. Working conditions have improved little over the past decade. Anyway, the life of an Adviser to the Minister was always going to be like that. Ministers always come first.

He knew that this one would be bad, too. Having gone public 72 hours ago with an ambitious new plan for a national health promotion strategy, creating thousands of jobs, and, there was great initial excitement at the positive health outcomes, as well as the economic boost this would bring. If endorsed, it would create 60,000 jobs, and save 30,000 lives over the next decade.

Eighteen months of tireless work had gone into the proposal. Consultation with health and medical professional groups, industry bodies, researchers
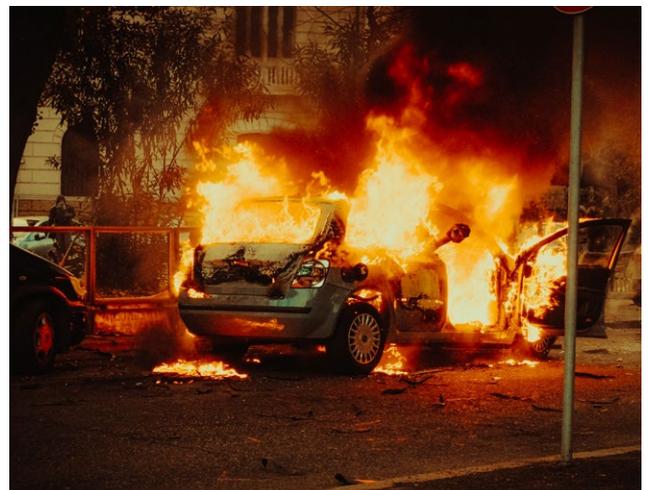
and the community. Extensive rewrites after negotiations with social services, unions, and consumer groups. And a full breakdown of the economic implications. Ramesh was not comfortable with the fact that the Minister for Ageing wasn't included in discussions, but he knew the Minister's reputation for point scoring risked derailing the plan before it saw the light of day. That was why his Minister had chosen to shore up support and ringfence any detractors before going public. It was a risky strategy, for sure, but politics was a risky space.

Maybe this morning's panicked message was the result of that? The health budget was consistently attacked by the right wing media who have opposed any increases in health spending since the COVID-19 pandemic. That, along with unemployment and immigration were topics guaranteed to fuel yet another media storm.

Ramesh knew the drill: Great policy is announced. Political egos are bruised. Opponents grab hold and pour petrol on it. And before you know, there are protests once again in the streets. Outrage erupts. Cries that key people were not consulted at all during the process, mingled with 'the economy will suffer' stories as a result of the new policy. Attempts to sweeten or soften the deal by the Minister responsible. And then a retraction, back to business as usual. And the Minister's office retreats, licking its wounds. No wonder so few truly transformative policy ideas were even imagined these days, let alone pursued.

He picked up the pace as he neared his office. It was going to be another very long day.

Looking for love in all the wrong places
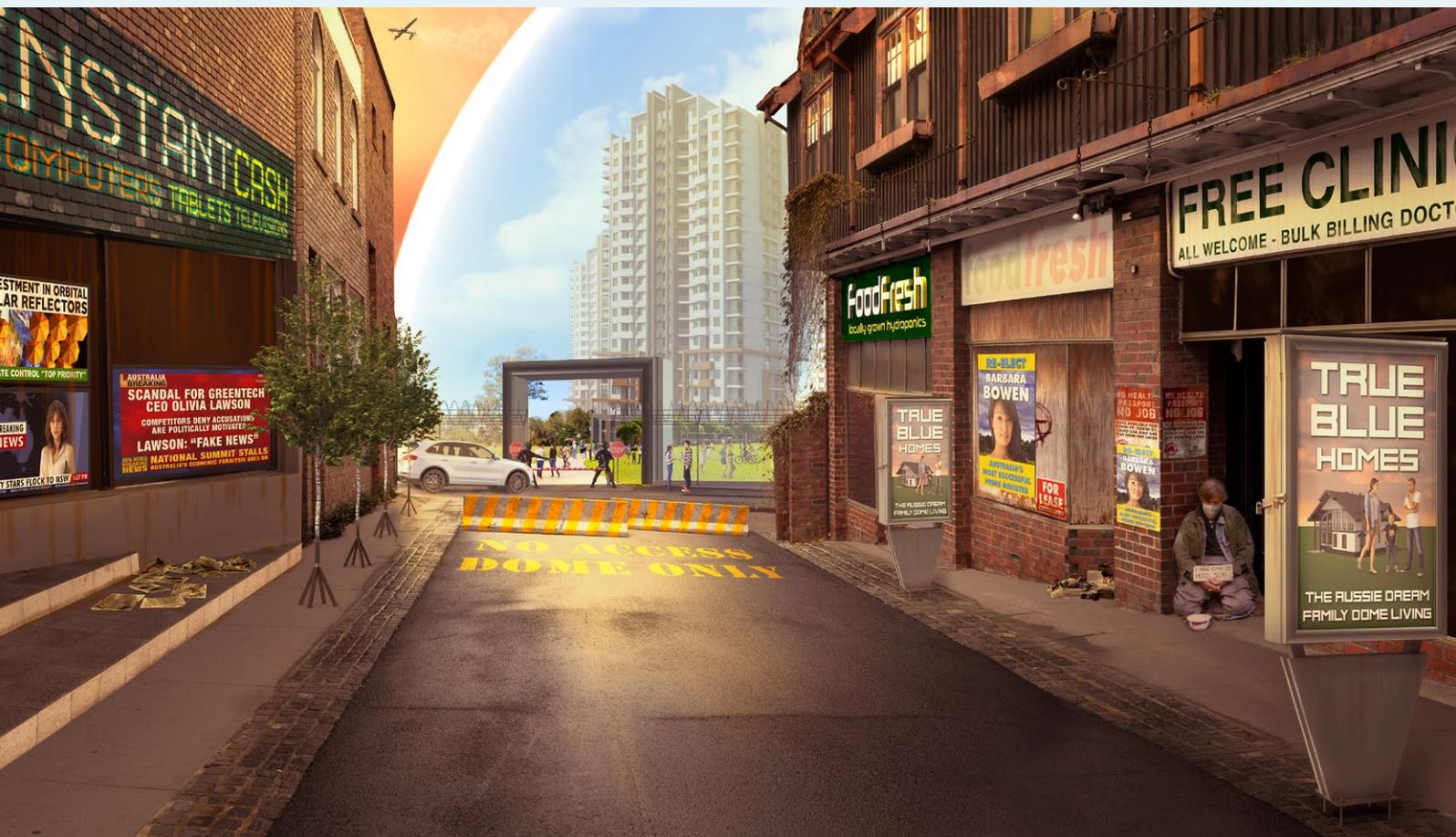
Stock prices soar for space mirror manufacturer 'Reflector'

We are on the verge of a powerful tipping point

Litany	*Just keep swimming*
Metaphor	Sisyphus (forced to push a boulder uphill)
Motto	At least we gave it a crack

Somewhere over the past decade, Australia lost its compass. In 2030 we don't quite know who we are, or how it all went wrong. Where once we identified with stereotypes of gungho sports legends, brave battlers, proud feminists and a tolerant fair go society, these have been replaced with a deification of celebrity and material wealth and a willingness to cede power to the powerful. There is a rise in female leadership, but the public discourse is hostile and inclined to blame new leaders for past mistakes. Without any aspirational signs of leadership, we live in the grip of a sometimes paralysing anxiety about the future.

We are at a tipping point

The potential for major social change follows the global public uprising early in the decade, powered by a proliferation of engaged social movements. The Federal Government convenes a national forum to address multiple challenges; COVID-19 recovery, climate change, the recession. It starts by acknowledging the scale of the challenge and the complexity of the problems. We are on the verge of a powerful tipping point.

But the government and key players prove indecisive, unwilling to take necessary risks. Hope proves short-lived as promise fails to follow through into policy. We cannot find accord. Adaptation is used to excuse inaction. Mitigation is seen as idealistic and unattainable. Critical windows of opportunity to create systemic change pass us by. Attempts at decentralisation fail due

to the power of vested interests and failure of governments to loosen this hold.

We opt for tech over deep solutions

Misplaced enthusiasm that 'tech will save us' leads to investment in unproven technologies with unintended consequences. In medicine, prioritising individual precision diagnostics over preventative health leads to greater inequity. We continue to ignore the cause of climate change and opt for maladaptation: with billions invested in sun reflectors in an effort to cool the earth, rather than phase out fossil fuels. Canberra takes its lead from Dubai and opts for a giant glass dome over the central city, creating a climate-controlled outdoor environment. Instead of strengthening food security through promoting sustainable plant based food sources, we spend scarce research and development funding on complex processed meat substitutes.

We invest in monoculture plantations (including of non-native trees) to sequester carbon emissions, rather than reforestation of native species. Cities and towns are losing their natural green spaces. Local councils install fake trees, leading to poorer air quality and contributing to the urban heat island effect. Many community food gardens are abandoned due to excessive heat and the rising cost of water. Food is increasingly grown on the urban fringe in factories under UV lights, but the high cost of produce limits access to those on higher incomes. The divide between rich and poor has never been more apparent and this growing disparity drives poor physical and mental health outcomes.

We work and think in silos

Governments and government agencies work in silos, consistently avoiding the root causes of environmental, economic, social and health challenges instead throwing haphazard fixes at short-term responses. We grasp at answers in expensive and invest in expensive medical technologies, but fail to invest in health promotion and illness prevention, so health outcomes continue to decline. In the wake of the pandemic recovery, governments do not adequately plan or prepare to address the next zoonotic health crisis and a significant, avoidable loss of life results.

We repeatedly fail to learn lessons such as properly consulting and involving Indigenous and multicultural communities in planning and tailoring messaging to community values or building trust and providing education support on new initiatives, where needed.

The social, health and economic impacts of climate change are writ large. These range from lost productivity, declining food production and poorer human health outcomes. This has both financial impacts and societal burden (with increased pressure on healthcare budgets, rising food prices, and rising unemployment). But the Federal Government continued reliance on decide, engineering only approach, which focuses benefits on the wealthy and so fails society as a whole.

We fail to consider consequences

Despite all the evidence, there is still an unwarranted confidence that we can improve on nature, leading to manipulation of ecological systems that produce short-term benefits but long-term problems. For example, the government invests heavily in geo-engineering technologies, launching an initial trial of a UK technology to spray sulphate aerosols into the atmosphere. But this leads to an increase in air pollution and is considered responsible for a sudden depletion of the ozone layer, resulting in a damages claim from New Zealand in the International Court of Justice.

With increasing incidence of infectious disease outbreaks, public health surveillance is being outsourced to defence personnel, with costs deducted by the Commonwealth from states and territories whenever they experience a surge in cases. Further changes to healthcare funding in 2021 see states and territories forced to take on responsibility for the majority of healthcare expenditure. This drives a further shift towards telehealth services, but while demand rises, access to care declines: GP consultations are reduced to three minute sessions.

Deliberate misinformation campaigns make truth and evidence indistinguishable from propaganda and disinformation. Fake news is almost indistinguishable from fact. There is a deepened mistrust of governments and institutions, as there is less consultation or dialogue with the community and little insight into decisions being made. The uprisings of the School Strikes, and Extinction Rebellion have gone underground, as increasingly punitive restrictions influence public displays of activism. This erosion of human rights and civil liberties leaves people very anxious about what each day might bring.

We lose confidence, and retreat

Following repeated false starts and a failure to commit to social, environmental and political progress, our faltering economy is weighted further by poor consumer confidence. Climate inaction has led to entrenched inequities, and worsened population health outcomes. As temperatures increase, people are much less likely to spend time outdoors exercising or socialising, undermining social cohesion and contributing to the growing national 'girth'.

Metaphorically and literally, Australians just can't motivate themselves to get up off the couch.

A day in the life of Francesca Ditadi, 22 year old student studying 3rd year law, NSW
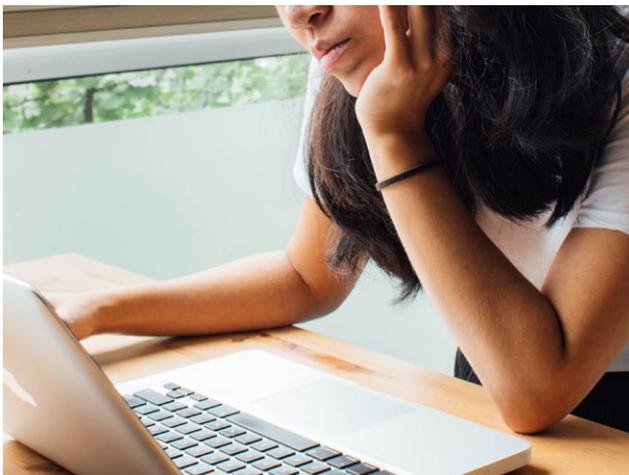
Francesca sits in her online lecture from her bedroom desk. Online learning became the new 'normal' when the pandemic drove the world 'virtual'. Francesca misses the true connections that face-to-face learning gave her in primary school. She doodles on a notebook, though she really should be concentrating because exams are coming.

The lecturer is talking about the ethics of technology in a horribly dull monotone and Francesca looks around the virtual lecture room to notice almost all the class seem as bored as she is. Since university fees are now prohibitively high, every one of the faces she looks at will likely spend the rest of their working life paying back their HECS debt. But they count themselves lucky: At least they will be able to work at the company of their choice. The other option today is to accept a corporate-funded place, which would have meant no debt, but a lifetime contract tethered to one company who preselects you using a PsychApp entry test that digitally selects top scoring students and determines the full life cycle of their careers, even before they receive their Uni offer.

The legal system has changed so much in the past few years. After a seismic jump in litigation post-pandemic, due to the environmental, economic and social fallouts of poor planning and a surge in climate-related litigation, laws were hastily changed to automate and streamline many legal processes. This was not well thought out however and only added to the backlog before being taken offline; Francesca could have saved the government the millions of dollars they wasted on this infrastructure - she knows answers can't always be found in the law: We will always need humans to find broader, human-centred solutions.

Francesca is also passionate about a free press and ensuring that disinformation doesn't subvert the truth. But social media today is a multi-headed beast and an ongoing challenge for citizens, lawmakers and governments alike. It continues to lack regulation or oversight. Every day, damaging content risks going viral in seconds. And Francesca knows more than most, the dangers of disinformation spread. It had nearly cost her father his life a couple of years back.

Her father is a police officer and when the 2028 food riots broke out, police and militia were sent in to calm things down. Social media however had been weaponised with a false story about police 'paying off' some of the protesters with food coupons. This quickly stirred the crowd into uncontrollable rage. Somewhere in the thick of it, Francesca's father had been knocked unconscious and trampled until a colleague pulled him out to safety.

Francesca does not blame the rioters or the police. She knows this is happening because the system is broken. It makes her all the more determined to create change. At 22 she has already decided her life will not be about traditional concepts of family or community. She will become a modern freedom fighter, her 'weapon': her intelligence and the law. She and her generation overwhelmingly agree the system has to change. After all, Australia in 2030 is not a place anyone should settle for.

A day in the life of Kaspar Sapp, immigrant 52 year old furniture designer and teacher, Esk, QLD

Kaspar bends forward as he runs his hand over the smooth arc of the timber chair leg. Its line, like many of the soft lines in his work, follows the curves of nature. He has been fascinated with the structure of furniture since he was a boy back in Estonia. Aged eight, Kaspar had already built his own table and chair. When his family moved to Australia seeking a better life, he already knew what his future would be.

In his early career in Brisbane, Kaspar built an enviable reputation as a true craftsman furniture maker. Then during the COVID-19 pandemic, Kaspar and his family had joined the mass migration of city dwellers seeking more space and a healthier lifestyle of rural living. They were lured to the town of Esk with the promise of strong federal and state economic recovery plans, reassured that his innovative furniture making school would find a rich new vein of students.

Economic predictions indicated significant growth for that decade in the furniture design and manufacturing market. But Kaspar knew too, that computer drafting, drawing and modelling was the future of furniture design. So when a government post-pandemic recovery package included education funding and incentives for small businesses to build their skills, he jumped at the opportunity, commuting back to the city to study CAD. Half way into his course however, the government switched strategies, slashing arts and

humanities funding and redirecting it all into STEM subjects. It was a frustrating setback for Kaspar, but for Australia, it was a disastrous decision. It set the nation up for future chronic shortfalls in the professions needed to focus on the many broader challenges facing humanity. It was not the first strategy failure from governments post-COVID: a lack of policy to plan for sustainable growth and long-term jobs shifts had already seen over four millions jobs vanish in the past decade.

There were early attempts to design and implement major economic reform. This was driven by the private sector as well as education. But governments repeatedly failed to back this up with authentic consultation or properly funded, detailed innovation, technology and education policies.

Kaspar knew all this. He had grown up in Australia but his lineage instilled in him a strong sense of political engagement. He felt a simmering rage watching as Australia dwindled its enormous opportunities much in the same way many European countries had done in the past. His anger joined the rise of widespread social unrest around the country. But government's response was to ramp up laws that prohibited free speech, protesting or demonstrating. Try to stop protests and you only drive them underground, Kaspar thinks to himself. He knows things in his troubled country will get much worse before they get better. And that 'better' may not even come in his lifetime. But for now, he would focus on things that calmed him, like the beautiful lines of a chair.

We can do this

**Northern Quoll emblematic
of a new Australia**

A ten-year turnaround from near zero to healthy numbers

Litany	*2030 is better shared*
Metaphor	Future in young hands/symbiosis
Motto	A future for all
Indicators	Indigenous life expectancy gap closes

Australia is on a strong and positive path.

It takes a big struggle to make big changes and we are by no means 'there' yet. We know for instance, that massive efforts to mitigate climate change impacts won't translate into clearly visible outcomes for decades. Many other challenges continue, but instead of meeting these with fear and contraction, we have discovered the value in addressing them with courage and agency, learning from our past and – finally – seriously thinking about future generations, first. There is a sense of optimism that we are heading in the right direction and that Australia has the tools we need to get there.

We reflect

While it wasn't immediately discernible in 2020, COVID-19 led to a period of deep thinking and reflection among civil society, development, environment and conservation groups, academia, and among local and state governments – about the need for a radical shift in our systems of governance and democracy. The old way was well and truly broken. It had become increasingly apparent that tinkering at the edges of reform would never meet the scale of the threats we now faced - to our climate, our health, our way of life and indeed, to human survival.

The determined and passionate advocacy by strong coalitions of civil society and industry groups over the past decade finally helped create a mandate for governments to invest in policies and strategies that benefit the whole of society.

We commit to a better, shared, future

The now adopted Uluru Statement captured what has become a nationally accepted mantra - let's walk together into a better future for us all.

We begin envisioning a future in which diversity is genuinely valued, where there is nested governance, free and transparent flows of information, evidence-based decision making, and deepened trust in our institutions and amongst each other. We adopt a healthy culture of risk taking, curiosity and an acceptance of fear of failure to support entrepreneurship and innovation.

Key to community-led reform is legislative recognition of First Nations sovereignty, a strengthening of Native Title and recompense for past injustices toward Aboriginal and Torres Strait Islander people. Indigenous leaders are now represented at every level of government and lead positions in land management. Land tenure and water rights reforms recognise Indigenous autonomy. Indigenous voices and knowledge systems guide holistic solutions as with the incorporation of Indigenous approaches to environmental management and business development. There is strong progress towards closing the gap. Non-Indigenous Australians begin authentically embracing Indigenous culture as part of their identity. Australian birth certificates include the name of the Indigenous traditional land where the child was born and every child receives a welcome to country.

Governance is decentralised and local councils and health systems work together with communities through meaningful co-design that embraces community led solutions.

This is exemplified in the diversity of communities now involved in designing and delivering culturally appropriate healthcare that meets their needs and provides quality health access for all. Health investment decisions restrict private interests, instead placing citizens beside clinicians as key decision makers. This is underpinned by well-resourced regulatory systems that prioritise safety and consumer protection.

We rethink the digital world

Following an explosion of interest around digital privacy arising when the digital space became our 'meeting room', the world experiences a second digital revolution, this time founded in principles of digital dignity. Business models based on data exhaust (the digital trail of one's online activity) become the new asbestos and regulations around the use of data exponentially increase. This leads to moves that de-monopolise and deconstruct major technology companies.

Consumption is being redefined as we invest in the circular economy as well as focus on selling services rather than 'stuff'. This also contributes to more stable and resilient economy as Australian companies move productivity towards the global frontier, creating new, internationally competitive low carbon industries and services.

Most people have changed their eating habits, having become more aware that food has been the leading cause of ill-health and contributes to climate change; health institutions have also followed suit, now sourcing locally grown organic food, supporting farmers and reducing emissions at the same time.

We develop a planetary consciousness

Legislation formalises accountability for recognising the connection between planetary and human health – contributing to win-win outcomes: policies and strategies that reduce emissions, improve health, create jobs and tackle inequity. We see a greater proportion of young people elected to parliament as the generation of school strikers for climate which began in 2018 opt for political careers to drive change. We invest in measures to preserve and restore natural environments, in tandem with commitments to health promotion and illness prevention funding. Agreements and wages for health care professionals are renegotiated and improved. There is greater emphasis on climate change adaptation to better protect individuals, communities, organisations and natural resources, such as coordinated management of precious water resources and new building codes that factor in future climate conditions.

The situation is not perfect and trade offs are inevitable: Large solar farms require significant parcels of land to deliver into the grid where there is demand. Some previously strong markets (e.g. the car industry) endure significant pain with the demise of private vehicle ownership, leading to the downsizing of vehicle maintenance infrastructure (mechanics, auto equipment, car insurance).

We truly commit to net zero

But perhaps one of our greatest sources of national optimism comes from bi-partisan national agreement that Australia must – and can – get to net zero emissions by 2040. Progress leading up to 2020 had already closed the technical gap and made this possible across many sectors. Drastic reductions in emissions were initially driven by significant government intervention in the form of the Climate Emergency Act (2023). All sectors develop and implement time-bound emissions reduction plans and a carbon price on all emissions-intensive activities is integrated at every level of society. Revenue from this subsidises the transition for low-income households and

accelerating clean technologies like converting retired coal-powered to solar thermal plants to produce dispatchable clean energy.

With a net zero emissions by 2040 goal enshrined into law, business, industry and community finally have the much-needed certainty to commit to the transition. The ground for innovation becomes fertile and early wins reset expectations so that a 'race to the top' approach becomes the new norm. Governments find that energy retrofits, particular for low-income households, tick all boxes. Microgrids become widespread and an expanded and improved recycling system creates a large number of jobs.

Following the lead of China, Europe and North America, coal use is being rapidly phased out of Australia's energy system, with a focus on high reliability and affordability and low emissions. While the task remains significant, the renewables revolution has been reframed as both achievable and fun. The Grand Prix is now totally electric vehicles and and three out of four new cars sold are electric.

We achieve growth AND decarbonise

Australia's economy continues to grow while we achieving 45% emissions reduction (since 2020), positioning us to achieve the 2040 target. Few can deny that decarbonisation, economic growth and positive social outcomes are working hand in hand.

A day in the life of Sureya Namok, co-owner of local cooperative, Strahan, Tasmania

Sureya walks with her child, Dewi, to school in Strahan, which has been renamed Toogee, a zero waste, carbon neutral community on the west coast of Tasmania. They are excited to spot a huge white-bellied sea eagle with a wingspan of about 2m; the animal totem of the region.

Her town and state seem peaceful now, but less than a decade ago, Tasmania – and much of Australia's populated regions – had become hotbeds of social discord. Protests, rallies and even rioting became commonplace, as the strains of economic and social disparity had finally become untenable. Tasmanians fought for change on so many fronts: from environmental destruction to massive unemployment and then outrage in the wake of the political donations scandal from gambling businesses. The Premier had resigned before his whole party was brought down, and this seemed to precipitate a ripple effect right up Australia's east coast, before the north and west joined in. At that point there was no denying the system was broken. Major political parties fell like tenpins, replaced by a new generation of Independents and leaders who truly engaged with communities and courageously chose bold reforms that would better society, over the political manouvering and sniping of old.

It is a 'work in progress' today, but Australia has definitely turned a corner and the future looks promising.

A descendant of the local traditional owners, the Minegin people, Sureya is part owner of the local community factory that processes native foods, including sea vegetables for Tasmanian restaurants and a native therapeutics business in Launceston. With eight weeks' annual leave and additional public holidays, she works a 4 day, 30 hour week - around 1,200 hours a year, which is about average for full-time workers. This gives her time to volunteer at the local community co-operative FeedThePeople, which both nurtures and feeds the region's small number of unemployed people. Most people without paid work are actively engaged in the community farm, earning a 'participation income' for in-kind contributions to society.

FeedThePeople works closely with the local traditional owners to support caring for country initiatives and the development of the native foods industry, in recognition that our health and ultimately our wealth depends on protecting nature, so nature can protect us.

Mother and child pass under wind turbines powering the region. Australia-wide, the transition to a net zero economy is well underway. Transport and many industries are now powered by renewable energy, generated by both micro-grids and publicly owned utilities, such as the Togee Wind Farm.

Coal-fired power stations are almost completely a thing of the past now – nobody these days will touch carbon-exposed assets. The much-hyped economic and employment losses that were threatened with the fall of carbon-intensive industry were, however, never realised, as a new, hyper-energised green economy emerged bringing with it, a host of jobs that had previously never existed.

As they walk, Suraya reflects on the transformation in her health, since she was referred to the local health promotion nurse practitioner a few years ago. Struggling with obesity, and a heart attack at age 39, she was at risk of leaving her only child an orphan. But with the help of a skilled practitioner at the local community health service, Suraya has turned things around. She's now at her ideal weight, leading a local walking group herself, and feels stronger, happier and much more confident about the future.

A day in the life of Frank Bagnato, organic farmer, Kuttabul (near Mackay) QLD

He squints as he looks across the shore, always a keen eye on the kids when they're swimming. Both children are together, laughing and splashing each other, best of friends – until the next spat at least.

Frank and Lena Bagnato have taken the family to Seaforth for a few days. They can afford time off to do this now, as their small scale fruit, vegetable and flower farm in Kuttabul is ably managed by a young manager with big ideas. Working a four-day week used to be the stuff of dreams for Australians dedicated to farming life. But a major systemic shakeup in the early 20's driven by chronic unemployment, social discord and political collapse, had finally changed how Australians work.

This period prompted many to reconsider how we were living. For Frank, that meant searching for a new approach to farming – one that would protect the environment from damage caused by the old fertilisers. They were producing significant nitrogen runoff that threatened water quality and ultimately, entered the Great Barrier Reef to devastating

effect: Excess nitrogen was causing algal bloom and supercharging populations of the devastating crown of thorns starfish. This one species alone had destroyed over 40% of coral on the Reef. Add the impacts of climate change, and the coral in this World Heritage Site didn't stand a chance.

But today, hope is found on a number of fronts: Federal legislation has enacted a comprehensive strategy for net zero emissions by 2050. And the new government's support for raft of social and business practices more in tune with sustainable environmental management is showing some early signs of success. It will take many decades for nature to respond, and some damage is irreparable, but in a number of regions around the Reef, coral has started making a tentative comeback.

And Frank is playing his part: he along with many Queensland farmers supported The Long Term Sustainability Plan that led to a major breakthrough in 'discovering' a natural fertilising alternative that is revolutionising the impacts of agriculture on environment. While many had been looking for futuristic answers in technology, the solution ultimately came from looking to the past - to Indigenous land management experts who were included in the Plan. They asked for their knowledge around sustainable agriculture. They shared their own farming traditions, which dated back thousands of years. And it changed the game: incorporating these Indigenous agricultural practices and shifting to organic production techniques has eliminated nitrogen runoff. It has also seen yields increase and profits grow.

For the first time in their married lives, Frank and Lena are hopeful too, that their family business will survive. He looks back out into the water to check on his kids – only to see the laughter has once again turned to tears. Oh well, he thinks to himself, they'll survive the environmental challenges; they just might not survive each other!

Our island home

'A' for Australia on sustainable development scorecard

Aussie leaders earn standing ovation at global summit

Litany	*Anything is possible/dream big*
Metaphor	= (equal symbol) / weaving comprised of many different textiles, colours, thicknesses etc – together creating a beautiful new fabric
Motto	Can do/Aim high and allow for gravity
Indicators	Australia's Prime Minister is female, Indigenous, inspirational

Australia's implementation of a bold new strategy for the future emerges this decade through hardship, deep self-reflection and a generous serve of resilience. Amongst the rich diversity of people who call Australia home, we depoliticise the issues by recognising the most powerful of uniting principles: We are all human.

We find common ground

In a bold response to the rapid-fire shocks of environmental disaster, a global pandemic, hostile geo-political realignment, social unrest, economic collapse and the rise of military intervention, Australians say 'enough'. Led by newly emerging political and business leaders who directly challenge toxic sniping between political parties and states, a relieved Australia rediscovers its resourcefulness, inventiveness, great humour in the face of great challenge and commitment to a fair go for all. These qualities 'serve to organise and measure the best of our energies and skills'.

The now ratified Uluru Statement captures what has become a nationally accepted mantra - let's walk together into a better future for us all.

We begin acknowledging our wrongs

When we look into our nation's heart to ask how we can unite and move forward, our first step is obvious: Australia officially recognises First Nations' sovereignty and offers recompense

for past injustices toward Aboriginal and Torres Strait Islander people. Land tenure and water rights reforms recognise Indigenous autonomy. There is strong progress towards closing the gap. There is a palpable shift in our willingness to acknowledge the significant lessons to be learned from the world's oldest continuous culture. Indigenous leaders are now represented at every level of government and are in lead positions in land management. Indigenous voices and knowledge systems guide holistic solutions as with the incorporation of Indigenous approaches to environmental management and business development.

We design a sustainable future

Acknowledging the connection between environmental and human health, COVID-19 recovery spending in green growth provides lasting economic value, cutting emissions and improving people's lives. Federal Government legislates the right to a clean and healthy environment through strengthened environmental protections. Early signs of biodiversity recovery across several Australian ecosystems include the re-emergence of brush tailed bettong populations in SA, WA and Vic.

Progressive taxation, along with cracking down on corporate and high-net worth tax avoidance, capping resource use, and legislating against planned obsolescence all contribute to a vastly more equitable economic system. There is a rise in the importance of cooperatives and communal ownership, and a massive investment in infrastructure commons (both physical and digital).

We commit to staying the course

Accepting the failure of short-termism policy, governments gain momentum in planning for the long-term. We begin the shift towards nested governance, and free, transparent flows of information. Indigenous Australians and young people engaging in community-led reform gives rise to the emergence of trusted voices and new leaders emerge.

Progress is neither perfect nor instant. However, lobbyist influence has weakened significantly and Federal and state governments (and a determined crossbench) stay the course. Major reforms are widely supported by a progressive private sector and self-organising communities who are finding their own solutions to emergencies and social challenges (as seen with the proliferation of renewable power schemes in small towns).

We discover true progress

A year after Federal Parliament passes the Climate Emergency Act in 2023, it enshrines net zero emissions by 2050 into law. An unprecedented economic, social and political corner is turned. Roadmaps in the form of legislation, regulations and rapid action plans (RAPs) for key sectors are helping Australia transition away from fossil-fuels, cut waste and use natural resources more sustainably. In 2030 we've surpassed our decarbonisation target, reducing emissions by 45% since 2020.

In addition to mitigation actions, we draw on the skills of scientists and other experts to better plan for inevitable climate and public health challenges ahead. At the start of the decade, investors had already begun divesting from fossil fuels but our carbon-driven market suffered its fatal shock following a surge in stranded assets, legal actions arising from poor climate disclosure and the global transition to a low carbon economy.

Inspired by Europe's Green Deal of 2019, Australia develops a new strategy that leads us into sustainable progress, way beyond GDP. It directly prioritises the decoupling of economic growth from use of resources, turning climate and environmental challenges into opportunities across all policy areas and making the transition just and inclusive. Vulnerable groups and regions are supported by the Fair Go For All Mechanism which addresses socio-economic impacts of the transition by supporting innovation by SMEs, re-skilling workers and diversifying economic activity in rural regions.

The Prime Minister announces Australia's first 'Wellbeing Budget' as part of the annual budget package, saying: "Well-being must serve as a central goal for our society, and we must ensure we use our shared resources - our taxes – to deliver it."

Policies support a thriving culture of human and technological innovation from industry. Bold decisions pay dividends, such as pivoting our energy priorities to renewables, which now power a vibrant and innovative new era in manufacturing. There's strong investment in green technology across all sectors, including our built environment and transport. Both are quickly moving towards complete decarbonisation, proving far cheaper and healthier to run. After the demonstrated failure of big-ticket resource projects such as the Adani coal mine to deliver as hoped, new approaches were essential and Australia quickly becomes a leading contributor to the knowledge economy.

We reimagine how we might live

With the rising voice of social movements, communities are recognising their resilience and power to affect change. Growing numbers begin organising and mobilising to form non-violent protests and taking united action to defuse racial, religious and poverty tensions.

At the national level, a new sustainable approach to food and agriculture questions how we might improve nutrition, safeguard the environment and hardwire resilience to global shocks like pandemics. This immediately contains and begins eliminating migration of tropical diseases, weeds and pests. Locally grown food, knowledge systems and a holistic approach to caring for natural resources all contribute to shorter food supply chains, improving human and environmental health.

Eating habits have changed, with many people recognising that food has been a big contributor to poor health outcomes and contributes to carbon emissions. Many hospitals now purchase direct from organic farmers, helping to create jobs and leading to shorter in-patient stays.

We champion truth and accountability

The toxic influences of disinformation, vested interests and media empire building all come crashing down as society demands that major media is accountable to all citizens. Truth in journalism undergoes a global renaissance and evidence-based traditional media re-emerges within a new framework of data and technology-supported ethics and fact checking.

A uniform approach to political donations across Australia has strengthened our democracy, with donations capped at $1,000 per annum, and significant penalties introduced for breaches.

We rethink what is needed from technology

Accepting that technology should be designed to support human needs, we integrate social and ecological knowledge into technological advance. We shift to prioritising prevention over diagnostics in healthcare (with more public funding to achieve this). This steers us away from immediately outsourcing solutions to technology, reasserting the value of human intervention when dealing with complex and urgent problems.

A day in the life of Audra Hoang, entrepreneur, Perth, WA

Audra Hoang stands in the park where her favourite café is located, overlooking Derbarl Yerrigan, formerly known as the Swan River in Perth. She is meeting up for a coffee with her business partners for a quick catch up ahead of an important meeting. They are due to present their six month update to the panel representing the community shareholders who collectively seed-funded the fully electric aircraft design company she runs with two others – one an aerospace engineer and the other an electrical engineer. Their business, TechAer, is in final stages of designing a commercial aircraft that is fully powered by renewable electricity.

They live in a decade which is revolutionising how the aeronautics industry impacts the global environment. Only ten years ago, airplanes were releasing around 500 million tons of carbon dioxide into the atmosphere globally. Then the pandemic hit – and virtually grounded almost all passenger flights overnight. While electric planes were already on the drawing board at this time, enormous opportunities – and massive funding interest – were unexpected side-effects to come out of this period when global emissions 'hit pause'.
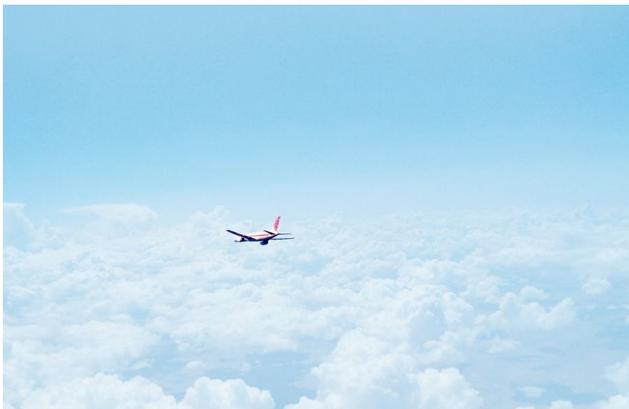
TechAer was one beneficiary of the new green industry to boldly emerge from those times. Their prototype was a small aircraft that flew non-stop for 500 kms and emitted zero emissions, powered by a single battery. Total energy cost for the maiden flight was just under $10. The next phase is a commercial aircraft that will carry over 100 people internationally.

Their innovation is a long way from 'Alice' – a nine passenger all-electric aircraft launched by a start-up business in 2022. Alice was a phenomenon in her time, but TechAer's craft is set to beat that record, with a 120 passenger aircraft that will fly 2,000km on a single charge – closer to the fossil-fuelled Boeing 747 which used to fill our skies.

Australia has become a nation of innovators. The knowledge economy and green industries have spurred Australia and the world in a race to the top. But this new era for Australia is also being led by a human-centred approach to our future. One which carefully takes stock of the social and cultural impacts of each new idea. After some early mistakes when it was assumed technology would solve our problems for us – it did not – a nested governance model now provides transparent checks and balances by distributing decision-making through many levels of society. This ensures individuals, communities and all who would be impacted by a change, can participate in exploring, reviewing and implementing that change.

Audra sees her colleagues, Edison and Ray, approach. Ray, is the electrical engineer and also a new era celebrity thanks to their genius intellect and proud championing of their non-binary or enby status. In Ray's lifetime so much has changed for LGBTQI communities, now able to live, dress and have their gender respected at work, school and in all public places. (The Who?Ray! trope celebrates this shift in Aussie culture.)

With the team now together, they order their drinks and begin planning their week.

A day in the life of Yasmina Harris, biomedical engineer, Melbourne VIC

Yasmina loves it when her work and personal lives overlap. As she drives away silently in an electric vehicle having visited her Mum at home, she cannot wipe the smile off her face. She also loves the share economy – which right now means being able to drive anywhere without owning a vehicle or having to find somewhere to park it in her highly densified suburb. The revolution in share driving and autonomous vehicles led to car ownership all but disappearing.

Although the vehicle she travels in tonight does not need human interaction, an excited Yasmina has decided to wait before making her phone call. It's a beautiful night after all, and the sky is clear.

Once the long drive back into the city delivers Yasmina to her own apartment, she dials her best friend.

"I just saw Mum.' She begins happily. 'And she is wearing the data patch I helped design!"

Yasmina's mother Yvonne suffers a long-term chronic illness, which requires constant monitoring. Yvonne, a Ngarrindjeri elder living on country in the Coorong in South Australia, cannot easily access medical services. So the technology behind data patches was a game changer. A small, ultra thin piece of electronic skin, the data patch can be

worn continuously and monitors Yvonne's vital signs like temperature, blood pressure and electrical signals, including running remote electrocardiograms to monitor her heart. The data is instantly transmitted to the health centre where her specialist works alongside a team of patient advocates and social workers who together support Yvonne's needs.

Yasmina works in Melbourne as a biomedical engineer. At the forefront of her field and largely focused on developing health solutions to support Australia's ageing population, she enjoys a growing demand for her expertise. The idea of wearable technology particularly appeals to Yasmina and her screensaver features a sci-fi looking image of a woman wearing a SecondSkin. These are being developed as an adaptive technology for people living in extreme climates. Thinner than cotton, they are designed to keep the wearer's body temperature regulated and hydrated no matter how hot the weather, and to recycle the body's waste. The impacts of a changing climate are now dramatic across Victoria. With the benefits of strong decarbonisation legislation yet to be felt, Australian city dwellers are also adapting through actions including the introduction of extensive green spaces, biodiversity corridors and zero emissions buildings.

Yasmina ends her call outside her own building to realise she is hungry. Like all Australians, her mostly plant based diet is grown using regenerative practices that improve rather than deplete the overall health of local ecosystems. Urban and peri-urban farming have shortened supply chains and strengthened the community's connection with food and the farmers who grow it. Packaging today (where needed) is fully biodegradable. Surplus food is redistributed with by-products transformed into organic fertilisers, biomaterials, medicines, and bioenergy. And healthy food is no longer affordable by only an elite few. It is now the norm, easily available and preferred by young Aussies, thanks to marketing and education that reshaped our preferences and habits (plus the introduction of a sugar tax!).

All this thinking about food isn't helping: It's getting late and Yasmina is ready to eat!

Conclusion

We set out in this ambitious project to bring people together to use the moment of disruption provided by the COVID-19 pandemic to imagine different future worlds. This process was intended to provide us, and others, with the opportunity to consider possible alternative future scenarios, and better understand their accompanying uncertainties.

While many of these possible futures are sobering, they are possible.

We hope through the dissemination of plausible alternative future scenarios, we can communicate how different choices may play out, and help to build support for action to achieve a preferred future.

We have subsequently used a process of backcasting to develop a pathway to our preferred future scenario: Our Island Home. This policy agenda is called *Healthy, Regenerative and Just: Our Vision for a Better Future*.

This future is one in which we prioritise planetary health, recognising the links between our own health and Earth systems (Healthy); the protection of ecosystems on which our health depends (Regenerative), along with a culture of cooperation for collective benefit (that's 'Just').

A healthy, regenerative and just future is available to us. It is scientifically, economically, culturally, socially, and technologically feasible.

It is our hope these narratives will help build consensus around a shared vision for a healthy, regenerative and just future for all, and fuel effective change.

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